

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 11/07/2022 Version: 1.0

SECTION 1: Identification		
1.1. Identification		
Product form Product name	: Mixture : Diamond PPF	
1.2. Recommended use and restrictions of	on use	
Use of the substance/mixture	: Protective coating	
1.3. Supplier		
Manufacturer NGNT Material Sciences SA Chem. du Mont-de-Brez 2 1405 Pomy Switzerland T +41 (0)58 300 1080		Importer NGNT Material Sciences SA Rockefeller Center - Concourse- Suite 2002 610 Fifth Avenue New York NY 10185 United States T +1 917 522 2111 (Hours: 10 AM - 5 PM)
1.4. Emergency telephone number		
Emergency number	: Phone number (U	S): 917 522 2111; Hours - 9 AM - 5 PM
SECTION 2: Hazard(s) identification		
2.1. Classification of the substance or mix	cture	
GHS US classification		
Flammable liquids, Category 2 Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 1 Skin sensitisation, Category 1 Specific target organ toxicity – Single exposure, Ca Aspiration hazard, Category 1	ategory 3, Narcosis	Highly flammable liquid and vapour. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.
2.2. GHS Label elements, including preca	utionary statements	
GHS US labelling		
Hazard pictograms (GHS US) Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US)	Causes skin irritat May cause an alle Causes serious ey May cause drowsi : Keep away from h Use only outdoors Wear eye protecti	allowed and enters airways. ion. rgic skin reaction. /e damage.
	and easy to do. C	

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Immediately call a POISON CENTER, a doctor.

Do NOT induce vomiting.

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	%	GHS US classification
Distillates (petroleum), hydro- treated light; Kerosine— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approxi mately 150 °C to 290 °C (302 °F to 554 °F).]	CAS-No.: 64742-47-8	<70	Asp. Tox. 1
Propan-2-ol	CAS-No.: 67-63-0	<30	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3
3-aminopropyltriethoxysilane	CAS-No.: 919-30-2	<3,5	Acute Tox. 4 (Oral) Skin Corr. 1B Eye Dam. 1 Skin Sens. 1
tetraethyl silicate; ethyl silicate	CAS-No.: 78-10-4	1,4 <x<1,55< td=""><td>Flam. Liq. 3 Acute Tox. 4 (Inhalation) Eye Irrit. 2 STOT SE 3</td></x<1,55<>	Flam. Liq. 3 Acute Tox. 4 (Inhalation) Eye Irrit. 2 STOT SE 3
1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin	CAS-No.: 25085-99-8	<0,8	Skin Irrit. 2 Eye Irrit. 2 Skin Sens. 1 Aquatic Chronic 2

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. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
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.

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First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.	
4.2. Most important symptoms and effect	cts (acute and delayed)	
Potential adverse human health effects and symptoms Symptoms/effects Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	<ul> <li>Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.</li> <li>May cause drowsiness or dizziness.</li> <li>Irritation. May cause an allergic skin reaction.</li> <li>Serious damage to eyes.</li> <li>Risk of lung oedema.</li> </ul>	

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting meas	ures
5.1. Suitable (and unsuitable) extin	nguishing media
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from	the chemical
Fire hazard	: Highly flammable liquid and vapour.
5.3. Special protective equipment	and precautions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release	e measures
6.1. Personal precautions, protec	tive equipment and emergency procedures
6.1.1. For non-emergency personnel	
Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing vapours, spray, fume. Avoid contact with skin and eyes.
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".
6.2. Environmental precautions	

Avoid release to the environment. Do not let the product enter drainage system, surface and ground-water or soil. Contact local authorities in case of environmental release. Do not empty into drains.

6.3. Methods and material for contai	nment and cleaning up
For containment	: Collect spillage.
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 8: "Exposure controls/personal protection". For further information refer to section 13.

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SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well- ventilated area. Avoid breathing vapours, spray. Avoid contact with skin and eyes.
Hygiene measures	: 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	g any incompatibilities
Technical measures Storage conditions Incompatible materials Storage area	<ul> <li>Ground/bond container and receiving equipment.</li> <li>Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.</li> <li>Oxidising agents.</li> <li>Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.</li> </ul>

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

Propan-2-ol (67-63-0)	
USA - ACGIH - Occupational Exposure Limits	
Local name	2-Propanol
ACGIH OEL TWA [ppm]	200 ppm
ACGIH OEL STEL [ppm]	400 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2021
USA - ACGIH - Biological Exposure Indices	
Local name	2-PROPANOL
BEI	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B, Ns
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Isopropyl alcohol
OSHA PEL TWA [1]	980 mg/m³
OSHA PEL TWA [2]	400 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
tetraethyl silicate; ethyl silicate (78-10-4)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Ethyl silicate
ACGIH OEL TWA [ppm]	10 ppm

