

ENDURIS 3400 PB BROWN 55G

SAFETY DATA SHEET

1. Identification

Product identifier: ENDURIS 3400 PB BROWN 55G

Other means of identification

Synonyms: Silicone Roofcoat

Recommended use and restriction on use

Recommended use: Plastic Coating

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information : Momentive Performance Materials LLC
260 Hudson River Road
Waterford NY 12188

Contact person : commercial.services@momentive.com

Telephone : General information
+1-800-295-2392

**Emergency telephone number
Supplier :** CHEMTREC
1-800-424-9300

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 3

Health Hazards

Carcinogenicity Category 1A

Specific Target Organ Toxicity - Repeated Exposure Category 1¹

Target Organs

1. Central nervous system

Label Elements

Hazard Symbol:

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Signal Word:	Danger
Hazard Statement:	H226; Flammable liquid and vapor. H350; May cause cancer. H372; Causes damage to organs through prolonged or repeated exposure.
Precautionary Statements	
Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
Response:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF exposed or concerned: Get medical advice/attention. In case of fire: Use... to extinguish.
Storage:	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification:	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.
Substance(s) formed under the conditions of use:	Generates methanol during cure.

3. Composition/information on ingredients

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Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
(1) Calcium Carbonate	471-34-1	20 - <50%	# This substance has workplace exposure limit(s).
Solvent Naphtha	64742-88-7	20 - <50%	# This substance has workplace exposure limit(s).
Octadecanoic acid	57-11-4	1 - <5%	# This substance has workplace exposure limit(s).
(1) TITANIUM DIOXIDE	13463-67-7	1 - <5%	# This substance has workplace exposure limit(s).
Titanium, Bis(ethyl acetoacetato)-diispropoxy	27858-32-8	1 - <5%	No data available.
(1) QUARTZ	14808-60-7	0.1 - <1%	# This substance has workplace exposure limit(s).

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

- Ingestion:** If swallowed, do NOT induce vomiting. Give a glass of water.
- Inhalation:** If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.
- Skin Contact:** Wash area with soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- Eye contact:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Most important symptoms/effects, acute and delayed

Symptoms: None known.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

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5. Fire-fighting measures

General Fire Hazards: No data available.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Foam. Carbon dioxide

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: No data available.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Combustible Wear appropriate personal protective equipment. Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Combustible Keep away from heat, sparks and open flame. Use only in well-ventilated areas. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Keep out of reach of children.

Methods and material for containment and cleaning up: Wipe, scrape or soak up in an inert material and put in a container for disposal. Wear proper protective equipment as specified in the protective equipment section. Warn other workers of spill. Keep unauthorized personnel away.

7. Handling and storage

Precautions for safe handling: Sensitivity to static discharge is expected; material has a flash point below 200 F.

Conditions for safe storage, including any incompatibilities: No data available.

8. Exposure controls/personal protection

Control Parameters
Occupational Exposure Limits

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Chemical Identity	Type	Exposure Limit Values	Source
(1) Calcium Carbonate - Total	REL	10 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
(1) Calcium Carbonate - Respirable.	REL	5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
(1) Calcium Carbonate - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
(1) Calcium Carbonate - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
(1) Calcium Carbonate - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
(1) Calcium Carbonate - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
(1) Calcium Carbonate - Total dust.	TWA	15 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
(1) Calcium Carbonate - Respirable fraction.	TWA	5 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Solvent Naphtha - Non-aerosol. - as total hydrocarbon vapor	TWA	200 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
Solvent Naphtha	REL	100 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	REL	100 ppm 400 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2016)
	PEL	100 ppm 400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (01 2017)
	TWA	100 ppm 400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	100 ppm 400 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
	STEL	400 ppm 1,800 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (10 2016)
	TWA PEL	300 ppm 1,350 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (10 2016)
	IDLH	1,000 ppm	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	LEL	1.0 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
Octadecanoic acid - Respirable fraction.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2017)
Octadecanoic acid - Inhalable fraction.	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2017)
(1) TITANIUM DIOXIDE	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
(1) TITANIUM DIOXIDE - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	10 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
(1) TITANIUM DIOXIDE - Particulate.	ST ESL	50 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	AN ESL	5 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
(1) TITANIUM DIOXIDE - Total dust.	TWA PEL	10 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as

