

# SAFETY DATA SHEET

## GLASS GUARD

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name                   GLASS GUARD  
Product number                B1524/01  
Internal identification         L1524

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

Identified uses                Glass Treatment

#### 1.3. Details of the supplier of the safety data sheet

Supplier                         GARDX PROTECTION LTD  
                                      UNIT 7 CLOVELLY BUSINESS PARK  
                                      CLOVELLY ROAD  
                                      SOUTHBOURNE, EMSWORTH  
                                      HANTS  
                                      PO10 8PE  
                                      +44 (0)1243 376426  
  
                                      product@gardx.co.uk

#### 1.4. Emergency telephone number

Emergency telephone         +44 (0) 777 8505 330 (24 hrs)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

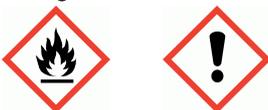
##### Classification

Physical hazards                Flam. Liq. 2 - H225  
Health hazards                 Eye Irrit. 2 - H319  
Environmental hazards         Not Classified

Classification (67/548/EEC or 1999/45/EC)   F;R11. R66.

#### 2.2. Label elements

##### Pictogram



Signal word                     Danger

Hazard statements             H225 Highly flammable liquid and vapour.  
                                      H319 Causes serious eye irritation.

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<b>Precautionary statements</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P280 Wear protective gloves, eye and face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P501 Dispose of contents/container in accordance with national regulations.</p>
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### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>Ethyl alcohol</b> <span style="float: right;"><b>30-60%</b></span>		
CAS number: 64-17-5	EC number: 200-578-6	REACH registration number: 01-2119457610-43-xxxx
<b>Classification</b> Flam. Liq. 2 - H225 Eye Irrit. 2 - H319	<b>Classification (67/548/EEC or 1999/45/EC)</b> F;R11	
<b>METHANOL</b> <span style="float: right;"><b>1-5%</b></span>		
CAS number: 67-56-1	EC number: 200-659-6	REACH registration number: 01-2119433307-44
<b>Classification</b> Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370	<b>Classification (67/548/EEC or 1999/45/EC)</b> F;R11 T;R23/24/25,R39/23/24/25	
<b>PROPAN-2-OL</b> <span style="float: right;"><b>1-5%</b></span>		
CAS number: 67-63-0	EC number: 200-661-7	REACH registration number: 01-2119457558-25-xxxx
<b>Classification</b> Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	<b>Classification (67/548/EEC or 1999/45/EC)</b> F;R11 Xi;R36 R67	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>Inhalation</b>	IF INHALED: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
<b>Skin contact</b>	Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

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**Eye contact** Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

### 4.2. Most important symptoms and effects, both acute and delayed

**Inhalation** May cause drowsiness or dizziness.

**Ingestion** May cause discomfort if swallowed.

**Skin contact** Product has a defatting effect on skin.

**Eye contact** Causes serious eye irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

### 5.2. Special hazards arising from the substance or mixture

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

### 5.3. Advice for firefighters

**Protective actions during firefighting** No specific firefighting precautions known.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not touch or walk into spilled material. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Provide adequate ventilation. Take care as floors and other surfaces may become slippery. Avoid contact with contaminated tools and objects. Wash thoroughly after dealing with a spillage.

### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. Contain and absorb spillage with sand, earth or other non-combustible material. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

### 6.4. Reference to other sections

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

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**Usage precautions**                      Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Do not breathe vapours. Do not eat, drink or smoke when using this product. Wash skin thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions**                      Store at temperatures between 4°C and 40°C. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**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 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### **Ethyl alcohol**

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m<sup>3</sup>

##### **METHANOL**

Long-term exposure limit (8-hour TWA): WEL 200 ppm(Sk) 266 mg/m<sup>3</sup>(Sk)

Short-term exposure limit (15-minute): WEL 250 ppm(Sk) 333 mg/m<sup>3</sup>(Sk)

