

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. Issue date: 12/31/2021 Revision date: 6/27/2022 Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : 16 Double Coverage Cement

Product code : X16AF 190830

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Architectural Coating

1.3. Supplier

Manufacturer

Karnak Corporation 330 Central Avenue

Clark, New Jersey 07066 - USA

T +1-800-526-4236 www.karnakcorp.com

1.4. Emergency telephone number

Emergency number : CHEMTREC (US Transportation): (800)424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flam. Liq. 3 Flammable liquid and vapor

Resp. Sens. 1A May cause an allergy or asthma symptoms or breathing difficulties if inhaled

Skin Sens. 1 May cause an allergic skin reaction Carc. 2 Suspected of causing cancer

Repr. 1B May damage fertility or the unborn child Lact. May cause harm to breast-fed children

STOT RE 1 Causes damage to organs through prolonged or repeated exposure

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : Flammable liquid and vapor

May cause an allergic skin reaction

May cause an allergy or asthma symptoms or breathing difficulties if inhaled

Suspected of causing cancer

May damage fertility or the unborn child May cause harm to breast-fed children

Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) : Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Keep container tightly closed.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Avoid contact during pregnancy/while nursing.

Wash hands, forearms and face thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

Wear respiratory protection..

If exposed or concerned: Get medical advice/attention.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a poison center or doctor..

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Asphalt	CAS-No.: 8052-42-4	30 - 50
Naphtha, petroleum, hydrotreated heavy	CAS-No.: 64742-48-9	< 30
Stoddard solvent	CAS-No.: 8052-41-3	< 30
Kaolin	CAS-No.: 1332-58-7	5 - 10
Microcrystalline cellulose	CAS-No.: 9004-34-6	1 - 5
Benzene, 1,2,4-trimethyl-	CAS-No.: 95-63-6	< 2
nonane	CAS-No.: 111-84-2	< 2
Xylenes (o-, m-, p- isomers)	CAS-No.: 1330-20-7	< 1
Fatty aminoamine mixture	Trade Secret	< 1
Toluene	CAS-No.: 108-88-3	< 1
hexane	CAS-No.: 110-54-3	< 1
Ethylbenzene	CAS-No.: 100-41-4	< 1

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Name	Product identifier	%
Naphthalene	CAS-No.: 91-20-3	< 1

^{*}Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

First-aid measures after skin contact : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash clothing before re-using. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact

: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

rst-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause harm to breast-fed children.

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. May cause an allergy or asthma symptoms or

breathing difficulties if inhaled.

Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause

an allergic skin reaction.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea

: Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to

organs through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

Chronic symptoms

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor. Products of combustion may include, and are not limited to: oxides

of carbon. Hydrocarbons.

Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Move containers away from the fire area if this can be done without risk. Cool closed containers

exposed to fire with water spray.

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory

protection (SCBA).

6/27/2022 (Revision date) EN (English US) 3/18

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Remove all sources of ignition. Use only non-sparking tools.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment

: Stop leak if safe to do so. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up

: Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed Precautions for safe handling

- : Handle empty containers with care because residual vapors are flammable.
- : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin and clothing. Do not breathe dust, fume, gas, mist, spray, vapors. Do not swallow. When using do not eat, drink or smoke. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Handle and open container with care. Use only non-sparking tools. Use explosion-proof equipment. Avoid contact during pregnancy/while nursing. Benzene may be present in trace amounts. Benzene is subject to the standard 29 CFR 1910.1028 which may contain specific requirements for handling including protective equipment, regulated areas, monitoring and medical surveillance. The employer should review the standard and assure compliance with applicable requirements.

Hygiene measures

: Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures Storage conditions

- : Proper grounding procedures to avoid static electricity should be followed.
- : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Store locked up.