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			amended (01 2015)
(1) TITANIUM DIOXIDE - Respirable fraction.	TWA PEL	5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) TITANIUM DIOXIDE - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) TITANIUM DIOXIDE - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) TITANIUM DIOXIDE - Total dust.	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) TITANIUM DIOXIDE	IDLH	5,000 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
(1) QUARTZ - Respirable fraction.	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
(1) QUARTZ - Respirable dust.	REL	0.05 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
(1) QUARTZ - Respirable dust.	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016)
	OSHA_ACT	0.025 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016)
(1) QUARTZ - Respirable dust.	PEL	0.05 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)
	TWA	0.1 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
(1) QUARTZ - Particulate.	AN ESL	0.27 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
(1) QUARTZ - Respirable dust.	TWA PEL	0.05 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (10 2016)
(1) QUARTZ - Respirable.	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
(1) QUARTZ	IDLH	50 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
(1) QUARTZ - Respirable dust.	TWA	0.050 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)
(1) QUARTZ - Particulate.	ST ESL	14 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)

Appropriate Engineering Controls

Use only in well-ventilated areas.

Individual protection measures, such as personal protective equipment

General information:

Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

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Eye/face protection:	Safety glasses with side shields Monogoggles
Skin Protection	
Hand Protection:	Rubber or plastics gloves
Other:	Wear rubber apron. Wear suitable protective clothing and eye/face protection.
Respiratory Protection:	If exposure is possible, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).
Hygiene measures:	No data available.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	White
Odor:	Faint
Odor threshold:	No data available.
pH:	Not applicable
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	156.00 °C
Flash Point:	50 °C
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	6.00 %(V)
Flammability limit - lower (%):	1.00 %(V)
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Heat of combustion:	No data available.
Vapor pressure:	< 5 hPa (20 °C)
Vapor density:	No data available.
Density:	ca. 1.276 g/cm ³
Relative density:	1.276
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	Soluble in Petroleum Distillate
Partition coefficient (n-octanol/water) Log Pow:	No data available.

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Auto-ignition temperature:	232.00 °C
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	228 g/l ;

10. Stability and reactivity

Reactivity:	No dangerous reaction if used as recommended.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	Keep away from sources of ignition - No smoking. Keep away from sources of ignition - No smoking.
Incompatible Materials:	None known.
Hazardous Decomposition Products:	Carbon dioxide Formaldehyde. Silicon dioxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

**Oral
Product:**

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ATEmix : 23,641.5 mg/kg

Specified substance(s):

Solvent Naphtha LD 50 (Rat, No data available.): 6,500 mg/kg

Octadecanoic acid LD 50 (Rat, No data available.): > 2,000 mg/kg

(1) TITANIUM DIOXIDE LD 50 (Rat): > 10,000 mg/kg

Dermal

Product:

ATEmix : 14,160.96 mg/kg

Specified substance(s):

Solvent Naphtha LD 50 (Rat, No data available.): 3,000 mg/kg

(1) TITANIUM DIOXIDE LD 50 (Rabbit): > 10,000 mg/kg

Inhalation

Product:

No data available. Not classified for acute toxicity based on available data.

Specified substance(s):

Solvent Naphtha LC50 (Rat, No data available.): 14 mg/l

(1) TITANIUM DIOXIDE LC50 (Rat): > 6.8 mg/l

Repeated dose toxicity

Product:

No data available.

Skin Corrosion/Irritation

Product:

No data available.

Serious Eye Damage/Eye Irritation

Product:

No data available.

Respiratory or Skin Sensitization

Product:

No data available.

Carcinogenicity

Product:

No data available.

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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified **US. National Toxicology Program (NTP) Report on Carcinogens:**
(1) QUARTZ Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:
No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Target Organs
Specific Target Organ Toxicity - Repeated Exposure: Central nervous system

Aspiration Hazard
Product: No data available.