##### **PROPAN-2-OL**

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

### ISOPENTYL ACETATE (CAS: 123-92-2)

**DNEL**    Workers - Inhalation; Long term systemic effects: 20.8 mg/m<sup>3</sup>  
 Workers - Dermal; Long term systemic effects: 2.95 mg/kg/day  
 General population - Inhalation; Long term systemic effects: 5.1 mg/m<sup>3</sup>  
 General population - Dermal; Long term systemic effects: 1.47 mg/kg/day  
 General population - Oral; Long term systemic effects: 1.47 mg/kg/day

**PNEC**    - Fresh water; 0.022 mg/l  
 - Marine water; 0.0022 mg/l  
 - Intermittent release; 0.22 mg/l  
 - STP; 30 mg/l  
 - Sediment (Freshwater); 17.87 mg/kg/day  
 - Sediment (Marinewater); 1.787 mg/kg/day  
 - Soil; 4.15 mg/kg/day

### ETHANOL (CAS: 64-17-5)

**Ingredient comments**                      WEL = Workplace Exposure Limits

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<b>DNEL</b>	Industry - Inhalation; Short term : 1900 mg/m <sup>3</sup>
	Industry - Dermal; Long term : 343 mg/kg/day
	Industry - Inhalation; Long term : 950 mg/m <sup>3</sup>
	Consumer - Inhalation; Short term : 950 mg/m <sup>3</sup>
	Consumer - Dermal; Long term : 206 mg/kg/day
	Consumer - Inhalation; Long term : 114 mg/m <sup>3</sup>
	Consumer - Oral; Long term : 87 mg/kg/day

<b>PNEC</b>	- Fresh water; 0.96 mg/l
	- Marine water; 0.79 mg/l
	- Soil; 0.62 mg/kg
	- STP; 580 mg/l

### METHANOL (CAS: 67-56-1)

<b>DNEL</b>	Industry - Dermal; : 40 mg/kg/day
	Industry - Inhalation; : 260 mg/m <sup>3</sup>
	Consumer - Dermal; : 8 mg/kg/day
	Consumer - Inhalation; : 50 mg/m <sup>3</sup>

<b>PNEC</b>	- Sediment; 570.4 mg/kg
	- Soil; 23.5 mg/kg
	- STP; 100 mg/l
	- Fresh water; 154 mg/l
	- Marine water; 15.4 mg/l

### PROPAN-2-OL (CAS: 67-63-0)

<b>DNEL</b>	Industry - Dermal; Long term systemic effects: 888 mg/kg/day
	Industry - Inhalation; Long term systemic effects: 500 mg/m <sup>3</sup>
	Consumer - Dermal; Long term systemic effects: 319 mg/kg/day
	Consumer - Oral; Long term systemic effects: 26 mg/kg/day
	Consumer - Inhalation; Long term systemic effects: 89 mg/m <sup>3</sup>

<b>PNEC</b>	- Fresh water; 140.9 mg/l
	- Marine water; 140.9 mg/l
	- Intermittent release; 140.9 mg/l
	- Sediment (Freshwater); 552 mg/kg
	- Sediment (Marinewater); 552 mg/kg
	- STP; 2251 mg/l
- Soil; 28 mg/kg	

## 8.2. Exposure controls

### Protective equipment



### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

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**Hand protection** Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. For exposure up to 4 hours, wear gloves made of the following material: Rubber (natural, latex). Nitrile rubber. Neoprene. Polyvinyl chloride (PVC). To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

**Hygiene measures** Wash hands thoroughly after handling.

### SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Ester.
<b>pH</b>	Not applicable.
<b>Flash point</b>	5°C SCC (Setaflash closed cup).
<b>Relative density</b>	0.840 @ 25°C
<b>Solubility(ies)</b>	Insoluble in water.

#### 9.2. Other information

**Other information** Not determined.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

#### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Not determined.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition.