6/27/2022 (Revision date) EN (English US) 4/18

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

16 Double Coverage Cement No additional Information available Asphalt (8052-42-4) USA - ACGIH - Occupational Exposure Limits ACGIH Chemical category Not Classifiable as a Human Carcinogen fume, coal tar-free USA - ACGIH - Biological Exposure Indices BEI (BLV) Shift at end of workweek (background) Parameter: 1-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (hackground) Parameter: 3-Hydroxyberazo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (hackground) Parameter: 3-Hydroxyberazo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (hackground) Parameter: 3-Hydroxyberazo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (hackground) Parameter: 3-Hydroxyberazo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (hackground) Parameter: 3-Hydroxyberazo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (hackground) Parameter: 3-Hydroxyberazo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (hackground) Parameter: 3-Hydroxyberazo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (hackground) Parameter: 3-Hydroxyberazo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (hackground) Parameter: 48-99 No additional information available 150 ppm No additional information available 150 ppm Remark (ACGIH) 170 ppm Remark (ACGIH) 170 ppm Remark (ACGIH) 170 ppm Remark (ACGIH) Not Classifiable as a Human Carcinogen ACGIH cacin ame ACG	o.i. Control parameters		
Asphalt (8052-42-4) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 0.5 mg/m² (tume, inhalable particulate matter) ACGIH AcGIH - Biological Exposure Indices BEI (BLV) Say 12 marmeter: 1-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (background) Parameter: 3-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (background) Parameter: 3-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (background) Parameter: 3-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (nonquantitative) Naphtha, petroleum, hydrotreated heavy (64742-48-9) Na additional information available Xylenes (o-, m-, p- isomers) (1330-20-7) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 100 ppm ACGIH OEL TWA [ppm] 150 ppm ACGIH CEL TWA [pom] 150 ppm ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift usa - ACGIH - Occupational Exposure Limits USA - SOSHA - Occupational Exposure Limits USA - CUMP (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name 7 Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH - Occupational Exposure Limits Local name 7 Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) - Occupational Exposure Limits Local name 7 Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) - Occupational Exposure Limits Local name 7 Toluene ACGIH OEL TWA [ppm] 20 ppm	16 Double Coverage Cement		
USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH chemical category Not Classifiable as a Human Carcinogen fume, coal tar-free USA - ACGIH - Biological Exposure Indices BEI (BLV) \$\begin{array}{cccccccccccccccccccccccccccccccccccc	No additional information available		
ACGIH CEL TWA 0.5 mg/m² (tume, inhalable particulate matter) ACGIH chemical category Not Classifiable as a Human Carcinogen fume, coal tar-free USA - ACGIH - Biological Exposure Indices BEI (BLV) 2.5 µg/l Parameter: 1-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (background) Parameter: 3-Hydroxybenzo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (honquantitative) Naphtha, petroleum, hydrotreated heavy (647424-84-9) No additional information available Xylenes (o-, m-, p- isomers) (1330-20-7) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 100 ppm ACGIH OEL STEL [ppm] 150 ppm ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - ACGIH - Biological Exposure Limits Local name 2 Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) 0SHA Annotated Table 2-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name 5 Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) 11 TUV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen): BEI ACGIH Chemical category Not Classifiable as a Human Carcinogen	Asphalt (8052-42-4)		
ACGIH chemical category Not Classifiable as a Human Carcinogen fume, coal tar-free USA - ACGIH - Biological Exposure Indices BEI (BLV) 2.5 µg/l Parameter: 1-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (background) Parameter: 3-Hydroxyberaco(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (nonquantitative) Naphtha, petroleum, hydrotreated heavy (64742-48-9) No additional information available Xylenes (o-, m-, p- isomers) (1330-20-7) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 100 ppm ACGIH CEL TWA [ppm] 150 ppm ACGIH CEL STEL [ppm] 150 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen USA - ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift usa - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-88-3)	USA - ACGIH - Occupational Exposure Limits		
USA - ACGIH - Biological Exposure Indices BEI (BLV) 2.5 µg/l Parameter: 1-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (background) Parameter: 3-Hydroxybenzo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (nonquantitative) Naphtha, petroleum, hydrotreated heavy (64742-48-9) No additional information available Xylenes (o-, m-, p- isomers) (1330-20-7) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 100 ppm ACGIH OEL TWA [ppm] 150 ppm ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - OshA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-08-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-08-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-08-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-08-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-08-1) ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TVA [ppm] 100 ppm Remark (ACGIH) TVA [ppm] 20 ppm Remark (ACGIH) TVA [ppm] 20 ppm	ACGIH OEL TWA	0.5 mg/m³ (fume, inhalable particulate matter)	
