

Product Metalshield Black Gloss
 Revision date 22 October 2021
 Revision 2



Safety Data Sheet (SDS)
 according to Regulation (EC) No. 1907/2006

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Metalshield Black Gloss
Other means of identification UFI: 5QAX-AEAS-C206-PS2Q

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Paint or paint related material.
Uses advised against Any other purpose.

1.3 Details of the supplier of the safety data sheet

Supplier FSW Coatings Ltd
 Virginia
 Co Cavan
 Ireland
 Tel: 353 49854 7209
Contact person info@fsw.ie

1.4 Emergency telephone number

Emergency telephone + 353 49854 7209 (Between 0900 and 1700 hrs Monday-Friday)
National emergency telephone number Outside those hours, contact National Poisons Information Centre, Beaumont Hospital.
 Members of Public: +353 (1) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week) Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)
 Physical and chemical hazards Flam. Liq 3- H226
 Human health STOT SE 3 - H336, Skin. Sens 1 A- H317
 Environment Aquatic Chronic 2 - H411

2.2 Label elements

Contains Cobalt bis(2-ethylhexanoate)
 dodecane-1-thiol
 Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
 Hydrocarbons, C9-C12, n-Alkanes, Isoalkanes, Cyclics, Aromatics (5-25%) / Naphtha (petroleum), hydrodesulfurized heavy (benzene < 0,1 %)

Label in accordance with (EC) no. 1272/2008



Signal word Warning

Hazard statements H226 Flammable liquid and vapour.
 H317 May cause an allergic skin reaction.
 H336 May cause drowsiness or dizziness.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements **Prevention**
 P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.

P233 Keep container tightly closed.
P271 Use only outdoors or in a well-ventilated area.

Response

P370 + P378 In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO₂) for extinction.

Storage

P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

2.3 Other hazards

None known.

Section 3: Composition/information on ingredients**3.1 Substance**

Not applicable.

3.2 Mixtures

Name	Product identifier	Regulation (EC) No 1272/2008	%
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	CAS-No.: EC No.: 919-857-5 REACH Reg No.: 01-2119463258-33-XXXX	Asp. Tox - H304, Flam. Liq 3- H226, STOT SE 3 - H336	30-40%
trizinc bis(orthophosphate)	CAS-No.: 7779-90-0 EC No.: 231-944-3	Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	5-10%
Hydrocarbons, C9-C12, n-Alkanes, Isoalkanes, Cyclics, Aromatics (5-25%) / Naphtha (petroleum), hydrodesulfurized heavy (benzene < 0,1 %)	CAS-No.: 64742-82-1 EC No.: 919-446-0 REACH Reg No.: 01-2119458049-33	STOT SE 3 - H336, Asp. Tox - H304, Flam. Liq 3- H226, Aquatic Chronic 2 - H411	5-10%
1-methoxy-2-propanol	CAS-No.: 107-98-2 EC No.: 203-539-1	Flam. Liq 3- H226, STOT SE 3 - H336	1-5%
2-ethylhexanoic acid, zirconium salt	CAS-No.: 22464-99-9 EC No.: 245-018-1	Repr. 2 - H361d	0.1-0.9%
Cobalt bis(2-ethylhexanoate)	CAS-No.: 136-52-7 EC No.: 205-250-6 REACH Reg No.: 01-2119524678-29-XXXX	Eye Irrit.2A - H319, Skin. Sens 1 A- H317, Repr. 1B- H360, Aquatic Acute 1 - H400, Aquatic Chronic 3 - H412	0.1-0.9%
naphthalene	CAS-No.: 91-20-3 EC No.: 202-049-5	Acute Tox 4 - H302, Carc. 2 - H351, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	0.1-0.9%
dodecane-1-thiol	CAS-No.: 112-55-0 EC No.: 203-984-1	Skin Corr. 1C - H314, Skin. Sens 1 A- H317, Aquatic Chronic 1 - H410	<0.1%
nonane	CAS-No.: 111-84-2 EC No.: 203-913-4	Aquatic Chronic 1 - H410, Skin Irrit.2 - H315, Asp. Tox - H304, Flam. Liq 3- H226, STOT SE 3 - H336	<0.1%
propionic acid	CAS-No.: 79-09-4 EC No.: 201-176-3	Skin Corr. 1B - H314	<0.1%
octane	CAS-No.: 111-65-9 EC No.: 203-892-1	Aquatic Chronic 1 - H410, Skin Irrit.2 - H315, Asp. Tox - H304, Flam. Liq 2- H225, STOT SE 3 - H336	<0.1%

The full text for all hazard statements are displayed in section 16.

