

ENDURIS LIQUID FLASHING

SAFETY DATA SHEET

1. Identification

Product identifier: ENDURIS LIQUID FLASHING

Other means of identification

Synonyms: One part RTV sealant

Recommended use and restriction on use

Recommended use: Silicone Elastomer

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

Health Hazards

Toxic to reproduction

Category 2

Unknown toxicity - Health

Acute toxicity, oral	0 %
Acute toxicity, dermal	0 %
Acute toxicity, inhalation, vapor	0 %
Acute toxicity, inhalation, dust or mist	0 %

Label Elements

Hazard Symbol:

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Signal Word: Warning

Hazard Statement: H361; Suspected of damaging fertility or the unborn child.

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response: IF exposed or concerned: Get medical advice/attention.

Storage: 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.

Hazard(s) not otherwise classified (HNOC): None.

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	1317-65-3	20 - <50%	# This substance has workplace exposure limit(s).
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl) -, reaction products with ammonia, octamethylcyclotetrasiloxane and silica	68937-51-9	1 - <5%	No data available.
(1) TITANIUM DIOXIDE	13463-67-7	1 - <5%	# This substance has workplace exposure limit(s).
Titanium, Bis(ethyl acetoacetato)-diisoproxy	27858-32-8	1 - <5%	No data available.
Octadecanoic acid	57-11-4	0.1 - <1%	# This substance has workplace exposure limit(s).
Octamethylcyclotetrasiloxane	556-67-2	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.

(1) The respirable particle(s) listed above are inextricably bound within the polymer matrix, and therefore does not present an inhalation hazard during normal use of this product. Tooling or machining of the cured product (sanding, cutting, milling) may release hazardous, respirable substances.

4. First-aid measures

General information:	No action shall be taken involving any personal risk or without suitable training.
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:	To clean from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water. 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.

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Most important symptoms/effects, acute and delayed

Symptoms:	No data available.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	This product reacts with moisture in the acid contents of the stomach to form methanol. Treatment is symptomatic and supportive.
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5. Fire-fighting measures

General Fire Hazards:	Use standard firefighting procedures and consider the hazards of other involved materials. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
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Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	All standard extinguishing agents are suitable.
Unsuitable extinguishing media:	Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical:	In case of fire, carbon monoxide and carbon dioxide may be formed. Acute overexposure to the products of combustion may result in irritation of the respiratory tract. Reacts with water liberating small amounts of methanol. This material is reactive with water, but the reaction will not significantly increase the fire severity.
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Special protective equipment and precautions for firefighters

Special fire fighting procedures:	Move container from fire area if it can be done without risk. Cool fire-endangered containers with water.
Special protective equipment for fire-fighters:	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:	Keep container closed. Avoid contact with skin and eyes. Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the finger and hands. Product releases methanol during application and curing. Keep out of reach of children. See Section 8 of the SDS for Personal Protective Equipment.
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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.

7. Handling and storage

Precautions for safe handling:

Sensitivity to static discharge is not expected. Methanol is formed during processing. Avoid contact with eyes, skin, and clothing. See Section 8 of the SDS for Personal Protective Equipment. Do not eat, drink or smoke when using the product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities:

Keep away from heat, sparks and open flame. Keep container tightly closed.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
(1) CALCIUM CARBONATE - Respirable.	REL	5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
(1) CALCIUM CARBONATE - Total	REL	10 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)
(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 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

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	TWA	15 millions of particles per cubic foot of air	amended (01 2015) US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) TITANIUM DIOXIDE - Total dust.	TWA	15 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) TITANIUM DIOXIDE - Respirable fraction.	TWA	5 mg/m ³	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/m ³	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
Octadecanoic acid - Respirable fraction.	TWA	3 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2017)
Octadecanoic acid - Inhalable fraction.	TWA	10 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2017)
Octamethylcyclotetrasiloxane	TWA	5 ppm	
Octamethylcyclotetrasiloxane - Vapor.	ST ESL	1,000 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	AN ESL	100 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
Octamethylcyclotetrasiloxane	TWA	10 ppm	US. OARS. WEELs Workplace Environmental Exposure Level Guide, as amended (2014)

This product contains one or more substances with an occupational exposure limit. However, the respirable particle(s) of this/these substance(s) are inextricably bound within the polymer matrix. Therefore, we do not expect an exposure to this/these substance(s) during normal use of this product. Tooling or machining of the cured product (sanding, cutting, milling) may release hazardous, respirable substances.

Appropriate Engineering Controls

Eye wash facilities and emergency shower must be available when handling this product. Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

Individual protection measures, such as personal protective equipment

General information: Wear suitable gloves and eye/face protection.

Eye/face protection: Safety glasses with side shields

Skin Protection

Hand Protection: Use chemical-resistant, impervious gloves.

Other: Wear suitable protective clothing and eye/face protection.

Respiratory Protection: If inhalation exposure is expected, 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).

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Hygiene measures: Provide adequate ventilation. Observe good industrial hygiene practices. Avoid contact with eyes, skin, and clothing. Wash hands after handling. When using do not eat, drink or smoke.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: Paste
Color: White

Odor: Negligible

Odor threshold: No data available.

pH: No data available.

Melting point/freezing point: No data available.

