

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : T20-3004LVGR

1.2. Recommended use and restrictions on use

Recommended use : Potting compound
Restrictions on use : Not to be used for any purpose other than the one the product was designed for

1.3. Supplier

Epoxies, Etc.
21 Starline Way
Cranston, RI 02921
USA
T 401-946-5564
www.epoxies.com

1.4. Emergency telephone number

Emergency number : VelocityEHS: +1 (800) 255-3924, +1 (813) 248-0585

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation Category 1C	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Reproductive toxicity Category 1B	H360	May damage fertility or the unborn child
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure
Hazardous to the aquatic environment – Chronic Hazard Category 2	H411	Toxic to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H360 - May damage fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H411 - Toxic to aquatic life with long lasting effects
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

Precautionary statements (GHS US) :

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P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P302+P352 - If on skin: Wash with plenty of water.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a poison center or doctor.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P405 - Store locked up.
P501 - 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

Other hazards which do not result in classification : Harmful dust may be released during cutting, milling or grinding process.

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Bisphenol A diglycidyl ether resin*	CAS-No.: Trade Secret	≥ 60	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Accelerating agent	CAS-No.: 100-51-6	5 – 30	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319
Formaldehyde, polymer with benzenamine, hydrogenated	CAS-No.: 135108-88-2	5 – 30	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1C, H314 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Titanium oxide (TiO2)	CAS-No.: 13463-67-7	1 – 5	Carc. 2, H351

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Name	Product identifier	%	GHS US classification
Amine curing agent*	CAS-No.: Trade Secret	1 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 2 (Inhalation), H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335
Cyclic amine*	CAS-No.: Trade Secret	< 5	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT RE 2, H373
Phenol, 4,4'-(1-methylethylidene)bis-	CAS-No.: 80-05-7	< 5	Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360 STOT SE 3, H335 Aquatic Chronic 2, H411
Benzoic acid, 2-hydroxy-	CAS-No.: 69-72-7	< 1	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361 STOT SE 1, H370 STOT RE 2, H373 Aquatic Acute 3, H402

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

Comments : Components not listed are either non-hazardous or are below reportable limits.
*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret
This product contains Titanium Dioxide, which is suspected of causing cancer when inhaled in fine particulate form. Titanium Dioxide should not be respirable in this formulation.
This product contains Carbon Black, which is suspected of causing cancer when inhaled in fine particulate form. Carbon Black should not be respirable in this formulation.

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.

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Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.
Chronic symptoms	: May damage fertility or the unborn child.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
Hygiene measures	: Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store locked up.
Packaging materials	: Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Amine curing agent	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	1 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr. Notations: Skin
Regulatory reference	ACGIH 2024
Titanium oxide (TiO ₂) (13463-67-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Titanium dioxide (*not respirable as contained in this liquid mixture)
ACGIH OEL TWA	0.2 mg/m ³ (Respirable fraction) 2.5 mg/m ³ (Respirable fraction)
Remark (ACGIH)	TLV® Basis: LRT irr; pneumoconiosis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Titanium dioxide (*not respirable as contained in this liquid mixture)

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Wear suitable gloves resistant to chemical penetration. Neoprene or nitrile rubber gloves. Butyl-rubber protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Refer to manufacturer's information. Gloves must be replaced after each use and whenever signs of wear or perforation appear

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Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Mixture contains one or more component(s) which have the following colour(s): Colourless Colourless to light yellow Colourless to white On exposure to air: light brown Yellow White Pure substance: white Unpurified: coloured Dark grey to black
Odor	: There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour: Fruity odour Aromatic odour Mild odour Amine-like odour Odourless Ammonia odour Phenol odour
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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

Accelerating agent (100-51-6)