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tetraethyl silicate; ethyl silicate (78-1)	0-4)
Remark (ACGIH)	TLV® Basis: URT & eye irr; kidney dam
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Lin	nits
Local name	Ethyl silicate
OSHA PEL TWA [1]	850 mg/m <sup>3</sup>
OSHA PEL TWA [2]	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Monitoring methods	
Monitoring methods	The measurement of substances in the workplace must be carried out with standardized methods (e.g. UNI EN 689:2019: Workplace atmospheres - Guide for assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy; UNI EN 482:2015: Workplace explosure - General requirements for the performance of procedures for the measurement of chemical agents) or, failing that, with appropriate methods.
8.2. Appropriate engineering controls	;
Appropriate engineering controls Environmental exposure controls	<ul> <li>Ensure good ventilation of the work station. Appropriate risk management measures, that must b adopted at the workplace, have to be selected and applied, following the risks assessment carrie out by the employer, in connection with his working activity. If the results of this evaluation show that the general and collective prevention measures are not sufficient to reduce the risk, and if yo cannot prevent exposure to the mixture by other means, adequate personal protective equipmer must be adopted, complying with the relevant technical national/international standards.</li> <li>Avoid release to the environment.</li> </ul>

8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Wear protective tightly fitting glasse or protective visor (EN 166).
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

## **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state
Appearance
Colour
Odour

: Liquid

- : Liquid.
- : Colourless
- : Not available

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Odour threshold pH Melting point Freezing point Boiling point Flash point Relative evaporation rate (butylacetate=1) Flammability Vapour pressure	<ul> <li>No data available</li> <li>9.1</li> <li>Not applicable</li> <li>No data available</li> <li>Highly flammable liquid and vapour.</li> <li>No data available</li> </ul>
Relative vapour density at 20 °C Relative density	: No data available : 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
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

### 9.2. Other information

No additional information available

SECTION 10: Stability and reactivity
10.1. Reactivity
Highly flammable liquid and vapour.
10.2. Chemical stability
No additional information available
10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

**10.5. Incompatible materials** 

No additional information available

**10.6. Hazardous decomposition products** 

No additional information available

SECTION 11: Toxicological information	1
11.1. Information on toxicological effects	
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	<ul> <li>Not classified (Based on available data, the classification criteria are not met)</li> <li>Not classified (Based on available data, the classification criteria are not met)</li> <li>Not classified (Based on available data, the classification criteria are not met)</li> </ul>

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Distillates (petroleum), hydro- treated light; Kerosine- unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approxi mately 150 °C to 290 °C (302 °F to 554 °F).] (64742-47-8)LD50 oral rat > 5000 mg/kg in male and female rats for kerosine (similar to OECD 420) LD50 dermal rabbit > 2000 mg/kg in male and female rabbits for kerosine (similar to OECD 402) LC50 Inhalation - Rat > 5.28 mg/l vapour in male and female rats for kerosine (similar to OECD 403) Propan-2-ol (67-63-0) LD50 oral rat > 2000 mg/kg LD50 dermal rabbit > 2000 mg/kg ATE US (oral) 5840 mg/kg bodyweight ATE US (vapours) 25 mg/l/4h ATE US (dust, mist) 25 mg/l/4h 3-aminopropyltriethoxysilane (919-30-2) LD50 oral rat 1490 mg/kg bodyweight LD50 dermal rabbit 4075 mg/kg bodyweight ATE US (oral) 1490 mg/kg bodyweight ATE US (dermal) 4075 mg/kg bodyweight tetraethyl silicate; ethyl silicate (78-10-4) LD50 oral rat > 2500 mg/kg bodyweight LC50 Inhalation - Rat (Vapours) 16.83 mg/l/4h female ATE US (gases) 4500 ppmv/4h ATE US (vapours) 16.83 mg/l/4h ATE US (dust, mist) 1.5 mg/l/4h 1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin (25085-99-8) LD50 oral rat > 15000 mg/kg LD50 dermal rabbit 23000 mg/kg ATE US (dermal) 23000 mg/kg bodyweight Skin corrosion/irritation Causes skin irritation. Propan-2-ol. In skin irritation studies, irritation was not observed following patch application (occlusive) of undiluted chemical for four hours to intact and abraded skin of rabbits and guinea pigs. 3-aminopropyltriethoxysilane was found to be corrosive after 1 hour of application on the skin.

Ethyl silicate is slightly irritating to the skin of rabbits, but does not meet the criteria for classification as irritant.