#### 10.5. Incompatible materials

**Materials to avoid** No specific material or group of materials is likely to react with the product to produce a hazardous situation.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - oral

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ATE oral (mg/kg) 12,776.83134583

### Acute toxicity - dermal

ATE dermal (mg/kg) 12,776.83134583

### Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 425.89437819

<b>Inhalation</b>	Vapours may cause drowsiness and dizziness.
<b>Ingestion</b>	Gastrointestinal symptoms, including upset stomach.
<b>Skin contact</b>	Product has a defatting effect on skin.
<b>Eye contact</b>	Causes serious eye irritation.

### Toxicological information on ingredients.

#### ISOPENTYL ACETATE

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 7,422.0

Species Rat

ATE oral (mg/kg) 7,422.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 5,000.0

Species Rat

ATE dermal (mg/kg) 5,000.0

Skin contact Dryness and/or cracking.

#### Ethyl alcohol

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 2,001.0

Species Rat

ATE oral (mg/kg) 2,001.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 2,001.0

Species Rabbit

ATE dermal (mg/kg) 2,001.0

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 21.0

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**Species** Mouse

**ATE inhalation (vapours mg/l)** 21.0

**Serious eye damage/irritation**

**Serious eye damage/irritation** Slightly irritating.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** NOAEL 1730 mg/kg, Oral,

**Target organs** Gastro-intestinal tract Liver

**Inhalation** Vapours in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting.

**Ingestion** Ingestion of large amounts may cause unconsciousness. May cause nausea, headache, dizziness and intoxication.

**Skin contact** Repeated exposure may cause skin dryness or cracking.

**Eye contact** Irritating to eyes.

**Medical symptoms** EYES AND MUCOUS MEMBRANES. Irritation of eyes and mucous membranes. RESPIRATORY SYSTEM. Upper respiratory irritation. SKIN. Skin irritation. DIGESTIVE SYSTEM. Gastrointestinal symptoms, including upset stomach.

### METHANOL

**Acute toxicity - oral**

**ATE oral (mg/kg)** 300.0

**Acute toxicity - dermal**

**ATE dermal (mg/kg)** 300.0

**Acute toxicity - inhalation**

**Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)** 10.0

**Species** Rat

**ATE inhalation (vapours mg/l)** 10.0

### PROPAN-2-OL

**Acute toxicity - oral**

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 4,700.0

**Species** Rat

**ATE oral (mg/kg)** 4,700.0

**Acute toxicity - dermal**

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 16.4

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Species                      Rabbit

### SECTION 12: Ecological Information

**Ecotoxicity**                      The product is not expected to be hazardous to the environment.

#### Ecological information on ingredients.

##### Ethyl alcohol

**Ecotoxicity**                      The product is not expected to be hazardous to the environment.

##### PROPAN-2-OL

**Ecotoxicity**                      The product is not expected to be toxic to aquatic organisms.

#### 12.1. Toxicity

**Acute toxicity - fish**                      Not determined.

#### Ecological information on ingredients.

##### Ethyl alcohol

**Toxicity**                      Not considered toxic to fish.

**Acute toxicity - fish**                      Not determined.  
LC<sub>50</sub>, 48 hours, 48 hours: > 100 mg/l, Leuciscus idus (Golden orfe)  
LC<sub>50</sub>, 96 hours: 11.000 mg/l, Fish

**Acute toxicity - aquatic invertebrates**                      EC<sub>50</sub>, 48 hours: 12.34 mg/l, Daphnia magna

**Acute toxicity - aquatic plants**                      EC<sub>50</sub>, hours: mg/l, Selenastrum capricornutum

##### METHANOL

**Acute toxicity - fish**                      LC<sub>50</sub>, 96 hours: 10800 mg/l, Fish

**Acute toxicity - aquatic invertebrates**                      EC<sub>50</sub>, 48 hours, 48 hours: 24500 mg/l,

**Acute toxicity - aquatic plants**                      IC<sub>50</sub>, 72 hours: 8000 mg/l, Algae

##### PROPAN-2-OL

**Toxicity**                      Not considered toxic to fish.

**Acute toxicity - fish**                      LC<sub>50</sub>, 96 hours, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates**                      EC<sub>50</sub>, : 9714 mg/l, Daphnia magna  
EC<sub>50</sub>, 48 hours: >100 mg/l, Daphnia magna