BEI (BLV) 2.5 µg/l Parameter: 1-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (background) Parameter: 3-Hydroxypenzo(a) pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (nonquantitative) Naphtha, petroleum, hydrotreated heavy (6474248-9) No additional information available Xylenes (o-, m-, p- isomers) (1330-20-7) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA (ppm) 100 ppm ACGIH OEL STEL (ppm) 150 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen USA - ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - Oscupational Exposure Limits USA - OshA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene (108-00-10) ACGIH Obel TWA (ppm) 20 ppm Remark (ACGIH) TWA (ppm) 20 ppm Remark (ACGIH) Exposure Limits Local name Toluene (ACGIH) TUA (ppm) 20 ppm Remark (ACGIH) TUA (ppm) 20 ppm Remark (ACGIH) Not classifiable as a Human Carcinogen); BEI ACGIH Chemical category Not classifiable as a Human Carcinogen)	ACGIH chemical category	Not Classifiable as a Human Carcinogen fume, coal tar-free	
shift at end of workweek (background) Parameter: 3-Hydroxybenzo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (nonquantitative) Naphtha, petroleum, hydrotreated heavy (64742-48-9) No additional information available Xylenes (o-, m-, p- isomers) (1330-20-7) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 100 ppm ACGIH OEL STEL [ppm] 150 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen USA - ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - OSHA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TWA [ppm] 20 ppm	USA - ACGIH - Biological Exposure Indices		
No additional information available Xylenes (o-, m-, p- isomers) (1330-20-7) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 100 ppm ACGIH OEL STEL [ppm] 150 ppm ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - ACGIH - Biological Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TUA [ppm] 20 ppm Remark (ACGIH) TUA [Sesifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	BEI (BLV)	shift at end of workweek (background) Parameter: 3-Hydroxybenzo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of	
Wylenes (o-, m-, p- isomers) (1330-20-7) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 100 ppm ACGIH OEL STEL [ppm] 1550 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen USA - ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - OSHA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TVWE [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	Naphtha, petroleum, hydrotreated heavy (647	42-48-9)	
USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 100 ppm ACGIH OEL STEL [ppm] 150 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen USA - ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - OSHA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	No additional information available		
ACGIH OEL TWA [ppm] 150 ppm ACGIH OEL STEL [ppm] 150 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen USA - ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - OSHA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	Xylenes (o-, m-, p- isomers) (1330-20-7)		
ACGIH OEL STEL [ppm] 150 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen USA - ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - OSHA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	USA - ACGIH - Occupational Exposure Limits		
ACGIH chemical category Not Classifiable as a Human Carcinogen USA - ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - OSHA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	ACGIH OEL TWA [ppm]	100 ppm	
USA - ACGIH - Biological Exposure Indices BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - OSHA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name ACGIH OEL TWA [ppm] Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	ACGIH OEL STEL [ppm]	150 ppm	
BEI (BLV) 1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift USA - OSHA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	ACGIH chemical category	Not Classifiable as a Human Carcinogen	
USA - OSHA - Occupational Exposure Limits Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	USA - ACGIH - Biological Exposure Indices		
Local name Xylenes (o-, m-, p-isomers) OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TUV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	BEI (BLV)	1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift	
OSHA PEL (TWA) [1] 435 mg/m³ OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	USA - OSHA - Occupational Exposure Limits		
OSHA PEL (TWA) [2] 100 ppm Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	Local name	Xylenes (o-, m-, p-isomers)	
Regulatory reference (US-OSHA) OSHA Annotated Table Z-1 Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	OSHA PEL (TWA) [1]	435 mg/m³	
Toluene (108-88-3) USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	OSHA PEL (TWA) [2]	100 ppm	
USA - ACGIH - Occupational Exposure Limits Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	
Local name Toluene ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	Toluene (108-88-3)		
ACGIH OEL TWA [ppm] 20 ppm Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	USA - ACGIH - Occupational Exposure Limits		
Remark (ACGIH) TLV® Basis: Visual impair; female repro; pregnancy loss. Notations: A4 (Not classifiable as a Human Carcinogen); BEI ACGIH chemical category Not Classifiable as a Human Carcinogen	Local name	Toluene	
ACGIH chemical category Not Classifiable as a Human Carcinogen	ACGIH OEL TWA [ppm]	20 ppm	
	Remark (ACGIH)	, , , , , , , , , , , , , , , , , , , ,	
Regulatory reference ACGIH 2020	ACGIH chemical category	Not Classifiable as a Human Carcinogen	
	Regulatory reference	ACGIH 2020	