LD50 oral rat	1620 mg/kg bw/day (Rat, Male, Experimental value, Oral, 14 day(s))
LD50 oral	1200 mg/kg
LD50 dermal rat	2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg body weight (EPA OTS 798.1100, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal	2000 mg/kg
LC50 Inhalation - Rat	> 4.18 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, (maximum achievable concentration), Inhalation (mist), 14 day(s))
LC50 Inhalation - Rat (Dust/Mist)	4.178 mg/l/4h
LC50 Inhalation - Rat (Vapours)	> 4.178 mg/l
ATE US (oral)	1200 mg/kg body weight
ATE US (dermal)	2000 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	4.178 mg/l/4h

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Formaldehyde, polymer with benzenamine, hydrogenated (135108-88-2)	
LD50 dermal rabbit	> 1000 mg/kg body weight Animal: rabbit, Guideline: other:40CFR Part 158 Series 81-2, EPA Pesticide Assessment Guidelines. F 1984
ATE US (oral)	500 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
Cyclic amine	
LD50 oral rat	380 mg/kg (EPA OPP 81-1: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral)
LD50 oral	380 mg/kg
LD50 dermal rabbit	2110 mg/kg body weight (EPA OPP 81-2, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LD50 dermal	2110 mg/kg
ATE US (oral)	380 mg/kg body weight
ATE US (dermal)	2110 mg/kg body weight
Benzoic acid, 2-hydroxy- (69-72-7)	
LD50 oral rat	891 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 oral	891 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal rabbit	> 10000 mg/kg Source: International Uniform Chemical Information Database
LD50 dermal	2500 mg/kg
LC50 Inhalation - Rat	> 0.9 mg/l (1 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))
ATE US (oral)	891 mg/kg body weight
ATE US (dermal)	2500 mg/kg body weight
ATE US (dust, mist)	0.5 mg/l/4h
Amine curing agent	
LD50 oral rat	1553 mg/kg body weight (Rat, Male, Experimental value, Oral, 14 day(s))
LD50 oral	1080 mg/kg
LD50 dermal rabbit	1045 mg/kg body weight (Rabbit, Experimental value, Dermal)
LD50 dermal	1040 mg/kg
ATE US (oral)	1080 mg/kg body weight
ATE US (dermal)	1040 mg/kg body weight
ATE US (gases)	100 ppmV/4h
ATE US (vapors)	0.5 mg/l/4h
ATE US (dust, mist)	0.05 mg/l/4h
Bisphenol A diglycidyl ether resin	
LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 oral	11400 mg/kg

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Bisphenol A diglycidyl ether resin	
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
ATE US (oral)	11400 mg/kg body weight
Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)	
LD50 oral rat	2000 – 5000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	3300 mg/kg
LD50 dermal rabbit	3000 mg/kg body weight (Rabbit, Experimental value, Dermal)
LD50 dermal	3000 mg/kg
ATE US (oral)	2000 mg/kg body weight
ATE US (dermal)	3000 mg/kg body weight
Titanium oxide (TiO2) (13463-67-7)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	5000 mg/kg
LC50 Inhalation - Rat	> 5.09 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))
LC50 Inhalation - Rat (Dust/Mist)	> 3.43 mg/l Source: ECHA
ATE US (oral)	5000 mg/kg body weight
Skin corrosion/irritation	: Causes severe skin burns.
Accelerating agent (100-51-6)	
pH	No data available in the literature
Cyclic amine	
pH	11.6 (25 °C, OECD 105: Water Solubility)
Benzoic acid, 2-hydroxy- (69-72-7)	
pH	No data available in the literature
Amine curing agent	
pH	No data available in the literature
Bisphenol A diglycidyl ether resin	
pH	No data available in the literature
Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)	
pH	No data available in the literature
Titanium oxide (TiO2) (13463-67-7)	
pH	7 (aqueous suspension, 10 %)
Serious eye damage/irritation	: Causes serious eye damage.
Accelerating agent (100-51-6)	
pH	No data available in the literature