**Acute toxicity - aquatic plants**                      EC<sub>50</sub>, 72 hours, 72 hours: > 100 mg/l, Scenedesmus subspicatus  
IC<sub>50</sub>, 72 hours: >100 mg/l, Algae

#### 12.2. Persistence and degradability

**Persistence and degradability**                      The product is expected to be biodegradable.

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### Ecological information on ingredients.

#### Ethyl alcohol

<b>Persistence and degradability</b>	The product is readily biodegradable.
<b>Biodegradation</b>	- Half-life : 1 - <10

#### PROPAN-2-OL

<b>Persistence and degradability</b>	The product is readily biodegradable.
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### 12.3. Bioaccumulative potential

<b>Bioaccumulative potential</b>	The product is not bioaccumulating.
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### Ecological information on ingredients.

#### Ethyl alcohol

<b>Bioaccumulative potential</b>	The product is not bioaccumulating.
<b>Partition coefficient</b>	: -0.031

#### PROPAN-2-OL

<b>Bioaccumulative potential</b>	The product is not bioaccumulating.
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### 12.4. Mobility in soil

<b>Mobility</b>	The product is insoluble in water.
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### Ecological information on ingredients.

#### Ethyl alcohol

<b>Mobility</b>	The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.
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#### PROPAN-2-OL

<b>Mobility</b>	The product is soluble in water.
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### 12.5. Results of PBT and vPvB assessment

<b>Results of PBT and vPvB assessment</b>	This product does not contain any substances classified as PBT or vPvB.
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### Ecological information on ingredients.

#### PROPAN-2-OL

<b>Results of PBT and vPvB assessment</b>	This substance is not classified as PBT or vPvB according to current EU criteria.
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### 12.6. Other adverse effects

<b>Other adverse effects</b>	Not determined.
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### Ecological information on ingredients.

#### Ethyl alcohol

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**Other adverse effects** Not known.

### PROPAN-2-OL

**Other adverse effects** Not available.

#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

#### SECTION 14: Transport information

##### 14.1. UN number

UN No. (ADR/RID) 1993

UN No. (IMDG) 1993

UN No. (ICAO) 1993

##### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** FLAMMABLE LIQUID, N.O.S. (ethanol)

**Proper shipping name (IMDG)** FLAMMABLE LIQUID, N.O.S. (ethanol)

**Proper shipping name (ICAO)** FLAMMABLE LIQUID, N.O.S. (ethanol)

##### 14.3. Transport hazard class(es)

ADR/RID class 3

IMDG class 3

ICAO class/division 3

##### Transport labels



##### 14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ICAO packing group II

##### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

##### 14.6. Special precautions for user

**Tunnel restriction code** (D/E)

##### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

<b>National regulations</b>	Control of Substances Hazardous to Health Regulations 2002 (as amended).
<b>EU legislation</b>	Commission Regulation (EU) No 453/2010 of 20 May 2010. 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 (as amended).
<b>Guidance</b>	Workplace Exposure Limits EH40.

#### 15.2. Chemical safety assessment

### SECTION 16: Other information

<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	24/08/2015
<b>Revision</b>	2.0
<b>Supersedes date</b>	20/11/2013
<b>SDS number</b>	14565
<b>Risk phrases in full</b>	R10 Flammable. R11 Highly flammable. R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R36 Irritating to eyes. R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. R66 Repeated exposure may cause skin dryness or cracking. R67 Vapours may cause drowsiness and dizziness.
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H311 Toxic in contact with skin. H319 Causes serious eye irritation. H331 Toxic if inhaled. H336 May cause drowsiness or dizziness. H370 Causes damage to organs (Central nervous system).

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.