Safety Data Sheet

Toluene (108-88-3)		
USA - ACGIH - Biological Exposure Indices		
BEI (BLV)	0.02 mg/l Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek 0.03 mg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g Kreatinin Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)	
USA - OSHA - Occupational Exposure Limits		
Local name	Toluene	
OSHA PEL (TWA) [2]	200 ppm	
OSHA PEL C [ppm]	300 ppm	
Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	500 ppm Peak (10 minutes)	
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-2	
Ethylbenzene (100-41-4)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	20 ppm	
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans	
USA - ACGIH - Biological Exposure Indices		
BEI (BLV)	0.15 g/g Kreatinin Parameter: Sum of mandelic acid and phenylglyoxylic acid - Medium: urine - Sampling time: end of shift (nonspecific)	
USA - OSHA - Occupational Exposure Limits		
Local name	Ethyl benzene	
OSHA PEL (TWA) [1]	435 mg/m³	
OSHA PEL (TWA) [2]	100 ppm	
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1 OSHA Annotated Table Z-1	
hexane (110-54-3)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	50 ppm	
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route	
USA - ACGIH - Biological Exposure Indices		
BEI (BLV)	0.5 mg/l Parameter: 2,5-Hexanedione without hydrolysis - Medium: urine - Sampling time: end of shift	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL (TWA) [1]	1800 mg/m³	
OSHA PEL (TWA) [2]	500 ppm	
Stoddard solvent (8052-41-3)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Stoddard solvent	
ACGIH OEL TWA [ppm]	100 ppm	

Safety Data Sheet

Stoddard solvent (8052-41-3)		
Remark (ACGIH)	TLV® Basis: Eye, skin, & kidney dam; nausea; CNS impair	
Regulatory reference	ACGIH 2020	
USA - OSHA - Occupational Exposure Limits		
Local name	Stoddard solvent	
OSHA PEL (TWA) [1]	2900 mg/m³	
OSHA PEL (TWA) [2]	500 ppm	
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	
Naphthalene (91-20-3)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	10 ppm	
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans, Skin - potential significant contribution to overall exposure by the cutaneous route	
USA - ACGIH - Biological Exposure Indices		
BEI (BLV)	Parameter: 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis - Sampling time: end of shift (nonquantitative, nonspecific)	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL (TWA) [1]	50 mg/m³	
OSHA PEL (TWA) [2]	10 ppm	
nonane (111-84-2)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	200 ppm	
Benzene, 1,2,4-trimethyl- (95-63-6)		
No additional information available		
Microcrystalline cellulose (9004-34-6)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	10 mg/m³	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL (TWA) [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)	
Kaolin (1332-58-7)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Kaolin	
ACGIH OEL TWA	2 mg/m³ (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)	
Remark (ACGIH)	TLV® Basis: Pneumoconiosis. Notations: A4 (Not classifiable as a Human Carcinogen)	
ACGIH chemical category	Not Classifiable as a Human Carcinogen	
Regulatory reference	ACGIH 2020	

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Kaolin (1332-58-7)	
USA - OSHA - Occupational Exposure Limits	
, ,	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)

8.2. Appropriate engineering controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below

recommended exposure limits. Provide readily accessible eye wash stations and safety showers.

Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves resistant to chemical penetration

Eye protection:

Safety glasses or goggles are recommended when using product.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color No data available Odor No data available Odor threshold No data available No data available Ha : No data available Melting point Freezing point : No data available : 300 - 350 °F Boiling point Flash point : 104 °F

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : Flammable liquid and vapor.