Initial boiling point and boiling range: No data available.

Flash Point: Measured 95.7 °C (Closed Cup)

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available.

Flammability limit - lower (%): No data available.

Explosive limit - upper: No data available.

Explosive limit - lower: No data available.

Heat of combustion: No data available.

Vapor pressure: Not applicable

Vapor density: No data available.

Density: ca. 1.18 g/cm³

Relative density: No data available.

Solubility(ies)

Solubility in water: Insoluble

Solubility (other): No data available.

Partition coefficient (n-octanol/water) Log Pow: No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No decomposition if stored and applied as directed.

SADT: No data available.

Viscosity, dynamic: No data available.

Viscosity, kinematic: > 20.5 mm²/s (40 °C)

VOC: 37 g/l ;

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10. Stability and reactivity

Reactivity:	No dangerous reaction if used as recommended.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid:	Keep away from moisture. Keep away from heat, sparks and open flame.
Incompatible Materials:	Strong Acids, Strong Bases Contact with water.
Hazardous Decomposition Products:	Carbon dioxide Silicon dioxide. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation. Generates methanol during cure.

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:	Not classified for acute toxicity based on available data.
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Specified substance(s):

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

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

Octamethylcyclotetrasiloxane LD 50 (Rat): > 4,800 mg/kg

Dermal

Product:

Not classified for acute toxicity based on available data.

Specified substance(s):

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

Octamethylcyclotetrasiloxane LD 50 (Rat): > 2,375 mg/kg

Inhalation

Product:

Not classified for acute toxicity based on available data.

Specified substance(s):

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

Octamethylcyclotetrasiloxane LC50 (Rat): 36 mg/l

Repeated dose toxicity

Product:

No data available.

Skin Corrosion/Irritation

Product:

No data available.

Specified substance(s):

Octadecanoic acid No skin irritation

Specified substance(s):

Octamethylcyclotetrasiloxane OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit): Slightly irritating.

Serious Eye Damage/Eye Irritation

Product:

No data available.

Specified substance(s):

(1) TITANIUM DIOXIDE No eye irritation

Specified substance(s):

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Octamethylcyclotetrasiloxane OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit): Non irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

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.

Specified substance(s):

Octamethylcyclotetrasiloxane Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic)
Mouse Lymphoma Assay (OECD Guideline 476): negative (not mutagenic)

In vivo

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Inhalation (Rat, male and female): negative

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.

Aspiration Hazard

Product: No data available.

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Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

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

Octadecanoic acid LC0 (Brachydanio rerio, 96 h): > 100 mg/l
 LC0 (Leuciscus idus, 96 h): > 100 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 %

Octamethylcyclotetrasiloxane 3.7 % (29 d, 310 Ready Biodegradability - CO₂ in Sealed Vessels (Headspace Test)) Not readily biodegradable.

BOD/COD Ratio

Product: No data available.

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Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane Fathead Minnow, Bioconcentration Factor (BCF): 12.40

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

(1) CALCIUM CARBONATE No data available.

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl) -, reaction products with ammonia, octamethylcyclotetrasiloxane and silica No data available.

(1) TITANIUM DIOXIDE No data available.

Titanium, Bis(ethyl acetoacetato)-diispropoxy No data available.

Octadecanoic acid No data available.

Octamethylcyclotetrasiloxane No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information: The generation of waste should be avoided or minimized wherever possible. Do not discharge into drains, water courses or onto the ground. See Section 8 for information on appropriate personal protective equipment.

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

Contaminated Packaging: Dispose of as unused product.

14. Transport information

DOT
Not regulated.

IMDG
Not regulated.

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IATA

Not regulated.

Special precautions for user:

This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

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.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Siloxanes and Silicones, di-Me hydroxy terminated	No OSHA Hazards
(1) CALCIUM CARBONATE	Causes mild skin irritation.; Respiratory hazard.
(1) TITANIUM DIOXIDE	Irritant.
Methyltrimethoxysilane	Causes mild skin irritation.
Titanium, Bis(ethyl acetoacetato)-diispropoxy	Causes mild skin irritation.; Respiratory hazard.

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

Reproductive toxicity

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.

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SARA 311/312 Hazardous Chemical

Chemical Identity

Threshold Planning Quantity

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

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 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

Siloxanes and Silicones, di-Me hydroxy terminated

(1) CALCIUM CARBONATE

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

(1) TITANIUM DIOXIDE

Methyltrimethoxysilane

US. Massachusetts RTK - Substance List

Chemical Identity

(1) QUARTZ

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

(1) CALCIUM CARBONATE

(1) TITANIUM DIOXIDE

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

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Inventory Status:

Australia AICS:	On or in compliance with the inventory	Remarks: None.
Canada DSL Inventory List:	Q (quantity restricted)	Remarks: At least one component is not listed in DSL but all such components are listed in NDSL.
EINECS, ELINCS or NLP:	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	Not in compliance with the inventory.	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	Not in compliance with the inventory.	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.

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

HMIS Hazard ID

Health	*	0
Flammability		1
Physical Hazards		1
PERSONAL PROTECTION		

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

Issue Date: 08/20/2020
Revision Date: No data available.
Version #: 3.0
Further Information: No data available.

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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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