<table>
<thead>
<tr>
<th>Product code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCCUKTCYP</td>
<td>Sperm Wizard Papanicolaou Stain Kit</td>
</tr>
</tbody>
</table>

Components:

<table>
<thead>
<tr>
<th>Product code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCCUKCC0112</td>
<td>CoverSafe</td>
</tr>
<tr>
<td>SCCUKCE0250</td>
<td>EA-50 Cytology Stain</td>
</tr>
<tr>
<td>SCCUKCM0157</td>
<td>Master Clear Clearing Agent</td>
</tr>
<tr>
<td>SCCUKCM0250</td>
<td>Modified Mayer's Hematoxylin</td>
</tr>
<tr>
<td>SCCUKCR0157</td>
<td>95% Reagent Alcohol</td>
</tr>
<tr>
<td>SCCUKCR0250</td>
<td>80% Reagent Alcohol</td>
</tr>
<tr>
<td>SCCUKCR0357</td>
<td>Reagents Alcohol, 100%</td>
</tr>
<tr>
<td>SCCUKCC0227</td>
<td>Cytology Fixative</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

1 Identification of the Substance/Mixture and Company

Product Name: CoverSafe
MSDS Code: SSCUKCC0112
Product Description: Mounting Medium
Manufacturer/Supplier:
American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073

European Authorized Representative:
Emergo Europe
Moleensraat 15
2513 BH The Hague,
The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture

GHS02 Flame
Flam. Liq. 3 H226 Flammable liquid and vapour.

GHS09 Environment
Aquatic Acute 1
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

GHS07
Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant
R38: Irritating to skin.

Xi; Sensitizing
R43: May cause sensitisation by skin contact.

R10: Flammable.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of international guidelines.
Product Name: CoverSafe

Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements
GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02  GHS07  GHS09

Signal word Warning

Hazard-determining components of labeling:
(R)-p-mentha-1,8-diene

Hazard statements
Flammable liquid and vapour.
Causes skin irritation.
May cause an allergic skin reaction.
Very toxic to aquatic life with long lasting effects.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Avoid breathing dust/fume/gas/mist/vapours/spray.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Specific treatment (see on this label).
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)
Health = 1
Fire = 2
Reactivity = 0

HMIS-ratings (scale 0 - 4)
Health = 1
Fire = 2
Reactivity = 0

Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: CoverSafe

---

### Dangerous components:

<table>
<thead>
<tr>
<th>CAS: 5989-27-5</th>
<th>(R)-p-mentha-1,8-diene</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 227-813-5</td>
<td>Flam. Liq. 3, H226; Aquatic Acute 1; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Skin Sens. 1, H317</td>
</tr>
</tbody>
</table>

---

### 4 First Aid Measures

**Description of first aid measures**

**After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.

**After eye contact:** Rinse opened eye for several minutes under running water.

**After swallowing:** If symptoms persist consult doctor.

**Information for doctor:**
Most important symptoms and effects, both acute and delayed: No further relevant information available.

**Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

---

### 5 Firefighting Measures

**Extinguishing media**

**Suitable extinguishing agents:** CO2, sand, extinguishing powder. Do not use water.

**For safety reasons unsuitable extinguishing agents:** Water with full jet

**Special hazards arising from the substance or mixture:** No further relevant information available.

**Advice for firefighters**

**Protective equipment:** No special measures required.

---

### 6 Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:**
Wear protective equipment. Keep unprotected persons away.

**Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

**Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

**Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
7 Handling and Storage

Handling:
Precautions for safe handling:
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

Storage:
Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls:

Personal protective equipment:

General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.

Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Review Date 10/02/2015 Revision Date 10/02/2015

Product Name: CoverSafe

Eye protection: Tightly sealed goggles

9 Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
</tr>
<tr>
<td>Appearance</td>
</tr>
<tr>
<td>Form: Fluid</td>
</tr>
<tr>
<td>Color: Light yellow</td>
</tr>
<tr>
<td>Odor: Aromatic</td>
</tr>
<tr>
<td>Odor threshold: Not determined.</td>
</tr>
<tr>
<td>pH-value: Not determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: 176°C (349 °F)</td>
</tr>
</tbody>
</table>

| Flash point: 48°C (118 °F)                           |
| Flammability (solid, gaseous): Not applicable.       |
| Ignition temperature: 255°C (491 °F)                 |
| Decomposition temperature: Not determined.           |
| Auto igniting: Product is not selfigniting.          |
| Danger of explosion: Product is not explosive.       |
| Possibility of hazardous reactions: No dangerous     |
| reactions known.                                     |

<table>
<thead>
<tr>
<th>Explosion limits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower: 0.7 Vol %</td>
</tr>
<tr>
<td>Upper: 6.1 Vol %</td>
</tr>
</tbody>
</table>

| Vapor pressure at 20°C (68 °F): 2.3 hPa (2 mm Hg)    |
| Density: Not determined.                              |
| Relative density: Not determined.                     |
| Vapour density: Not determined.                       |
| Evaporation rate: Not determined.                     |

<table>
<thead>
<tr>
<th>Solubility in / Miscibility with Water: Not miscible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic: Not determined.</td>
</tr>
<tr>
<td>Kinematic: Not determined.</td>
</tr>
<tr>
<td>Other information: No further relevant information</td>
</tr>
<tr>
<td>available.</td>
</tr>
</tbody>
</table>

10 Stability and Reactivity

Reactivity:
Chemical stability:
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicology Information

Information on toxicological effects

Acute toxicity:

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5989-27-5 (R)-p-mentha-1,8-diene</td>
</tr>
<tr>
<td>Oral</td>
</tr>
</tbody>
</table>

Primary irritant effect:

On the skin: Irritant to skin and mucous membranes.
On the eye: No irritating effect.
Sensitization: Sensitization possible through skin contact.

Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

Carcinogenic categories

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5989-27-5 (R)-p-mentha-1,8-diene</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

NTP (National Toxicology Program)

None of the ingredients are listed.