Other effects: This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. A MSDS for formaldehyde is available from Momentive.
None.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
Octadecanoic acid LC0 (Brachydanio rerio, 96 h): > 100 mg/l

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LC0 (Leuciscus idus, 96 h): > 100 mg/l

(1) TITANIUM DIOXIDE LC0 (Leuciscus idus, 48 h): > 1,000 mg/l

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Octadecanoic acid LC0 (Brachydanio rerio, 4 d): > 100 mg/l
LC0 (Leuciscus idus, 4 d): > 100 mg/l

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

(1) TITANIUM DIOXIDE 0 %

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

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(1) Calcium Carbonate	No data available.
Solvent Naphtha	No data available.
Octadecanoic acid	No data available.
(1) TITANIUM DIOXIDE	No data available.
Titanium, Bis(ethyl acetoacetato)-diispropoxy	No data available.
(1) QUARTZ	No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Disposal should be made in accordance with federal, state and local regulations.

Contaminated Packaging: No data available.

14. Transport information

DOT

UN Number:	NA 1993
UN Proper Shipping Name:	Combustible liquid, n.o.s.
Transport Hazard Class(es)	
Class:	CBL
Label(s):	NONE
Packing Group:	III
Marine Pollutant:	No

IMDG

Not regulated.

IATA

Not regulated.

Special precautions for user: This product is considered flammable for transportation. It has been reclassified as combustible by ground transportation per 49CFR173.120(b)(2). This product must be classified as flammable when transported by vessel or aircraft.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

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CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Flammable (gases, aerosols, liquids, or solids)

Carcinogenicity

Specific target organ toxicity (single or repeated exposure)

Hazards Not Otherwise Classified (HNOC)

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

Chemical Identity

Threshold Planning Quantity

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65



WARNING: This product can expose you to chemicals including (1) TITANIUM DIOXIDE, (1) QUARTZ, which is [are] known to the State of California to cause cancer.

This product can expose you to chemicals including Methanol, which is [are] known to the State of California to cause birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

(1) Calcium Carbonate

Solvent Naphtha

Siloxanes and Silicones, di-Me hydroxy terminated

Dimethylpolysiloxane

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl) -, reaction products with ammonia, octamethylcyclotetrasiloxane and silica

(1) TITANIUM DIOXIDE

(1) QUARTZ

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US. Massachusetts RTK - Substance List

Chemical Identity

- (1) Calcium Carbonate
- Solvent Naphtha
- (1) TITANIUM DIOXIDE
- (1) QUARTZ

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

- (1) Calcium Carbonate
- Solvent Naphtha
- (1) TITANIUM DIOXIDE

US. Rhode Island RTK

Chemical Identity

- (1) Calcium Carbonate
- Solvent Naphtha
- (1) TITANIUM DIOXIDE

Inventory Status:

Australia AICS:	n (Negative listing)	Remarks: None.
EU EINECS List:	y (positive listing)	Remarks: None.
Japan (ENCS) List:	n (Negative listing)	Remarks: None.
China Inventory of Existing Chemical Substances:	n (Negative listing)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	n (Negative listing)	Remarks: None.
Canada DSL Inventory List:	y (positive listing)	Remarks: None.
Canada NDSL Inventory:	n (Negative listing)	Remarks: None.
Philippines PICCS:	n (Negative listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: None.
Taiwan Chemical Substance Inventory:	Not in compliance with the inventory.	Remarks: None.

16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	*	3
Flammability	2	
Physical Hazards	1	
PERSONAL PROTECTION		

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

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Revision Date: No data available.

Version #: 8.1

Further Information: No data available.

Disclaimer:

Notice to reader

Unless otherwise specified in section 1, Momentive products are intended for use in the manufacture and/or formulation of products and are not intended for direct consumer use. These products are not intended for long-lasting (> 30 days) implantation, injection or direct ingestion into the human body, nor for use in the manufacture of multiple use contraceptives. Keep out of the reach of children.

Further Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safehandling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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