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Cyclic amine	
pH	11.6 (25 °C, OECD 105: Water Solubility)
Benzoic acid, 2-hydroxy- (69-72-7)	
pH	No data available in the literature
Amine curing agent	
pH	No data available in the literature
Bisphenol A diglycidyl ether resin	
pH	No data available in the literature
Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)	
pH	No data available in the literature
Titanium oxide (TiO2) (13463-67-7)	
pH	7 (aqueous suspension, 10 %)
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified.
Bisphenol A diglycidyl ether resin	
NOAEL (chronic,oral,animal/male,2 years)	15 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)
NOAEL (chronic,oral,animal/female,2 years)	100 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)
Titanium oxide (TiO2) (13463-67-7)	
Additional information	*Not a respirable hazard as contained in this liquid mixture
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Not classified
Benzoic acid, 2-hydroxy- (69-72-7)	
STOT-single exposure	Causes damage to organs.
Amine curing agent	
STOT-single exposure	May cause respiratory irritation.
Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Accelerating agent (100-51-6)	
NOAEL (oral,rat,90 days)	400 mg/kg body weight Animal: rat, Guideline: other:OECD Guideline 451 (Carcinogenicity Studies)

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Formaldehyde, polymer with benzenamine, hydrogenated (135108-88-2)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Cyclic amine	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Benzoic acid, 2-hydroxy- (69-72-7)	
NOAEL (oral,rat,90 days)	50 mg/kg body weight Animal: rat
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Amine curing agent	
LOAEL (oral,rat,90 days)	530 – 620 mg/kg body weight Animal: rat, Guideline: other:OECD Guideline for Testing of Chemicals, No. 451, May 12, 1981
NOAEL (oral,rat,90 days)	70 – 80 mg/kg body weight Animal: rat, Guideline: other:OECD Guideline for Testing of Chemicals, No. 451, May 12, 1981
Bisphenol A diglycidyl ether resin	
NOAEL (oral,rat,90 days)	50 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:japanese MITI guidelines for toxicity testing of chemicals
Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)	
LOAEL (oral,rat,90 days)	600 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Accelerating agent (100-51-6)	
Viscosity, kinematic	No data available in the literature
Benzoic acid, 2-hydroxy- (69-72-7)	
Viscosity, kinematic	Not applicable (solid)
Amine curing agent	
Viscosity, kinematic	No data available in the literature
Bisphenol A diglycidyl ether resin	
Viscosity, kinematic	No data available in the literature
Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)	
Viscosity, kinematic	Not applicable (solid)
Titanium oxide (TiO2) (13463-67-7)	
Viscosity, kinematic	Not applicable (solid)
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.
Chronic symptoms	: May damage fertility or the unborn child.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

Accelerating agent (100-51-6)	
LC50 - Fish [1]	460 mg/l (EPA OPP 72-1, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	230 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	770 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	500 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	770 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC (chronic)	51 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic crustacea	51 mg/l
Formaldehyde, polymer with benzenamine, hydrogenated (135108-88-2)	
LC50 - Fish [1]	63 mg/l Test organisms (species): Poecilia reticulata
EC50 72h - Algae [1]	43.94 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Cyclic amine	
LC50 - Fish [1]	68 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	6.84 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
LC50 - Fish [2]	68 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [2]	6.84 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	140 – 200 mg/l Test organisms (species):
EC50 72h - Algae [2]	141.42 – 200 mg/l Test organisms (species):
ErC50 algae	140 – 200 mg/l (DIN 38412-9, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
NOEC (chronic)	4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 1 mg/l Test organisms (species): other:freshwater fish
Benzoic acid, 2-hydroxy- (69-72-7)	
LC50 - Fish [1]	1370 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Read-across, Measured concentration)
EC50 - Crustacea [1]	870 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 72h - Algae [1]	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Experimental value)
ErC50 algae	65 mg/l