1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin is classified as skin irritant.

pH: 9.1

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Serious eye damage/irritation	: Causes serious eye damage.
	Distillates (petroleum), hydrotreated light: kerosine was found to be non-irritating to rabbit eyes when exposed to 0.1 mL of test substance (OECD 405).
	Propan-2-olo: In an eye irritation study (OECD TG 405), the undiluted chemical was applied to the conjunctival sac of three male and three female New Zealand White rabbits. While conjunctival responses included redness, chemosis (oedema of the conjunctiva), and clear/white discharge, corneal opacity, stippling and corneal ulceration were also noted.
	3-aminopropyltriethoxysilane: in a study according to OECD 405, the substance was found to cause severe eye irritation with necrosis (test in rabbits).
	Ethyl silicate: vapours of ethyl silicate are irritating to the eyes and to the respiratory tract
	1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin is classified as eye irritant.
	pH: 9.1
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
	Distillates (petroleum), hydrotreated light: in animal assays (similar to OECD 406) for skin sensitisation, kerosines did not elicit a positive response.
	Propan-2-ol is not a skin sensitizer

1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin is classified as skin sensitizer.

3-aminopropyltriethoxysilane (919-30-2)		
Additional information	3-aminopropyltriethoxysilane is a skin sensitizer (study performed according to OECD Guideline 406)	
Germ cell mutagenicity :	Not classified (Based on available data, the classification criteria are not met)	
	Distillates (petroleum), hydrotreated light: there were no studiesthat described mutagenic or genotoxic effects of kerosine or jet fuels in humans. Because most of the experimental studies were negative and the data on various individual components of kerosines and jet fuels were negative, the weight of evidence from in vitro and in vivo mutagenic studies indicates that kerosine and jet fuels are likely not mutagens and are not classified as mutagens	
	3-aminopropyltriethoxysilane: in vivo and in vitro studies were negative.	
	Ethyl silicate: tests in vitro show that the substance does not induce mutations or chromosome aberrations in mammals cells	
Carcinogenicity :	Not classified (Based on available data, the classification criteria are not met)	
	Distillates (petroleum), hydrotreated light: kerosine is not carcinogenic when animals are exposed via the oral or inhalation route.	
	Propan-2-ol is not carcinogenic	
Propan-2-ol (67-63-0)		
IARC group	3 - Not classifiable	
3-aminopropyltriethoxysilane (919-30-2)		
NOAEL (chronic, oral, animal/male, 2 years)	209 mg/kg bodyweight mouse	
Reproductive toxicity :	Not classified (Based on available data, the classification criteria are not met)	
Distillates (petroleum), hydro- treated light; Kerosine— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approxi mately 150 °C to 290 °C (302 °F to 554 °F).] (64742-47-8)		
NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight 2-generation reproductive studies (OECD 416)	

Propan-2-ol (67-63-0)	
Propan-2-ol	The substance is considered not to be toxic for the reproduction.
STOT-single exposure :	May cause drowsiness or dizziness.

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Distillates (petroleum), hydro- treated light; Kerosine— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approxi mately 150 °C to 290 °C (302 °F to 554 °F).] (64742-47-8)

554 F).] (04/42-4/-0)	
NOAEL (oral, rat)	750 mg/kg bodyweight
NOAEL (dermal, rat/rabbit)	≥ 495 mg/kg bodyweight
NOAEC (inhalation, rat, vapour)	1 mg/l
Propan-2-ol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.
Additional information	Propan-2-ol may cause drowsiness or dizziness after inhalation (single exposure)
tetraethyl silicate; ethyl silicate (78-10-4)	
STOT-single exposure	May cause respiratory irritation.
Ethyl silicate	vapours of ethyl silicate are irritating to the eyes and to the respiratory tract
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
3-aminopropyltriethoxysilane (919-30-2)	
LOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEL (dermal, rat/rabbit, 90 days)	17 mg/kg bodyweight Animal: rabbit
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: No data available
3-aminopropyltriethoxysilane (919-30-2)	
Viscosity, kinematic	1.8 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'
tetraethyl silicate; ethyl silicate (78-10-4)	
Viscosity, kinematic	0.638 mm²/s
Likely routes of exposure	: Isopropanol is readily absorbed and distributed throughout the body in animals and humans following ingestion, inhalation, and dermal application. Isopropanol is metabolised to acetone predominantly by the enzyme alcohol dehydrogenase in both animals and humans. A minor metabolic pathway is the conjugation of isopropanol by glucuronic acid and the conjugate has been detected in the urine in animals and humans. The majority of the absorbed chemical is exhaled as acetone, carbon dioxide and unmetabolised chemical, with smaller amounts excreted in the urine and less again in the faeces. Elimination half-lives of 2.5–3 hours and 6.4 hours in blood of humans have been reported in two studies following ingestion of the chemical.
Potential adverse human health effects and symptoms Symptoms/effects Symptoms/effects after skin contact Symptoms/effects after eye contact	<ul> <li>Causes skin irritation.</li> <li>Causes serious eye damage.</li> <li>May cause an allergic skin reaction.</li> <li>May cause drowsiness or dizziness.</li> <li>May be fatal if swallowed and enters airways.</li> <li>May cause drowsiness or dizziness.</li> <li>Irritation. May cause an allergic skin reaction.</li> <li>Serious damage to eyes.</li> </ul>
Symptoms/effects after ingestion	: Risk of lung oedema.