Composition comments

The data shown are in accordance with the latest EC Directives.

Propionic Acid: Specific Concentration Limits - Eye Irrit. 2; H319: 10 % ≤ C < 25 %, STOT SE 3; H335: C ≥ 10 %, Skin Corr. 1B; H314: C ≥ 25 %, Skin Irrit. 2; H315: 10 % ≤ C < 25 %.

Cobalt bis(2-ethylhexanoate): M (acute) = 1.

Section 4: First aid measures**4.1 Description of first aid measures****General information**

General first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing in an unconscious person. Show this safety data sheet or product label to medical personnel.

Inhalation

Remove the affected person to fresh air, obtain medical attention if symptoms persist.

Ingestion	Rinse mouth thoroughly. DO NOT induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Launder contaminated clothing before reuse. Get medical attention if symptoms persist.
Eye contact	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Rinse with a gentle stream water for at least 15 minutes. Get prompt medical attention.

4.2 Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependant of the concentration and the length of exposure.
Inhalation	May cause drowsiness or dizziness.
Ingestion	Prolonged exposure to product may cause irritation to lining of the mouth.
Skin contact	Prolonged contact may cause redness, irritation and dry skin. May cause an allergic skin reaction.
Eye contact	May cause temporary eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician	Treat symptomatically.
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Section 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials. Use water fog, foam, dry chemical or carbon dioxide (CO ₂) to extinguish flames.
Unsuitable extinguishing media	High volume water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	When heated, toxic and corrosive vapours/gases may be formed
Unusual fire & explosion hazards	No unusual fire or explosion hazards noted.
Specific hazards	If heated, harmful vapours may be formed.

5.3 Advice for firefighters

Special fire fighting procedures	Avoid breathing fire vapours. Keep up-wind to avoid fumes. Fight advanced or massive fires from safe distance or protected location. Do not scatter spilled material with more water than needed to fight the fire Do not get water inside container
Protective equipment for firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke, use open fire or other sources of ignition. Make safe all sources of ignition. Avoid contact with skin and eyes.
For emergency responders	Follow safe handling advice and personal protective equipment recommendations for normal use of product.

6.2 Environmental precautions

Environmental precautions	Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.
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6.3 Methods and material for containment and cleaning up

Spill clean up methods	Stop leak if possible without risk. Wear necessary protective equipment. Absorb spillage with non-combustible, absorbent material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Wash thoroughly after dealing with a spillage.
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6.4 Reference to other sections

Reference to other sections

For waste disposal, see section 13. See section 1 for emergency contact. For personal protection, see section 8

Section 7: Handling and storage

7.1 Precautions for safe handling

Handling

Read and follow manufacturer's recommendations. Do not handle broken packages without protective equipment. Avoid spilling, skin and eye contact. Do not use contact lenses. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist. Ensure adequate ventilation. Vapours are heavier than air and may spread along floors. Do not eat, drink or smoke when using the product.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep upright. Keep locked up and out of reach of children. Avoid storing for very long periods. Keep container tightly sealed when not in use. Bags or containers, which are opened, must be carefully resealed to prevent leakage. Avoid contact with oxidising agents. Store away from acids. Store separate from alkalis. Store in cool dry areas away from direct sunlight or sources of ignition. Store away from other chemicals.

Storage class

Flammable liquid storage.

7.3 Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.

Usage description

Use only according to directions. Replace and tighten cap after use.

Section 8: Exposure controls/Personal protection

8.1 Control parameters

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
1-methoxy-2-propanol	OEL	100 ppm	375 mg/m ³	150 ppm	568 mg/m ³	IOELV
naphthalene	OEL	10 ppm	50 mg/m ³			IOELV
dodecane-1-thiol	OEL	0.1 ppm				Sens.
nonane	OEL	200 ppm	1050 mg/m ³			
propionic acid	OEL	10 ppm	31 mg/m ³	20 ppm	62 mg/m ³	IOELV
octane	OEL	300 ppm	1450 mg/m ³			

Ingredient comments

Ireland, Occupational Exposure Limits 2021.

8.2 Exposure Controls

Protective equipment



Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

Where risk assessment shows air-purifying respirators are appropriate a full face respirator conforming to EN143 should be used, and suitable respirator cartridges as a backup to engineering controls. Use type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as CEN (EU). Change filters frequently. Consult manufacturer for specific advice.