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Benzoic acid, 2-hydroxy- (69-72-7)	
NOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic algae	31 mg/l
Amine curing agent	
LC50 - Fish [1]	430 mg/l (EU Method C.1, 96 h, Poecilia reticulata, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	65 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [2]	16 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	187 mg/l Source: ECHA
ErC50 algae	1164 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
LOEC (chronic)	11.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	5.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 10 mg/l Test organisms (species): Gasterosteus aculeatus Duration: '28 d'
NOEC chronic crustacea	5.6 mg/l
Bisphenol A diglycidyl ether resin	
LC50 - Fish [1]	1.3 mg/l (96 h, Pisces, Literature study)
EC50 - Crustacea [1]	2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 72h - Algae [1]	9.4 mg/l (EPA 660/3 - 75/009, Selenastrum capricornutum, Static system, Fresh water, Experimental value, Biomass)
EC50 72h - Algae [2]	> 11 mg/l Test organisms (species): Scenedesmus capricornutum
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)	
LC50 - Fish [1]	4.6 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	10.2 mg/l (ASTM E-35.21, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Lethal)
EC50 96h - Algae [1]	2.73 – 3.1 mg/l (EPA 600/9-78-018, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)
EC50 96h - Algae [2]	1.4 mg/l Test organisms (species): Skeletonema costatum
LOEC (chronic)	3.6 mg/l Test organisms (species): other:Rotifer (Brachionus calyciflorus) Duration: '48 h'
NOEC chronic fish	0.16 mg/l
Titanium oxide (TiO2) (13463-67-7)	
LC50 - Fish [1]	> 1000 mg/l (Pisces, Fresh water, Literature study)
EC50 - Crustacea [1]	> 1000 mg/l (Invertebrata, Fresh water, Literature study)
EC50 72h - Algae [1]	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)

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12.2. Persistence and degradability

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Persistence and degradability	Not rapidly degradable
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Accelerating agent (100-51-6)

Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
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Formaldehyde, polymer with benzenamine, hydrogenated (135108-88-2)

Persistence and degradability	Not rapidly degradable
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Cyclic amine

Persistence and degradability	Not readily biodegradable in water.
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Benzoic acid, 2-hydroxy- (69-72-7)

Persistence and degradability	Readily biodegradable in water.
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Amine curing agent

Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
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Bisphenol A diglycidyl ether resin

Persistence and degradability	Not readily biodegradable in water.
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Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)

Persistence and degradability	Readily biodegradable in the soil, Readily biodegradable in water.
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Chemical oxygen demand (COD)	0.036 g O ₂ /g substance
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ThOD	2.5 g O ₂ /g substance
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Titanium oxide (TiO₂) (13463-67-7)

Persistence and degradability	Biodegradability: not applicable.
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Chemical oxygen demand (COD)	Not applicable (inorganic)
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ThOD	Not applicable (inorganic)
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12.3. Bioaccumulative potential

Accelerating agent (100-51-6)

BCF - Fish [1]	1.4 l/kg (BCFBAF v3.01, Estimated value)
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Partition coefficient n-octanol/water (Log Pow)	1 – 1.1 (Experimental value, 20 °C)
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Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
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Cyclic amine

BCF - Fish [1]	< 60 (OECD 305: Bioconcentration: Flow-Through Fish Test, 60 day(s), Cyprinus carpio, Flow-through system, Fresh water, Read-across, GLP)
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Partition coefficient n-octanol/water (Log Pow)	2.03 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
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Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
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Benzoic acid, 2-hydroxy- (69-72-7)

Partition coefficient n-octanol/water (Log Pow)	2.3 (Experimental value, Equivalent or similar to OECD 117, 25 °C)
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Benzoic acid, 2-hydroxy- (69-72-7)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Amine curing agent	
BCF - Fish [1]	0.3 – 6.3 (OECD 305: Bioconcentration: Flow-Through Fish Test, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-1.6 (Estimated value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Bisphenol A diglycidyl ether resin	
Partition coefficient n-octanol/water (Log Pow)	3 (Estimated value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)	
BCF - Fish [1]	5.1 – 67 (42 day(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	3.4 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 21.5 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Titanium oxide (TiO2) (13463-67-7)	
Bioaccumulative potential	Not bioaccumulative.
12.4. Mobility in soil	
Accelerating agent (100-51-6)	
Surface tension	39 mN/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.1 – 1.3 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
Cyclic amine	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.25 (log Koc, Other, Calculated value)
Ecology - soil	Low potential for mobility in soil.
Benzoic acid, 2-hydroxy- (69-72-7)	
Mobility in soil	23.96 Source: Quantitative Structure Activity Relation
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.5 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Highly mobile in soil.
Amine curing agent	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.4 – 4.6 (log Koc, EPA OTS 796.2750: Sediment and Soil Adsorption Isotherm, Experimental value, GLP)
Ecology - soil	Low potential for mobility in soil. Soil contaminant.