No data available Vapor pressure Relative vapor density at 20 °C No data available Relative density No data available Solubility No data available Partition coefficient n-octanol/water No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity, kinematic $: > 20.5 \text{ mm}^2/\text{s}$ Viscosity, dynamic : No data available **Explosion limits** : No data available

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Explosive properties : No data available Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Freezing. Sources of ignition. Direct sunlight. Incompatible materials.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Hydrocarbons. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Safety Data Sheet

Asphalt (8052-42-4)		
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	
LC50 inhalation rat	> 94.4 mg/m³ (Exposure time: 4.5 h)	
Naphtha, petroleum, hydrotreated heavy (6474	42-48-9)	
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)	
LD50 dermal rabbit	> 5000 mg/kg	
LC50 inhalation rat	> 8500 mg/m³ (Exposure time: 4 h)	
Xylenes (o-, m-, p- isomers) (1330-20-7)		
LD50 oral rat	3500 mg/kg	
LD50 dermal rat	1100 mg/kg	
Toluene (108-88-3)		
LD50 oral rat	2600 mg/kg	
LD50 dermal rabbit	12000 mg/kg	
LC50 inhalation rat	12.5 mg/l/4h	
Ethylbenzene (100-41-4)		
LD50 oral rat	3500 mg/kg	
LD50 dermal rabbit	15400 mg/kg	
LC50 inhalation rat	17.4 mg/l/4h	
hexane (110-54-3)		
LD50 oral rat	25 g/kg	
LD50 dermal rabbit	3000 mg/kg	
LC50 inhalation rat	48000 ppm/4h	
Stoddard solvent (8052-41-3)		
LD50 dermal rabbit	> 3000 mg/kg	
LC50 inhalation rat	> 5.5 mg/l/4h	
Naphthalene (91-20-3)		
LD50 oral rat	1110 mg/kg	
LD50 dermal rabbit	1120 mg/kg	
LC50 inhalation rat	> 0.4 mg/l/4h	
nonane (111-84-2)		
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)	
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)	
LC50 inhalation rat	17 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), 95% CL: 14 - 21	
LC50 inhalation rat	3200 ppm/4h	

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Benzene, 1,2,4-trimethyl- (95-63-6)		
LD50 oral rat	3280 mg/kg	
LD50 dermal rabbit	> 3160 mg/kg	
LC50 inhalation rat	18 g/m³ (Exposure time: 4 h)	
Microcrystalline cellulose (9004-34-6)		
LD50 oral rat	> 5 g/kg	
LD50 dermal rabbit	> 2000 mg/kg	
LC50 inhalation rat	> 5800 mg/m³ (Exposure time: 4 h)	
Kaolin (1332-58-7)		
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rat	> 5000 mg/kg	
Serious eye damage/irritation : Respiratory or skin sensitization : Germ cell mutagenicity :	Not classified Not classified May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Not classified Suspected of causing cancer.	
Asphalt (8052-42-4)	Cooperation of Cooperation in Cooper	
IARC group	2B - Possibly carcinogenic to humans	
In OSHA Hazard Communication Carcinogen list	Yes	
Xylenes (o-, m-, p- isomers) (1330-20-7)		
IARC group	3 - Not classifiable	
Toluene (108-88-3)		
IARC group	3 - Not classifiable	
Ethylbenzene (100-41-4)		
IARC group	2B - Possibly carcinogenic to humans	
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity	
In OSHA Hazard Communication Carcinogen list	Yes	
Naphthalene (91-20-3)		
IARC group	2B - Possibly carcinogenic to humans	
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen, Evidence of Carcinogenicity	
In OSHA Hazard Communication Carcinogen list	Yes	
Reproductive toxicity :	May damage fertility or the unborn child. May cause harm to breast-fed children.	