12 Ecological Information

Toxicity:

Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Additional ecological information:

General notes:
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects: No further relevant information available.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: CoverSafe

13 Disposal Considerations

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

14 Transport Information

<p>| UN-Number | Void |
| DOT, ADR, ADN, IMDG, IATA |
| UN proper shipping name | Void |
| DOT, ADR, ADN, IMDG, IATA |
| Transport hazard class(es) | Void |
| DOT, ADR, ADN, IMDG, IATA |
| Class |
| Packing group | Void |
| DOT, ADR, IMDG, IATA |
| Environmental hazards | Yes |
| Marine pollutant |
| Special precautions for user: | Not applicable. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: | Not applicable. |</p>
<table>
<thead>
<tr>
<th>UN &quot;Model Regulation&quot;:</th>
</tr>
</thead>
</table>

15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
SARA

Section 355 (extremely hazardous substances): None of the ingredients are listed.
Section 313 (Specific toxic chemical listings): None of the ingredients is listed.
TSCA (Toxic Substances Control Act): All ingredients are listed.

Proposition 65

Chemicals known to cause cancer: None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: CoverSafe

Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

Carcinogenic categories
EPA (Environmental Protection Agency)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02  GHS07  GHS09

Signal word Warning

Hazard-determining components of labelling: (R)-p-mentha-1,8-diene

Hazard statements
Flammable liquid and vapour.
Causes skin irritation.
May cause an allergic skin reaction.
Very toxic to aquatic life with long lasting effects.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Avoid breathing dust/fume/gas/mist/vapours/spray.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Specific treatment (see on this label).
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information
This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: CoverSafe

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
DOT: US Department of Transportation
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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1 Identification of the Substance/Mixture and Company

Product Name: EA-50 Cytology Stain
MSDS Code: SSCUKCE0250
Product Description: Cytology Stain
Manufacturer/Supplier: American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073
European Authorized Representative: Emergo Europe
Moleensraat 15
2513 BH The Hague,
The Netherlands
Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

F; Highly flammable
R11: Highly flammable.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of international guidelines.

Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements
GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02

Signal word Danger

Hazard statements
Highly flammable liquid and vapour.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Product Name: EA-50 Cytology Stain

Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/bond container and receiving equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)
Health = 1
Fire = 3
Reactivity = 0

HMIS-ratings (scale 0 - 4)
Health = 1
Fire = 3
Reactivity = 0

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>CAS: 64-17-5</th>
<th>Ethanol</th>
<th>Flam. Liq. 2, H225</th>
<th>&lt;80%</th>
</tr>
</thead>
</table>

4 First Aid Measures

Description of first aid measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

Information for doctor:
Most important symptoms and effects, both acute and delayed: No further relevant information available.
Indication of any immediate medical attention and special treatment needed:
No further relevant information available.

5 Firefighting Measures

Extinguishing media
Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
For safety reasons unsuitable extinguishing agents: Water
Special hazards arising from the substance or mixture: No further relevant information available.
Advice for firefighters
Protective equipment: No special measures required.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:
Wear protective equipment. Keep unprotected persons away.

Environmental precautions:
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.

Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

Handling:
Precautions for safe handling: No special precautions are necessary if used correctly.

Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

Storage:
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>Short-term value: 1880 mg/m³, 1000 ppm</td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.
Exposure controls:

Personal protective equipment:

General protective and hygienic measures: Wash hands before breaks and at the end of work.

Breathing equipment: Not required.

Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed goggles

### 9 Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
</tr>
<tr>
<td>Appearance</td>
</tr>
<tr>
<td>Form:  Fluid</td>
</tr>
<tr>
<td>Color: Dark green</td>
</tr>
<tr>
<td>Odor: Alcohol-like</td>
</tr>
<tr>
<td>Odor threshold: Not determined.</td>
</tr>
<tr>
<td>pH-value: Not determined.</td>
</tr>
<tr>
<td>Change in condition</td>
</tr>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: Undetermined.</td>
</tr>
<tr>
<td>Flash point: 13°C (55 °F)</td>
</tr>
<tr>
<td>Flammability (solid, gaseous): Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature: 425°C (797 °F)</td>
</tr>
<tr>
<td>Decomposition temperature: Not determined.</td>
</tr>
<tr>
<td>Auto igniting: Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion: Product is not explosive.</td>
</tr>
<tr>
<td>Product is not explosive. However, formation of explosive air/vapor mixtures are possible.</td>
</tr>
<tr>
<td>Explosion limits:</td>
</tr>
<tr>
<td>Lower: 3.5 Vol %</td>
</tr>
<tr>
<td>Upper: 15.0 Vol %</td>
</tr>
<tr>
<td>Vapor pressure at 20°C (68 °F): 59 hPa (44 mm Hg)</td>
</tr>
<tr>
<td>Density: Not determined.</td>
</tr>
<tr>
<td>Relative density: Not determined.</td>
</tr>
<tr>
<td>Vapour density: Not determined.</td>
</tr>
</tbody>
</table>
Evaporation rate: Not determined.

Solubility in / Miscibility with Water: Fully miscible.

Segregation coefficient (n-octonol/water): Not determined.
Dynamic: Not determined.
Kinematic: Not determined.
Other information: No further relevant information available.

10 Stability and Reactivity

Reactivity:
Chemical stability:
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicology Information

Information on toxicological effects
Acute toxicity:
Primary irritant effect:
On the skin: No irritant effect.
On the eye: No irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
Carcinogenic categories
IARC (International Agency for Research on Cancer)
5141-20-8 Light Green SF Yellowish [3]
NTP (National Toxicology Program)
None of the ingredients are listed.