Hand protection

Use suitable protective gloves if there is a risk of skin contact. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Eye protection	Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Change gloves regularly. Suggested material: Nitrile rubber gloves. Minimum layer thickness: 0.7mm. Minimum breakthrough time / gloves: 480 min. Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU).
Other protection	Protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. The selected clothing must satisfy the European norm standard EN 943.
Hygiene measures	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.
Process conditions	Keep container tightly sealed when not in use. Ensure that eye flushing systems are located close by in the work place.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Black.
Odour	Faint hydrocarbon odour.
Odour threshold - lower	No information available as testing has not been completed.
Odour threshold - upper	No information available as testing has not been completed.
pH-Value, Conc. Solution	Not applicable.
pH-Value, Diluted solution	Not applicable.
Melting point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	40.00 °C
Evaporation rate	Not applicable.
Flammability state	Liquid
Flammability limit - lower(%)	Lower: 1.48%
Flammability limit - upper(%)	Upper: 13.74%
Vapour pressure	Not applicable.
Vapour density (air=1)	Highest known value: 1.1 kPa (8.5 mm Hg) (at 20°C)
Relative density	0.97
Bulk density	No information available as testing has not been completed.
Solubility	Insoluble in cold water.
Decomposition temperature	Stable under normal handling and storage conditions
Partition coefficient; n-Octanol/Water	No information available as testing has not been completed.
Auto ignition temperature (°C)	Lowest known value: 270°C
Viscosity	Kinematic (25°C): = 5.63 cm ² /s
Explosive properties	Formation of explosive vapour is possible.
Oxidising properties	The product does not meet the criteria to be classified as oxidising.

9.2 Other information

Molecular weight	No information available as testing has not been completed.
Volatile organic compound	428g/l (max)
Other information	Volume solids: 56.0% +/- 1.0%
	Weight Solids: 57.0% +/- 1.0%

Section 10: Stability and reactivity**10.1 Reactivity**

Reactivity	Reactions may occur with strong oxidising agents.
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10.2 Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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10.3 Possibility of hazardous reactions

Hazardous reactions	For information on hazardous reaction see section 10.1.
Hazardous polymerisation	Unknown.
Polymerisation description	Unknown.

10.4 Conditions to Avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Extremes of temperature and direct sunlight.
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10.5 Incompatible materials

Materials to avoid	Strong oxidising substances. Do not mix with other chemicals unless listed on directions.
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10.6 Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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Section 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No. 1272/2008**

Toxicological information	No toxicological information for the overall finished product.
Acute toxicity (Oral LD50)	No information available as testing has not been completed.
Acute toxicity (Dermal LD50)	No information available as testing has not been completed.
Acute toxicity (Inhalation LD50)	No information available as testing has not been completed.
Serious eye damage/irritation	May cause temporary eye irritation.
Skin corrosion/irritation	The product is not classified as a skin corrosion/irritation hazard.
Respiratory sensitisation	The product is not classified as a respiratory hazard.
Skin sensitisation	The product is classified as a skin sensitisation hazard.
Germ cell mutagenicity	The product is not classified as a mutagen.
Carcinogenicity	The product is not classified as a carcinogen hazard.
Specific target organ toxicity - Single exposure:	
STOT - Single exposure	The product is classified as a single exposure specific target organ toxin.
Specific target organ toxicity - Repeated exposure:	
STOT - Repeated exposure	The product is not classified as a repeat exposure specific target organ toxin.
Inhalation	May cause drowsiness or dizziness.
Ingestion	Prolonged exposure to product may cause irritation to lining of the mouth.

Skin contact	Prolonged contact may cause redness, irritation and dry skin. May cause an allergic skin reaction.
Eye contact	May cause temporary eye irritation.
Waste management	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
Routes of entry	Eyes, skin, ingestion or inhalation.
Target organs	Eyes, skin, digestive system, respiratory system.
Aspiration hazards:	The product is not classified as an aspiration hazard.
Reproductive toxicity:	The product is not classified as a reproductive hazard.