6/27/2022 (Revision date) EN (English US) 11/18

Safety Data Sheet

Naphthalene (91-20-3)		
LOAEL (animal/female, F0/P)	50 mg/kg body weight Animal: rat, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study)	
LOAEL (animal/female, F1)	450 mg/kg body weight Animal: rat, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study)	
NOAEL (animal/female, F0/P)	120 mg/kg body weight Animal: rabbit, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study)	
STOT-single exposure	: Not classified	
Xylenes (o-, m-, p- isomers) (1330-2	0-7)	
STOT-single exposure	May cause drowsiness or dizziness.	
Toluene (108-88-3)		
STOT-single exposure	May cause drowsiness or dizziness.	
hexane (110-54-3)		
STOT-single exposure	May cause drowsiness or dizziness.	
nonane (111-84-2)		
STOT-single exposure	May cause drowsiness or dizziness.	
Benzene, 1,2,4-trimethyl- (95-63-6)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.	

Safety Data Sheet

Asphalt (8052-42-4)		
LOAEC (inhalation,rat,dust/mist/fume,90 days)	0.0207 mg/l air Animal: rat, Guideline: other:OECD 451	
Xylenes (o-, m-, p- isomers) (1330-20-7)		
LOAEL (oral,rat,90 days)	150 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)	
Toluene (108-88-3)		
LOAEL (oral,rat,90 days)	1250 mg/kg body weight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
NOAEL (oral,rat,90 days)	625 mg/kg body weight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
NOAEC (inhalation,rat,vapor,90 days)	2.355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.	
Ethylbenzene (100-41-4)		
NOAEL (oral,rat,90 days)	75 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
hexane (110-54-3)		
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.	
Stoddard solvent (8052-41-3)		
STOT-repeated exposure	Causes damage to organs (central nervous system) through prolonged or repeated exposure.	
Naphthalene (91-20-3)		
LOAEL (oral,rat,90 days)	400 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
LOAEC (inhalation,rat,vapor,90 days)	0.011 mg/l air Animal: rat, Guideline: EPA OPP 82-4 (90-Day Inhalation Toxicity), Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)	
NOAEL (dermal,rat/rabbit,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
nonane (111-84-2)		
NOAEL (oral,rat,90 days)	100 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
NOAEC (inhalation,rat,vapor,90 days)	24.3 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)	
NOAEL (subchronic,oral,animal/male,90 days)	100 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
Benzene, 1,2,4-trimethyl- (95-63-6)		
NOAEL (oral,rat,90 days)	600 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
NOAEC (inhalation,rat,vapor,90 days)	1.8 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)	

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Aspiration hazard : Not classified Viscosity, kinematic : > 20.5 mm²/s

Symptoms/effects : May cause harm to breast-fed children.

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. May cause an allergy or asthma symptoms or

breathing difficulties if inhaled.

Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause

an allergic skin reaction.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea

Chronic symptoms : Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to

organs through prolonged or repeated exposure.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Naphtha, petroleum, hydrotreated heavy (64742-48-9)		
LC50 - Fish [1]	2200 mg/l (Exposure time: 96 h - Species: Pimephales promelas)	
Xylenes (o-, m-, p- isomers) (1330-20-7)		
LC50 - Fish [1]	2.6 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia	
LC50 - Fish [2]	2.661 – 4.093 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])	
EC50 - Crustacea [2]	0.6 mg/l (Exposure time: 48 h - Species: Gammarus lacustris)	
LOEC (chronic)	3.16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'	
Toluene (108-88-3)		
LC50 - Fish [1]	5.5 mg/l Test organisms (species): Oncorhynchus kisutch	
EC50 - Crustacea [1]	5.46 – 9.83 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])	
LC50 - Fish [2]	12.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])	
EC50 - Crustacea [2]	11.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LOEC (chronic)	2.76 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'	
NOEC (chronic)	0.74 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'	
NOEC chronic fish	1.39 mg/l Test organisms (species): Oncorhynchus kisutch Duration: '40 d'	
NOEC chronic crustacea	0.74 mg/l	
Ethylbenzene (100-41-4)		
LC50 - Fish [1]	5.1 mg/l Test organisms (species): Menidia menidia	
EC50 - Crustacea [1]	1.8 – 2.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LC50 - Fish [2]	4.2 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])	
LOEC (chronic)	1.7 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'	