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### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Distillates (petroleum), hydro- treated light; Kerosine— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approxi mately 150 °C to 290 °C (302 °F to 554 °F).] (64742-47-8)		
LC50 - Fish [1]	2 – 5 mg/l OECD Guideline 203 (Fish, Acute Toxicity Test)	
EC50 - Crustacea [1]	1.4 mg/I OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)	
NOEC chronic crustacea	0.48 OECD Guideline 211 (Daphnia magna Reproduction Test)	
Propan-2-ol (67-63-0)		
LC50 - Fish [1]	9640 mg/l Pimephales promelas	
EC50 - Crustacea [1]	10000 mg/l Daphnia magna (Water flea)	
EC50 72h - Algae [1]	> 100 mg/l	
NOEC chronic algae	1800 mg/l Scenedesmus quadricauda	
3-aminopropyltriethoxysilane (919-30-2)		
LC50 - Fish [1]	> 934 mg/l Brachydanio rerio (zebra-fish)	
EC50 - Crustacea [1]	331 mg/l Daphnia magna (Water flea)	
EC50 72h - Algae [1]	535 mg/l	
tetraethyl silicate; ethyl silicate (78-10-4)		
LC50 - Fish [1]	> 245 mg/l Brachydanio rerio (zebra-fish)	
EC50 - Crustacea [1]	> 75 mg/l Daphnia magna (Water flea)	
EC50 72h - Algae [1]	> 22 mg/l Pseudokirchneriella subcapitata	
NOEC chronic fish	> 245 mg/l Brachydanio rerio (zebra-fish)	
NOEC chronic crustacea	≥ 75 mg/l Daphnia magna (Water flea)	
1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin (25085-99-8)		
LC50 - Fish [1]	2 mg/l Oncorhynchus mykiss (Rainbow trout)	
EC50 - Crustacea [1]	1.8 mg/l Daphnia magna (Water flea)	
EC50 72h - Algae [1]	11 mg/l Scenedesmus subspicatus	
NOEC chronic crustacea	0.55 mg/l Daphnia magna (Water flea)	

#### 12.2. Persistence and degradability

Distillates (petroleum), hydro- treated light; Kerosine— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approxi mately 150 °C to 290 °C (302 °F to 554 °F).] (64742-47-8)

Persistence and degradability	Kerosines are readily to inherently biodegradable.
Propan-2-ol (67-63-0)	
Persistence and degradability	readily biodegradable.

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3-aminopropyltriethoxysilane (919-30-2)		
Persistence and degradability	readily biodegradable.	
tetraethyl silicate; ethyl silicate (78-10-4)		
Persistence and degradability	readily biodegradable.	
1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin (25085-99-8)		
Persistence and degradability	Not readily biodegradable.	

## **12.3. Bioaccumulative potential**

Propan-2-ol (67-63-0)		
Partition coefficient n-octanol/water (Log Pow)	0.05	
Bioaccumulative potential	Isopropanol. The potential of bioconcentration in aquatic organisms is not expected to be significant, based on an estimated BCF value of 1.0.	
3-aminopropyltriethoxysilane (919-30-2)		
Partition coefficient n-octanol/water (Log Pow)	-0.3	
Bioaccumulative potential	Based on log Kow <=3, the substance has a low potential for bioaccumulation.	
tetraethyl silicate; ethyl silicate (78-10-4)		
Bioaccumulative potential	Low bioaccumulation potential.	
1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin (25085-99-8)		
Partition coefficient n-octanol/water (Log Pow)	3.242	