12 Ecological Information

Toxicity:
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal Considerations

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>UN1170</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>DOT, IATA</td>
<td>ETHANOL SOLUTION</td>
</tr>
<tr>
<td></td>
<td>ADR</td>
<td>1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)</td>
</tr>
<tr>
<td></td>
<td>IMDG</td>
<td>ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)</td>
</tr>
</tbody>
</table>

Transport hazard class(es)

| DOT | Class | 3 Flammable liquids. | Label | 3 |
| ADR, IMDG, IATA | Class | 3 Flammable liquids | Label | 3 |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

UN "Model Regulation": UN1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: EA-50 Cytology Stain

15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
</tr>
<tr>
<td>17372-87-1</td>
<td>disodium 2-(2,4,5,7-tetrabromo-6-oxido-3-oxoxanthen-9-yl)benzoate</td>
</tr>
<tr>
<td>10114-58-6</td>
<td>1,3-bis(2,3-diaminophenylazo)benzenemehydrochloride</td>
</tr>
<tr>
<td>5141-20-8</td>
<td>Light Green SF Yellowish</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>water, distilled, conductivity or of similar purity</td>
</tr>
</tbody>
</table>

Proposition 65

Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
</tr>
</tbody>
</table>

Carcinogenic categories

EPA (Environmental Protection Agency)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
</tr>
</tbody>
</table>

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02

Signal word Danger

Hazard statements
Highly flammable liquid and vapour.
Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/bond container and receiving equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

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1 Identification of the Substance/Mixture and Company

Product Name: Master Clear Clearing Agent

MSDS Code: SSCUKCM0157
CAS Number: 5989-27-5
EC number: 227-813-5
Index number: 601-029-00-7

Product Description: Clearing Agent

Manufacturer/Supplier:
American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073

European Authorized Representative:
Emergo Europe
Moleensraat 15
2513 BH The Hague,
The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture

GHS02 Flame
Flam. Liq. 3 H226 Flammable liquid and vapour.

GHS09 Environment
Aquatic Acute 1
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

GHS07
Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

Acute Tox. 5 H303 May be harmful if swallowed.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant
R38: Irritating to skin.
Product Name: Master Clear Clearing Agent

Xi; Sensitizing
R43: May cause sensitisation by skin contact.
R10: Flammable.

Information concerning particular hazards for human and environment: Not applicable.

Label elements
GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02  GHS07  GHS09

Signal word Warning

Hazard-determining components of labeling:
(R)-p-mentha-1,8-diene

Hazard statements
Flammable liquid and vapour.
May be harmful if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
Very toxic to aquatic life with long lasting effects.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Avoid breathing dust/fume/gas/mist/vapours/spray.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Specific treatment (see on this label).
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)
Health  = 1
Fire     = 2
Reactivity = 0

HMIS-ratings (scale 0 - 4)
Health  = 1
Fire     = 2
Reactivity = 0

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: Master Clear Clearing Agent

3 Composition

Chemical characterization: Substances
CAS No. Description
5989-27-5 (R)-p-mentha-1,8-diene
Identification number(s)
EC number: 227-813-5
Index number: 601-029-00-7

4 First Aid Measures

Description of first aid measures
After inhalation:
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.
Information for doctor:
Most important symptoms and effects, both acute and delayed: No further relevant information available.
Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Firefighting Measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water with full jet
Special hazards arising from the substance or mixture: No further relevant information available.
Advice for firefighters
Protective equipment: No special measures required.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:
Wear protective equipment. Keep unprotected persons away.
Environmental precautions: Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

Handling:
Precautions for safe handling: No special precautions are necessary if used correctly.
Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: Keep receptacle tightly sealed.
Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters
Components with limit values that require monitoring at the workplace: Not required.
Additional information: The lists that were valid during the creation were used as basis.

Exposure controls:
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
Breathing equipment: Not required.
Protection of hands:
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Tightly sealed goggles

9 Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
</tr>
<tr>
<td>Appearance</td>
</tr>
<tr>
<td>Form: Fluid</td>
</tr>
<tr>
<td>Color: Colorless</td>
</tr>
<tr>
<td>Odor: Characteristic</td>
</tr>
<tr>
<td>Odor threshold: Not determined.</td>
</tr>
</tbody>
</table>
Product Name: Master Clear Clearing Agent

**pH-value:** Not determined.

**Change in condition**
- **Melting point/Melting range:** -74.3°C (-102 °F)
- **Boiling point/Boiling range:** Undetermined.

**Flash point:** > 55°C (> 131 °F)

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:** 255°C (491 °F)

**Decomposition temperature:** Not determined.

**Auto igniting:** Not determined.

**Danger of explosion:** Not determined.

**Explosion limits:**
- **Lower:** 0.7 Vol %
- **Upper:** 6.1 Vol %

**Vapor pressure at 20°C (68 °F):** 2.3 hPa (2 mm Hg)

**Density at 20°C (68 °F):**
- **Relative density:** Not determined.
- **Vapour density:** Not determined.
- **Evaporation rate:** Not determined.

**Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

**Segregation coefficient (n-octanol/water):** Not determined.

**Dynamic:** Not determined.

**Kinematic:** Not determined.

**Other information:** No further relevant information available.

### 10 Stability and Reactivity

**Reactivity:**

**Chemical stability:**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions:** No dangerous reactions known.

**Conditions to avoid:** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicology Information

**Information on toxicological effects**

**Acute toxicity:**

**LD/LC50 values that are relevant for classification:**

**5989-27-5 (R)-p-mentha-1,8-diene**

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50</td>
<td>4400 mg/kg (rat)</td>
</tr>
</tbody>
</table>
Product Name: Master Clear Clearing Agent

Primary irritant effect:
On the skin: Irritant to skin and mucous membranes.
On the eye: No irritating effect.
Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

Carcinogenic categories

| IARC (International Agency for Research on Cancer) | 5989-27-5 (R)-p-mentha-1,8-diene | 3 |
| NTP (National Toxicology Program) | Substance is not listed. |

12 Ecological Information

Toxicity:
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.