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Bisphenol A diglycidyl ether resin	
Surface tension	59 mN/m (20 °C, 0.09 g/l)
Ecology - soil	No (test)data on mobility of the substance available.
Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)	
Surface tension	No data available (test not performed)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.8 – 2.97 (log Koc, OECD 106: Adsorption/Desorption Using a Batch Equilibrium Method, Experimental value, GLP)
Ecology - soil	Low potential for adsorption in soil.
Titanium oxide (TiO2) (13463-67-7)	
Surface tension	No data available in the literature
Ecology - soil	Low potential for mobility in soil.

12.5. Other adverse effects

No additional information available





SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
UN2079	UN2079	2079	2079
14.2. Proper Shipping Name			
Diethylenetriamine	DIETHYLENETRIAMINE	DIETHYLENETRIAMINE	Diethylenetriamine
14.3. Transport hazard class(es)			
8	8	8	8
			
14.4. Packing group			
II	II	II	II

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DOT	TDG	IMDG	IATA
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information available			

14.6. Special precautions for user

DOT

UN-No.(DOT)	: UN2079
DOT Special Provisions (49 CFR 172.102)	: B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 30 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters", 52 - Stow "separated from" acids

TDG

UN-No. (TDG)	: UN2079
Explosive Limit and Limited Quantity Index	: 1 L
Excepted quantities (TDG)	: E2
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 1 L
Emergency Response Guide (ERG) Number	: 154

IMDG

Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2
Segregation (IMDG)	: SGG18, SG35

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Properties and observations (IMDG) : Yellow hygroscopic liquid with ammoniacal odour. Soluble in water. Strongly alkaline, corrosive. Can form explosive mixtures with nitric acid. Reacts with oxidizing substances. Corrosive to copper and its alloys. Reacts violently with acids. Liquid and vapour can cause severe damage to skin and eyes.

IATA

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y840
PCA limited quantity max net quantity (IATA) : 0.5L
PCA packing instructions (IATA) : 851
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 855
CAO max net quantity (IATA) : 30L
ERG code (IATA) : 8L

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Phenol, 4,4'-(1-methylethylidene)bis-

CAS-No. 80-05-7

< 5%

15.2. International regulations

CANADA

Accelerating agent (100-51-6)

Listed on the Canadian DSL (Domestic Substances List)

Formaldehyde, polymer with benzenamine, hydrogenated (135108-88-2)

Listed on the Canadian DSL (Domestic Substances List)

Cyclic amine

Listed on the Canadian DSL (Domestic Substances List)

Benzoic acid, 2-hydroxy- (69-72-7)

Listed on the Canadian DSL (Domestic Substances List)

Amine curing agent

Listed on the Canadian DSL (Domestic Substances List)

Bisphenol A diglycidyl ether resin

Listed on the Canadian DSL (Domestic Substances List)

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Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)

Listed on the Canadian DSL (Domestic Substances List)

Titanium oxide (TiO₂) (13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Accelerating agent (100-51-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Benzoic acid, 2-hydroxy- (69-72-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Amine curing agent

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Phenol, 4,4'-(1-methylethylidene)bis- (80-05-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Titanium oxide (TiO₂) (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations



WARNING:

This product can expose you to chemicals including Bisphenol A (BPA), 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.

Component	State or local regulations
Accelerating agent(100-51-6)	U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) List
Amine curing agent()	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Phenol, 4,4'-(1-methylethylidene)bis-(80-05-7)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Titanium oxide (TiO ₂)(13463-67-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Full text of hazard classes and H-statements	
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs
H373	May cause damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.