Safety Data Sheet

Ethylbenzene (100-41-4)		
NOEC (chronic)	0.96 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'	
NOEC chronic crustacea	0.956 mg/l	
hexane (110-54-3)		
LC50 - Fish [1]	2.1 – 2.98 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
Naphthalene (91-20-3)		
LC50 - Fish [1]	5.74 – 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
EC50 - Crustacea [1]	2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LC50 - Fish [2]	1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])	
EC50 - Crustacea [2]	1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])	
NOEC (chronic)	0.59 mg/l Test organisms (species): Daphnia pulex Duration: '125 d'	
NOEC chronic fish	≈ 0.37 mg/l Test organisms (species): Oncorhynchus kisutch Duration: '40 d'	
nonane (111-84-2)		
EC50 - Crustacea [1]	0.2 mg/l Test organisms (species): Daphnia magna	
LOEC (chronic)	0.32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	0.17 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
Benzene, 1,2,4-trimethyl- (95-63-6)		
LC50 - Fish [1]	7.19 – 8.28 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
EC50 - Crustacea [1]	6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
12.2. Persistence and degradability		
16 Double Coverage Cement		
Persistence and degradability	Not established.	
12.3. Bioaccumulative potential		
16 Double Coverage Cement		
Bioaccumulative potential	Not established.	
Asphalt (8052-42-4)		
BCF - Fish [1]	(no bioaccumulation expected)	
Partition coefficient n-octanol/water	> 6	
Xylenes (o-, m-, p- isomers) (1330-20-7)		
BCF - Fish [1]	0.6 – 15	
Partition coefficient n-octanol/water	2.77 – 3.15	
Toluene (108-88-3)		
Partition coefficient n-octanol/water	2.7	
Ethylbenzene (100-41-4)		
BCF - Fish [1]	15	
<u> </u>	1	

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Ethylbenzene (100-41-4)	
Partition coefficient n-octanol/water	3.2
Naphthalene (91-20-3)	
BCF - Fish [1]	30 – 430
Partition coefficient n-octanol/water	3.6
Benzene, 1,2,4-trimethyl- (95-63-6)	
Partition coefficient n-octanol/water	3.63

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with

local, regional, national and/or international regulation. The generation of waste should be avoided or minimized wherever possible. Recycle empty containers where allowed. Empty

containers may contain residues which are hazardous.

Additional information : Handle empty containers with care because residual vapors are flammable.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No : Not regulated (if shipped in NON BULK packaging by ground transport) per DOT Exemption

173.150(1)(f)

UN-No. (TDG) : Not regulated (if shipped in NON BULK packaging by ground transport) per TDG Exemption 1.33

UN-No. (IMDG) : 1999 UN-No. (IATA) : 1999

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated (if shipped in NON BULK packaging by ground transport) per DOT Exemption

173.150(1)(f)

Proper Shipping Name (TDG) : Not regulated (if shipped in NON BULK packaging by ground transport) per TDG Exemption 1.33

Proper Shipping Name (IMDG) : TARS, LIQUID
Proper Shipping Name (IATA) : TARS, LIQUID

*Flammable for Air and Vessel transportation to non-US territories.

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not regulated Hazard labels (DOT) : Not regulated

TDG

Transport hazard class(es) (TDG) : Not regulated

6/27/2022 (Revision date) EN (English US) 16/18

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Hazard labels (TDG) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : 3
Hazard labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3



14.4. Packing group

Packing group (DOT) : Not regulated Packing group (TDG) : Not regulated

Packing group (IMDG) : III
Packing group (IATA) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

Marine pollutant : Product is not a marine pollutant

Emergency Response Guidebook No. : 130

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport per UN1999 TARS LIQUID 3, PG III

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. International regulations

No additional information available

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

15.3. US State regulations

⚠ WARNING:

This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Issue date : 12/31/2021
Revision date : 6/27/2022
Other information : None.

Prepared by : Nexreg Compliance Inc.

www.Nexreg.com



Indication of changes:

Transport information. GHS classification.

Safety Data Sheet (SDS), USA

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.