Additional ecological information:
General notes:
Water hazard class 2 (Assessment by list): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Waste treatment methods:
Recommendation: Disposal must be made according to official regulations.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

14 Transport Information

| UN-Number | Void |
| DOT, ADR, ADN, IMDG, IATA |

| UN proper shipping name | Void |
| DOT, ADR, ADN, IMDG, IATA |

| Transport hazard class(es) | Void |
| DOT, ADR, ADN, IMDG, IATA |
Product Name: Master Clear Clearing Agent

### Packing group

| DOT, ADR, IMDG, IATA | Void |

### Environmental hazards

| Marine pollutant: | Yes |
| Special precautions for user: | Not applicable |

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

| Not applicable |

### UN "Model Regulation":

| - |

### 15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

#### SARA

| Section 355 (extremely hazardous substances): |
| Substance is not listed |

| Section 313 (Specific toxic chemical listings): |
| Substance is not listed |

| TSCA (Toxic Substances Control Act): |
| Substance is listed |

#### Proposition 65

| Chemicals known to cause cancer: |
| Substance is not listed |

| Chemicals known to cause reproductive toxicity for females: |
| Substance is not listed |

| Chemicals known to cause reproductive toxicity for males: |
| Substance is not listed |

| Chemicals known to cause developmental toxicity: |
| Substance is not listed |

#### Carcinogenic categories

| EPA (Environmental Protection Agency) |
| Substance is not listed |

| TLV (Threshold Limit Value established by ACGIH) |
| Substance is not listed |

| NIOSH-Ca (National Institute for Occupational Safety and Health) |
| Substance is not listed |

| OSHA-Ca (Occupational Safety & Health Administration) |
| Substance is not listed |

| GHS label elements |
| The substance is classified and labeled according to the Globally Harmonized System (GHS) |
Hazard pictograms

GHS02  GHS07  GHS09

Signal word Warning

Hazard-determining components of labelling:
(R)-p-mentha-1,8-diene

Hazard statements
Flammable liquid and vapour.
May be harmful if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
Very toxic to aquatic life with long lasting effects.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Avoid breathing dust/fume/gas/mist/vapours/spray.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Specific treatment (see on this label).
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
1 Identification of the Substance/Mixture and Company

Product Name: Modified Mayer's Hematoxylin

MSDS Code: SSCUKCM0250

Product Description: Histology Stain

Manufacturer/Supplier:
American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073

European Authorized Representative:
Emergo Europe
Moleensraat 15
2513 BH The Hague,
The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture
The product is not classified according to the Globally Harmonized System (GHS).


Information concerning particular hazards for human and environment:
The product does not have to be labelled due to the calculation procedure of international guidelines.

Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements
GHS label elements: Void
Hazard pictograms: Void
Signal word: Void
Hazard statements: Void

Classification system:
NFPA ratings (scale 0 - 4)
Health = 1
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)
Health = 1
Fire = 0
Reactivity = 0

Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: Modified Mayer's Hematoxylin

3 Composition

Chemical characterization: Mixtures
Description: Mixture of the substances listed below with nonhazardous additions.
Dangerous components: Void

4 First Aid Measures

Description of first aid measures
General information: No special measures required.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.
Information for doctor:
Most important symptoms and effects, both acute and delayed: No further relevant information available.
Indication of any immediate medical attention and special treatment needed:
No further relevant information available.

5 Firefighting Measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture: No further relevant information available.
Advice for firefighters
Protective equipment: No special measures required.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Not required.
Environmental precautions: Dilute with plenty of water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

Handling:
Precautions for safe handling: No special measures required.
Information about protection against explosions and fires: No special measures required.
Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Product Name: Modified Mayer's Hematoxylin

Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-55-6 propane-1,2-diol</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>64-19-7 acetic acid</td>
<td></td>
</tr>
<tr>
<td>PEL</td>
<td>25 mg/m³, 10 ppm</td>
</tr>
<tr>
<td>REL</td>
<td>Short-term value: 37 mg/m³, 15 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 25 mg/m³, 10 ppm</td>
</tr>
<tr>
<td>TLV</td>
<td>Short-term value: 37 mg/m³, 15 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 25 mg/m³, 10 ppm</td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls:
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Goggles recommended during refilling.

9 Physical and Chemical Properties

Information on basic physical and chemical properties
General Information
Appearance
Form: Fluid
Color: Purple
Odor: Mildly acidic
Odor threshold: Not determined.

pH-value: Not determined.
### Change in condition

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Flash point.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>371°C (700 °F)</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto igniting:</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion:</td>
<td>Product does not present an explosion hazard.</td>
</tr>
</tbody>
</table>

### 10 Stability and Reactivity

**Reactivity:**
- Chemical stability:  
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicology Information

**Information on toxicological effects**
- Acute toxicity:  
- Primary irritant effect:  
- On the skin: No irritant effect.
- On the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenic categories

| IARC (International Agency for Research on Cancer) | None of the ingredients are listed. |
| NTP (National Toxicology Program) | None of the ingredients are listed. |

12 Ecological Information

Toxicity:
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal Considerations

Waste treatment methods:
Recommendation: Smaller quantities can be disposed of with household waste. Disposal must be according to official regulations.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

| UN-Number | DOT, ADR, ADN, IMDG, IATA | Void |
| UN proper shipping name | DOT, ADR, ADN, IMDG, IATA | Void |
| Transport hazard class(es) | DOT, ADR, ADN, IMDG, IATA | Void |
| Packing group | DOT, ADR, IMDG, IATA | Void |
**Environmental hazards**

Marine pollutant: No

**Special precautions for user:** Not applicable.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

**UN "Model Regulation":** -

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**15 Regulatory Information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

**SARA**

**Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

**Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

**TSCA (Toxic Substances Control Act):**

- 57-55-6 propane-1,2-diol
- 64-19-7 acetic acid
- 517-28-2 haematoxylin
- 7681-55-2 sodium iodate
- 7732-18-5 water, distilled, conductivity or of similar purity

**Proposition 65**

**Chemicals known to cause cancer:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**Carcinogenic categories**

**EPA (Environmental Protection Agency)**

None of the ingredients are listed.

**TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients are listed.

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

**GHS label elements** Void

**Hazard pictograms** Void
Product Name: Modified Mayer's Hematoxylin

Signal word Void
Hazard statements Void
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information
This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department
Contact: Phone (800) 860-4073

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

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1 Identification of the Substance/Mixture and Company

Product Name: 95% Reagent Alcohol
MSDS Code: SSUKCR0157
Product Description: Solvent

Manufacturer/Supplier:
American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073

European Authorized Representative:
Emergo Europe
Moleensraat 15
2513 BH The Hague,
The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

F; Highly flammable
R11: Highly flammable.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of international guidelines.

Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02

Signal word Danger

Hazard statements
Highly flammable liquid and vapour.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Product Name: 95% Reagent Alcohol

Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/container and receiving equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)
Health = 1
Fire = 3
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 1
Fire = 3
Reactivity = 0

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition
Chemical characterization: Mixtures
Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 64-17-5</td>
<td>ethanol</td>
</tr>
<tr>
<td>EINECS: 200-578-6</td>
<td>Flam. Liq. 2, H225 90%</td>
</tr>
<tr>
<td>CAS: 67-63-0</td>
<td>propan-2-ol</td>
</tr>
<tr>
<td>EINECS: 200-661-7</td>
<td>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 &lt;10%</td>
</tr>
</tbody>
</table>

4 First Aid Measures
Description of first aid measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing: If symptoms persist consult doctor.

Information for doctor:
Most important symptoms and effects, both acute and delayed: No further relevant information available.
Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Firefighting Measures
Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: 95% Reagent Alcohol

Special hazards arising from the substance or mixture: No further relevant information available.

Advice for firefighters:
Protective equipment: No special measures required.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:
Wear protective equipment. Keep unprotected persons away.

Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

Handling:
Precautions for safe handling: No special precautions are necessary if used correctly.

Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

Storage:
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>Short-term value: 1880 mg/m³, 1000 ppm</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: 95% Reagent Alcohol

**67-63-0 propan-2-ol**

<table>
<thead>
<tr>
<th></th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>980 mg/m³, 400 ppm</td>
<td>Short-term value: 1225 mg/m³, 500 ppm</td>
<td>Short-term value: 984 mg/m³, 400 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long-term value: 980 mg/m³, 400 ppm</td>
<td>Long-term value: 492 mg/m³, 200 ppm</td>
</tr>
</tbody>
</table>

**Additional information:** The lists that were valid during the creation were used as basis.

**Exposure controls:**

**Personal protective equipment:**

**General protective and hygienic measures:** Wash hands before breaks and at the end of work.

**Breathing equipment:** Not required.

**Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Tightly sealed goggles

---

**9 Physical and Chemical Properties**

**Information on basic physical and chemical properties**

**General Information**

**Appearance**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Fluid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Like alcohol</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**pH-value:** Not determined.

**Change in condition**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>78°C (172 °F)</td>
</tr>
</tbody>
</table>

**Flash point:** 13°C (55 °F)

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:** 425°C (797 °F)

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.
Product Name: 95% Reagent Alcohol

<table>
<thead>
<tr>
<th>Danger of explosion:</th>
<th>Product is not explosive. However, formation of explosive air/vapor mixtures are possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>3.5 Vol %</td>
</tr>
<tr>
<td>Upper:</td>
<td>15.0 Vol %</td>
</tr>
<tr>
<td>Vapor pressure at 20°C (68 °F):</td>
<td>59 hPa (44 mm Hg)</td>
</tr>
<tr>
<td>Density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water:</td>
<td>Fully miscible.</td>
</tr>
<tr>
<td>Segregation coefficient (n-octonol/water):</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Other information:</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and Reactivity

Reactivity:
Chemical stability:
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicology Information

Information on toxicological effects
Acute toxicity:
Primary irritant effect:
On the skin: No irritant effect.
On the eye: No irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
Carcinogenic categories
IARC (International Agency for Research on Cancer)
67-63-0 | propan-2-ol [3]
NTP (National Toxicology Program)
None of the ingredients are listed.
**12 Ecological Information**

**Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.

**Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.

**Additional ecological information:**
- **General notes:**
  - Water hazard class 1 (Self-assessment): slightly hazardous for water
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**Other adverse effects:** No further relevant information available.

---

**13 Disposal Considerations**

**Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

---

**14 Transport Information**

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1170</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UN proper shipping name</th>
<th>DOT, IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL SOLUTION</td>
<td>1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)</td>
</tr>
</tbody>
</table>

**DOT**

- **Class:** 3 Flammable liquids.
- **Label:** 3

**ADR, IMDG, IATA**

- **Class:** 3 Flammable liquids
- **Label:** 3
Product Name: 95% Reagent Alcohol

<table>
<thead>
<tr>
<th>Packing group</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, ADR, IMDG, IATA</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental hazards</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine pollutant:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special precautions for user:</th>
<th>Warning: Flammable liquids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger code (Kepler):</td>
<td>33</td>
</tr>
<tr>
<td>EMS Number:</td>
<td>F-E,S-E</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>UN &quot;Model Regulation&quot;:</th>
<th>UN1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II</th>
</tr>
</thead>
</table>

### 15 Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

#### SARA

<table>
<thead>
<tr>
<th>Section 355 (extremely hazardous substances):</th>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Section 313 (Specific toxic chemical listings):</th>
<th>67-63-0 propan-2-ol</th>
</tr>
</thead>
</table>

**TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**Proposition 65**

<table>
<thead>
<tr>
<th>Chemicals known to cause cancer:</th>
<th>None of the ingredients is listed.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemicals known to cause reproductive toxicity for females:</th>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemicals known to cause reproductive toxicity for males:</th>
<th>None of the ingredients are listed.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemicals known to cause developmental toxicity:</th>
<th>64-17-5 ethanol</th>
</tr>
</thead>
</table>

**Carcinogenic categories**

**EPA (Environmental Protection Agency)**

None of the ingredients are listed.

**TLV (Threshold Limit Value established by ACGIH)**

<table>
<thead>
<tr>
<th>64-17-5 ethanol</th>
<th>A3</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0 propan-2-ol</td>
<td>A4</td>
</tr>
</tbody>
</table>

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.
GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02

Signal word Danger
Hazard statements
Highly flammable liquid and vapour.
Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/bond container and receiving equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information
This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

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SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

1 Identification of the Substance/Mixture and Company

Product Name: 80% Reagent Alcohol
MSDS Code: SSCUKCR0250
Product Description: Solvent
Manufacturer/Supplier:
American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073

European Authorized Representative:
Emergo Europe
Moleensraat 15
2513 BH The Hague,
The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

F; Highly flammable
R11: Highly flammable.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of international guidelines.

Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02

Signal word Danger

Hazard statements
Highly flammable liquid and vapour.

Precautionary statements
If medical advice is needed, have product container or label at hand.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: 80% Reagent Alcohol

Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/container and receiving equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)
Health = 1
Fire  = 3
Reactivity = 0

HMIS-ratings (scale 0 - 4)
Health = 1
Fire  = 3
Reactivity = 0

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition

Chemical characterization: Mixtures
Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Chemical Component</th>
<th>CAS Number</th>
<th>EINECS Number</th>
<th>PBT</th>
<th>vPvB</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>propan-2-ol</td>
<td>67-63-0</td>
<td>200-661-7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 First Aid Measures

Description of first aid measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing: If symptoms persist consult doctor.

Information for doctor:
Most important symptoms and effects, both acute and delayed: No further relevant information available.
Indication of any immediate medical attention and special treatment needed:
No further relevant information available.

5 Firefighting Measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Product Name: 80% Reagent Alcohol

Special hazards arising from the substance or mixture: No further relevant information available.
Advice for firefighters
Protective equipment: No special measures required.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:
Wear protective equipment. Keep unprotected persons away.

Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

Handling:
Precautions for safe handling: No special precautions are necessary if used correctly.

Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
</tr>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>REL</td>
</tr>
<tr>
<td>TLV</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: 80% Reagent Alcohol

67-63-0 propan-2-ol

<table>
<thead>
<tr>
<th></th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>980 mg/m³, 400 ppm</td>
<td>Short-term value: 1225 mg/m³, 500 ppm</td>
<td>Long-term value: 980 mg/m³, 400 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Short-term value: 984 mg/m³, 400 ppm</td>
<td>Long-term value: 492 mg/m³, 200 ppm</td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls:

Personal protective equipment:

General protective and hygienic measures: Wash hands before breaks and at the end of work.

Breathing equipment: Not required.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed goggles

9 Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance

Form: Fluid

Color: Colorless

Odor: Characteristic

Odor threshold: Not determined.

pH-value: Not determined.

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 78°C (172 °F)

Flash point: 13°C (55 °F)

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 425°C (797 °F)

Decomposition temperature: Not determined.

Auto igniting: Product is not selfigniting.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: 80% Reagent Alcohol

---

**Danger of explosion:**
Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

<table>
<thead>
<tr>
<th>Explosion limits:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower:</strong></td>
<td>3.5 Vol %</td>
</tr>
<tr>
<td><strong>Upper:</strong></td>
<td>15.0 Vol %</td>
</tr>
</tbody>
</table>

| Vapor pressure at 20°C (68 °F):     | 59 hPa (44 mm Hg) |

| Density:                           | Not determined.  |
| Relative density:                  | Not determined.  |
| Vapour density:                    | Not determined.  |
| Evaporation rate:                  | Not determined.  |

| Solubility in / Miscibility with Water: | Fully miscible. |

| Segregation coefficient (n-octanol/water): | Not determined. |
| Dynamic:                                    | Not determined. |
| Kinematic:                                   | Not determined. |
| Other information:                          | No further relevant information available. |

---

### 10 Stability and Reactivity

**Reactivity:**

**Chemical stability:**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions:** No dangerous reactions known.

**Conditions to avoid:** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

---

### 11 Toxicology Information

**Information on toxicological effects**

**Acute toxicity:**

**Primary irritant effect:**

**On the skin:** No irritant effect.

**On the eye:** No irritating effect.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

**Carcinogenic categories**

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
</tr>
</tbody>
</table>

**NTP (National Toxicology Program)**

None of the ingredients are listed.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Review Date 10/02/2015   Revision Date 10/02/2015

Product Name: 80% Reagent Alcohol

12 Ecological Information

Toxicity:
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Additional ecological information:
General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal Considerations

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1170</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UN proper shipping name</th>
<th>DOT, IATA</th>
<th>ADR</th>
<th>IMDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL SOLUTION</td>
<td></td>
<td>1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)</td>
<td>ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)</td>
</tr>
</tbody>
</table>

Transport hazard class(es)

<table>
<thead>
<tr>
<th>DOT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>3 Flammable liquids.</td>
</tr>
<tr>
<td>Label</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ADR, IMDG, IATA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>3 Flammable liquids</td>
</tr>
<tr>
<td>Label</td>
<td>3</td>
</tr>
</tbody>
</table>
**SAFETY DATA SHEET**
In Accordance with ISO/DIS 11014

Review Date 10/02/2015 Revision Date 10/02/2015

**Product Name:** 80% Reagent Alcohol

<table>
<thead>
<tr>
<th>Packing group</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental hazards</td>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user:</td>
<td>Danger code (Kemler):</td>
<td>Warning: Flammable liquids 33</td>
</tr>
<tr>
<td>EMS Number:</td>
<td>F-E,S-E</td>
<td></td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>UN1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II</td>
<td></td>
</tr>
</tbody>
</table>

**15 Regulatory Information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

**SARA**

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
67-63-0 propan-2-ol

**TSCA (Toxic Substances Control Act):**
All ingredients are listed.

**Proposition 65**

Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
64-17-5 ethanol

**Carcinogenic categories**

**EPA (Environmental Protection Agency)**
None of the ingredients are listed.

**TLV (Threshold Limit Value established by ACGIH)**
64-17-5 ethanol A3
67-63-0 propan-2-ol A4

**NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients are listed.

**OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients are listed.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: 80% Reagent Alcohol

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02

Signal word Danger
Hazard statements
Highly flammable liquid and vapour.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/bond container and receiving equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

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USA
1 Identification of the Substance/Mixture and Company

Product Name: Reagents Alcohol, 100%
MSDS Code: SSCUKCR0357
Product Description: Solvent
Manufacturer/Supplier:
American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073
European Authorized Representative:
Emergo Europe
Moleensraat 15
2513 BH The Hague,
The Netherlands
Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture

GHS02 Flame
Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

F; Highly flammable
R11: Highly flammable.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of international guidelines.

Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements
GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02

Signal word Danger

Hazard statements
Highly flammable liquid and vapour.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/container and receiving equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:**
**NFPA ratings (scale 0 - 4)**
Health = 1
Fire = 3
Reactivity = 0
**HMIS-ratings (scale 0 - 4)**
Health = 1
Fire = 3
Reactivity = 0

**Other hazards**
**Results of PBT and vPvB assessment**
PBT: Not applicable.
vPvB: Not applicable.

### 3 Composition

**Chemical characterization: Mixtures**
**Description:** Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Components</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>200-578-6</td>
<td>ethanol</td>
<td>&lt;100%</td>
</tr>
<tr>
<td>67-63-0</td>
<td>200-661-7</td>
<td>propan-2-ol</td>
<td>&lt;10%</td>
</tr>
</tbody>
</table>

**Flam. Liq. 2, H225**
**Eye Irrit. 2, H319; STOT SE 3, H336**

### 4 First Aid Measures

**Description of first aid measures**
**After inhalation:** Supply fresh air; consult doctor in case of complaints.
**After skin contact:** Generally the product does not irritate the skin.
**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
**After swallowing:** If symptoms persist consult doctor.

**Information for doctor:**
**Most important symptoms and effects, both acute and delayed:** No further relevant information available.
**Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

### 5 Firefighting Measures

**Extinguishing media**
**Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: Reagents Alcohol, 100%

Special hazards arising from the substance or mixture: No further relevant information available.
Advice for firefighters
Protective equipment: No special measures required.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:
Wear protective equipment. Keep unprotected persons away.

Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

Handling:
Precautions for safe handling: No special precautions are necessary if used correctly.

Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
</tr>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>REL</td>
</tr>
<tr>
<td>TLV</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Review Date 10/02/2015 Revision Date 10/02/2015

Product Name: Reagents Alcohol, 100%

<table>
<thead>
<tr>
<th>67-63-0 propan-2-ol</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL 980 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>REL Short-term value: 1225 mg/m³, 500 ppm</td>
</tr>
<tr>
<td>Long-term value: 980 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>TLV Short-term value: 984 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>Long-term value: 492 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>BEI</td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls:

Personal protective equipment:

General protective and hygienic measures: Wash hands before breaks and at the end of work.

Breathing equipment: Not required.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed goggles

9 Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance

Form: Fluid
Color: Colorless
Odor: Alcohol-like
Odor threshold: Not determined.

pH-value: Not determined.

Change in condition

Melting point/Melting range: -114.5°C (-174 °F)
Boiling point/Boiling range: 78°C (172 °F)

Flash point: 13°C (55 °F)

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 425°C (797 °F)

Decomposition temperature: Not determined.

Auto igniting: Product is not selfigniting.

USA
Product Name: Reagents Alcohol, 100%

### Danger of explosion:
Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

**Explosion limits:**
- **Lower:** 3.5 Vol %
- **Upper:** 15 Vol %

**Vapor pressure at 20°C (68 °F):** 59 hPa (44 mm Hg)

**Density at 20°C (68 °F):** 0.79 g/cm³ (6.593 lbs/gal)
- **Relative density:** Not determined.
- **Vapour density:** Not determined.
- **Evaporation rate:** Not determined.

**Solubility in / Miscibility with Water at 20°C (68 °F):** 1 g/l

- **Segregation coefficient (n-octonol/water):** Not determined.
- **Dynamic:** Not determined.
- **Kinematic:** Not determined.
- **Other information:** No further relevant information available.

### 10 Stability and Reactivity

**Reactivity:**
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicology Information

**Information on toxicological effects**

**Acute toxicity:**
- **Primary irritant effect:**
  - **On the skin:** No irritant effect.
  - **On the eye:** No irritating effect.
  - **Sensitization:** No sensitizing effects known.
  - **Additional toxicological information:**

**Carcinogenic categories**

<table>
<thead>
<tr>
<th>Source</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC (International Agency for Research on Cancer)</td>
<td>67-63-0</td>
<td>propan-2-ol</td>
</tr>
</tbody>
</table>

**NTP (National Toxicology Program)**
None of the ingredients are listed.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: Reagents Alcohol, 100%

12 Ecological Information

Toxicity:
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Additional ecological information:
General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal Considerations

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

<table>
<thead>
<tr>
<th>UN-Number DOT, ADR, IMDG, IATA</th>
<th>UN1170</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name DOT, IATA</td>
<td>ETHANOL SOLUTION</td>
</tr>
<tr>
<td>ADR 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)</td>
<td></td>
</tr>
<tr>
<td>IMDG ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)</td>
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</tbody>
</table>

Transport hazard class(es)

DOT

<table>
<thead>
<tr>
<th>Class</th>
<th>3 Flammable liquids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>3</td>
</tr>
</tbody>
</table>

ADR, IMDG, IATA

<table>
<thead>
<tr>
<th>Class</th>
<th>3 Flammable liquids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>3</td>
</tr>
</tbody>
</table>
**SAFETY DATA SHEET**

In Accordance with ISO/DIS 11014

Review Date 10/02/2015  
Revision Date 10/02/2015

**Product Name:** Reagents Alcohol, 100%

<table>
<thead>
<tr>
<th>Packing group</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental hazards</td>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user:</td>
<td>Warning: Flammable liquids</td>
<td>33</td>
</tr>
<tr>
<td>Danger code (Kemler):</td>
<td>EMS Number:</td>
<td>F-E.S-E</td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>UN1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II</td>
<td></td>
</tr>
</tbody>
</table>