Name	LD50 oral	LD50 dermal	LD50 inhalation
1-methoxy-2-propanol	=4016.00mg/kg Rat		=6500.00ppmV Rat 4 Hours
propionic acid	2600.00mg/kg Rat	525.00mg/kg Rabbit	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	>5000.00mg/kg Rat >5000.00mg/kg Rat	>5000.00mg/kg Rabbit >5000.00mg/kg Rabbit	>6.10mg/l (vapours) Rat 4 Hours >6.10mg/l (vapours) Rat 4 Hours
2-ethylhexanoic acid, zirconium salt	>5.00g/kg Rat	>5.00g/kg Rabbit	

11.2 Information on other hazards

Information on other hazards	None known.
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Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish	No information available as testing has not been completed.
Acute toxicity - Aquatic invertebrates	No information available as testing has not been completed.
Acute toxicity - Aquatic plants	No information available as testing has not been completed.
Acute toxicity - Microorganisms	No information available as testing has not been completed.
Chronic toxicity - Fish	No information available as testing has not been completed.
Chronic toxicity - Aquatic invertebrates	No information available as testing has not been completed.
Chronic toxicity - Aquatic plants	No information available as testing has not been completed.
Chronic toxicity - Microorganisms	No information available as testing has not been completed.
Ecotoxicity	The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.
Eco toxicological information	The product contains a substance which is toxic to aquatic organisms.

12.2 Persistence and degradability

Degradability	The degradability of the product has not been stated.
Biological oxygen demand	No information available as testing has not been completed.
Chemical oxygen demand	No information available as testing has not been completed.

12.3 Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Bioaccumulation factor	No information available as testing has not been completed.
Partition coefficient; n-Octanol/Water	No information available as testing has not been completed.

12.4 Mobility in soil

Mobility	Insoluble in cold water.
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12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	The product does not contain any PBT or vPvB Substances.
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12.6 Endocrine disrupting properties

Endocrine disrupting properties	The product does not contain any substances with endocrine disrupting properties at a
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concentration above or equal to 0.1%.

12.7 Other adverse effects

Other adverse effects None known.

Name	Acute toxicity (Fish)	Acute toxicity (Aquatic invertebrates)	Acute toxicity (Aquatic plants)
1-methoxy-2-propanol	LC50 96 Hours =6812.00mg/l Leuciscus idus (Golden Orfe)	LC50 48 Hours =23000.00mg/l Daphnia magna	EC50 =1000.00mg/l Selenastrum Capricornutum
propionic acid	LC50 96 Hours 51.00ppm Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours 22.70ppm Daphnia magna	EC50 96 Hours 43.00mg/l
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	LC50 96 Hours >100.00ppm Freshwater Fish LC50 96 Hours >100.00ppm Freshwater Fish	LC50 48 Hours >100.00ppm Daphnia magna LC50 48 Hours >100.00ppm Daphnia magna	

Section 13: Disposal considerations

Waste management When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1 Waste treatment methods

Disposal methods Dispose of waste and residues in accordance with local authority requirements, and in accordance with all local, national and international regulations.

Section 14: Transport information

14.1 UN number or ID number

UN no. (ADR) UN1263
UN no. (IMDG) UN1263
UN no. (IATA) UN1263

14.2 UN proper shipping name

ADR proper shipping name PAINT or PAINT RELATED MATERIAL
IMDG proper shipping name PAINT or PAINT RELATED MATERIAL
IATA proper shipping name PAINT

14.3 Transport hazard class(es)

ADR class 3
IMDG class 3
IATA class 3

Transport labels



14.4 Packing group

ADR/RID/ADN packing group III
IMDG packing group III
IATA packing group III

14.5 Environmental hazards

ADR Yes
IMDG Yes
IATA Yes

14.6 Special precautions for user

EMS F-E, S-E

Emergency action code	A3 A72 A192
Hazard no. (ADR)	30
Tunnel restriction code	(D/E)

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/Legislation specific for the substance or mixture

EU legislation	Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Reach Regulation (EC) No 453/2010. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
Approved code of practice	2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2021) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)

15.2 Chemical safety assessment

Chemical safety assessment	No chemical safety assessment has been carried out.
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Section 16: Other information

General information	This Safety Data Sheet is in accordance with REACH Annex II, (EC) No 2020/878.
Revision comments	[1]Information updated. [2]Information updated. [3]Information updated. [4]Information updated. [8]Information updated. [9]Information updated. [11]Information updated. [12]Information updated. [15]Information updated. This is a second issue.
Revision date	22 October 2021
Revision	2
Safety data sheet status	Approved.

Hazard statements in full

EUH066	Repeated exposure may cause skin dryness or cracking.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.
H361	Suspected of damaging fertility or the unborn child .
H317	May cause an allergic skin reaction.
H360	May damage fertility or the unborn child .
H351	Suspected of causing cancer .
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H225	Highly flammable liquid and vapour.

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.