## 12.4. Mobility in soil

Propan-2-ol (67-63-0)		
Mobility in soil	A low potential for adsorption is expected because of its log Pow<3 and the ready biodegradability	
tetraethyl silicate; ethyl silicate (78-10-4)		
Mobility in soil	Based on a Kow=1 (estimated), ethyl silicate is expected to have a very high mobility in soil. The substance is also expected to volatilize from dry soil surfaces (based on the vapour pressure)	
1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin (25085-99-8)		
Mobility in soil	low potential	
12.5. Other adverse effects		

# No additional information available

SECTION 13: Disposal consideration	ns
13.1. Disposal methods	
Regional legislation (waste) Waste treatment methods Additional information Ecology - waste materials	<ul> <li>Disposal must be done according to official regulations.</li> <li>Dispose of contents/container in accordance with licensed collector's sorting instructions.</li> <li>Flammable vapours may accumulate in the container.</li> <li>Avoid release to the environment. Do not empty into drains.</li> </ul>

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## SECTION 14: Transport information

#### In accordance with ADR / IMDG / IMDG / IATA

ADR	IMDG	ΙΑΤΑ	RID
14.1. UN number or ID number	r		
UN 1139	UN 1139	UN 1139	UN 1139
14.2. UN proper shipping nam	e		
COATING SOLUTION	COATING SOLUTION	Coating solution	COATING SOLUTION
Transport document description			
UN 1139 COATING SOLUTION, 3, II, (D/E)	UN 1139 COATING SOLUTION, 3, II	UN 1139 Coating solution, 3, II	UN 1139 COATING SOLUTION, 3, II
14.3. Transport hazard class(e	es)		
3	3	3	3
3			
14.4. Packing group	-		
II	II	II	I
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information availa	able		

### 14.6. Special precautions for user

### **Overland transport**

Classification code (ADR)	:	F1
Special provisions (ADR)	:	640C
Limited quantities (ADR)	:	51
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T4
Portable tank and bulk container special provisions	:	TP1, TP8
(ADR)		
Tank code (ADR)	:	L1.5BN
Vehicle for tank carriage	:	FL
Transport category (ADR)	:	2
Special provisions for carriage - Operation (ADR)	:	S2, S20
Hazard identification number (Kemler No.)	:	33
Orange plates	:	33
		1139
Tunnel restriction code (ADR)	:	D/E
EAC code	:	•3YE

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### Transport by sea

Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP8
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-E
Stowage category (IMDG)	: B
Properties and observations (IMDG)	: Miscibility with water depends upon the composition.

#### Air transport

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	364
CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	3L
Rail transport		
Classification code (RID)	:	F1
Special provisions (RID)	:	640C
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T4
Portable tank and bulk container special provisions	:	TP1, TP8
(RID)		
Tank codes for RID tanks (RID)	:	L1.5BN
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE7
Hazard identification number (RID)	:	33

### 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

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

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Name	CAS-No.	Listing	Commercial status	Flags
Distillates (petroleum), hydro- treated light; Kerosine— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approxi mately 150 °C to 290 °C (302 °F to 554 °F).]	64742-47-8	Present	Active	
Propan-2-ol	67-63-0	Present	Active	
3-aminopropyltriethoxysilane	919-30-2	Present	Active	
tetraethyl silicate; ethyl silicate	78-10-4	Present	Active	
1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin	25085-99-8	Present	Active	XU

Propan-2-ol (67-63-0)

Subject to reporting requirements of United States SARA Section 313

#### **15.2. International regulations**

#### CANADA

Distillates (petroleum), hydro- treated light; Kerosine— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approxi mately 150 °C to 290 °C (302 °F to 554 °F).] (64742-47-8)

Listed on the Canadian DSL (Domestic Substances List)

#### Propan-2-ol (67-63-0)

Listed on the Canadian DSL (Domestic Substances List)

#### 3-aminopropyltriethoxysilane (919-30-2)

Listed on the Canadian DSL (Domestic Substances List)

#### tetraethyl silicate; ethyl silicate (78-10-4)

Listed on the Canadian DSL (Domestic Substances List)

#### 1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin (25085-99-8)

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

#### National regulations

Distillates (petroleum), hydro- treated light; Kerosine— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approxi mately 150 °C to 290 °C (302 °F to 554 °F).] (64742-47-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

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#### Propan-2-ol (67-63-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### 3-aminopropyltriethoxysilane (919-30-2)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### tetraethyl silicate; ethyl silicate (78-10-4)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### 1-Chloro-4 Trifluromethyl Bisphenol A Epoxy Resin (25085-99-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### **SECTION 16: Other information**

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Revision date Data sources

- : 11/07/2022
- : ECHA Database. SDS suppliers. ChemIDPlus database. PubChem Database.

Training advice

 Training instructions: Comply with the provisions of Directive 98/24/EC and subsequent amendments and national implementations.

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.