### 15 Regulatory Information

**SARA**

**Section 355 (extremely hazardous substances):**
None of the ingredients are listed.

**Section 313 (Specific toxic chemical listings):**
67-63-0 propan-2-ol

**TSCA (Toxic Substances Control Act):**
All ingredients are listed.

**Proposition 65**

**Chemicals known to cause cancer:**
None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**
64-17-5 ethanol

**Carcinogenic categories**

**EPA (Environmental Protection Agency):**
None of the ingredients are listed.

**TLV (Threshold Limit Value established by ACGIH):**
64-17-5 ethanol | A3 |
67-63-0 propan-2-ol | A4 |

**NIOSH-Ca (National Institute for Occupational Safety and Health):**
None of the ingredients are listed.

**OSHA-Ca (Occupational Safety & Health Administration):**
None of the ingredients are listed.
GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02

Signal word Danger
Hazard statements
Highly flammable liquid and vapour.
Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/bond container and receiving equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information
This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

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1 Identification of the Substance/Mixture and Company

Product Name: Cytology Fixative
MSDS Code: SSCUKCC0227
Product Description: Tissue Fixative
Manufacturer/Supplier: American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073

European Authorized Representative:
Emergo Europe
Moleensraat 15
2513 BH The Hague,
The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC
F; Highly flammable
R11: Highly flammable.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of international guidelines.

Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from
company and literature data.

Label elements
GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02

Signal word Danger

Hazard statements
Highly flammable liquid and vapour.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Product Name: Cytology Fixative

Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protection clothing/eye protection/face protection.
Ground/bond container and receiving equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)
Health = 1
Fire = 3
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 1
Fire = 3
Reactivity = 0

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition
Chemical characterization: Mixtures
Description: Mixture of the substances listed below with nonhazardous additions.

| CAS: 64-17-5 | Ethanol | Flam. Liq. 2, H225 | <100% |
| CAS: 25322-68-3 | Polyethylene glycol | | <10% |

4 First Aid Measures

Description of first aid measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

Information for doctor:
Most important symptoms and effects, both acute and delayed: No further relevant information available.
Indication of any immediate medical attention and special treatment needed:
No further relevant information available.

5 Firefighting Measures

Extinguishing media
Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
For safety reasons unsuitable extinguishing agents: Water
Special hazards arising from the substance or mixture: No further relevant information available.

Advice for firefighters
Protective equipment: No special measures required.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:
Wear protective equipment. Keep unprotected persons away.

Environmental precautions:
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

Handling:
Precautions for safe handling: No special precautions are necessary if used correctly.
Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>Short-term value: 1880 mg/m³, 1000 ppm</td>
</tr>
</tbody>
</table>
Product Name: Cytology Fixative

<table>
<thead>
<tr>
<th>25322-68-3 Polyethylene glycol</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEL 10 mg/m³ aerosol</td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls:

Personal protective equipment:

General protective and hygienic measures: Wash hands before breaks and at the end of work.

Breathing equipment: Not required.

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed goggles

## 9 Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
</tr>
<tr>
<td>Appearance</td>
</tr>
<tr>
<td>Form: Fluid</td>
</tr>
<tr>
<td>Color: Colorless</td>
</tr>
<tr>
<td>Odor: Characteristic</td>
</tr>
<tr>
<td>Odor threshold: Not determined.</td>
</tr>
<tr>
<td>pH-value: Not determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: 78°C (172 °F)</td>
</tr>
<tr>
<td>Flash point: 13°C (55 °F)</td>
</tr>
<tr>
<td>Flammability (solid, gaseous): Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature: 425°C (797 °F)</td>
</tr>
<tr>
<td>Decomposition temperature: Not determined.</td>
</tr>
<tr>
<td>Auto igniting: Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.</td>
</tr>
</tbody>
</table>

| Explosion limits:                                     |
| Lower: 3.5 Vol %                                      |
| Upper: 15.0 Vol %                                     |
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: Cytology Fixative

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor pressure at 20°C (68 °F):</td>
<td>59 hPa (44 mm Hg)</td>
</tr>
<tr>
<td>Density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water:</td>
<td>Fully miscible.</td>
</tr>
<tr>
<td>Segregation coefficient (n-octanol/water):</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Other information:</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and Reactivity

Reactivity:
Chemical stability:
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicology Information

Information on toxicological effects
Acute toxicity:
Primary irritant effect:
On the skin: No irritant effect.
On the eye: No irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
Carcinogenic categories

IARC (International Agency for Research on Cancer)
None of the ingredients are listed.

NTP (National Toxicology Program)
None of the ingredients are listed.

12 Ecological Information

Toxicity:
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: Cytology Fixative

Additional ecological information:
General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal Considerations
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1170</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UN proper shipping name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, IATA</td>
</tr>
<tr>
<td>ETHANOL, mixture</td>
</tr>
<tr>
<td>ADR</td>
</tr>
<tr>
<td>1170 ETHANOL (ETHYL ALCOHOL), mixture</td>
</tr>
<tr>
<td>IMDG</td>
</tr>
<tr>
<td>ETHANOL (ETHYL ALCOHOL), mixture</td>
</tr>
</tbody>
</table>

Transport hazard class(es)

<table>
<thead>
<tr>
<th>DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
</tr>
<tr>
<td>Label</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ADR, IMDG, IATA</th>
</tr>
</thead>
</table>

| Class | 3 Flammable liquids |
|-------|
| Label | 3 |

<table>
<thead>
<tr>
<th>Packing group</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, ADR, IMDG, IATA</td>
</tr>
<tr>
<td>II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine pollutant:</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special precautions for user:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger code (Kemler):</td>
</tr>
<tr>
<td>Warning: Flammable liquids</td>
</tr>
<tr>
<td>33</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
In Accordance with ISO/DIS 11014

Product Name: Cytology Fixative

EMS Number: F-E,S-D

| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: | Not applicable. |
| UN "Model Regulation": | UN1170, ETHANOL (ETHYL ALCOHOL), mixture, 3, II |

15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.

TSCA (Toxic Substances Control Act):
All ingredients are listed.

Proposition 65

Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
64-17-5 ethanol

Carcinogenic categories

EPA (Environmental Protection Agency)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)
64-17-5 ethanol A3

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GH302

Signal word Danger
Hazard statements
Highly flammable liquid and vapour.

Precautionary statements
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
Ground/bond container and receiving equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information
This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department
Contact: Phone (800) 860-4073

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

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