



SAFETY DATA SHEET

BARTOLINE - Superstik Grab Adhesive (High Strength)

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

1.1. Product identifier

Product name BARTOLINE - Superstik Grab Adhesive (High Strength)

REACH registration notes No REACH registration number required as this product is a mixture.

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

Identified uses Adhesive.

Uses advised against Not to be used for any other purpose than stated above.

1.3. Details of the supplier of the safety data sheet

Supplier Bartoline Limited
Barmston Close
Beverley
East Yorkshire
HU17 0LW
01482 678710
info@bartoline.co.uk

Contact person Product Compliance Manager

1.4. Emergency telephone number

Emergency telephone 01482 678710 (8.30am - 4.45pm Monday to Friday) or NHS 111 (General Public) (24 Hour service)

National emergency telephone number National Poisons Information Service (24hours) 0844 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

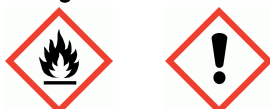
Physical hazards Flam. Liq. 2 - H225

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Pictogram



Signal word Danger

BARTOLINE - Superstik Grab Adhesive (High Strength)

Hazard statements	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapour/ spray. P271 Use only outdoors or in a well-ventilated area. Wear Nitrile/PVC protective gloves. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor/NHS 111 if you feel unwell. P405 Store locked up. P501 Dispose of contents/container to hazardous waste collection point.
Contains	ethyl acetate, Naphtha (petroleum), hydrotreated light, Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ethyl acetate			10-30%
CAS number: 141-78-6	EC number: 205-500-4	REACH registration number: 01-2119475103-46-XXXX	
Classification			
Flam. Liq. 2 - H225			
Eye Irrit. 2 - H319			
STOT SE 3 - H336			
Naphtha (petroleum), hydrotreated light			5-10%
CAS number: 64742-49-0	EC number: 265-151-9	REACH registration number: 01-2119475133-43-XXXX	
Classification			
Flam. Liq. 2 - H225			
Skin Irrit. 2 - H315			
STOT SE 3 - H336			
Asp. Tox. 1 - H304			
Aquatic Chronic 2 - H411			

BARTOLINE - Superstik Grab Adhesive (High Strength)

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	5-10%
CAS number: —	EC number: 920-750-0
	REACH registration number: 01-2119473851-33-XXXX
Classification	
Flam. Liq. 2 - H225	
Skin Irrit. 2 - H315	
STOT SE 3 - H336	
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	

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

Composition comments A ready to use panel adhesive based on a high bond strength synthetic rubber/resin mix in a solvent carrier.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Remove affected person from source of contamination. IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR THE NHS 111 SERVICE.
Inhalation	Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention immediately! Provide rest, warmth and fresh air.
Skin contact	Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms are severe or persist after washing.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapours inhaled in strong concentration have a narcotic effect on the central nervous system. Irritation of the respiratory tract due to excessive fume, causes headache, drowsiness or other effects to the central nervous system, loss of consciousness.
Ingestion	May cause damage to the gastro-intestinal tract. There may be soreness and redness of the mouth and throat.
Skin contact	Prolonged or repeated contact may cause irritation and dry skin.
Eye contact	Burning feeling and temporary redness.

BARTOLINE - Superstik Grab Adhesive (High Strength)

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

Notes for the doctor	Treat symptomatically.
Specific treatments	If adhesive bonding occurs, prise the skin apart slowly, working from the edge of the bonded area. This can be eased by using warm soapy water.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.
Hazardous combustion products	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentrations.

5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire vapours. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control. Containers close to fire should be removed or cooled with water.
Special protective equipment for firefighters	In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Keep unnecessary and unprotected personnel away from the spillage. No smoking, sparks, flames or other sources of ignition near spillage. Do not enter storage areas or confined spaces unless adequately ventilated. Take precautionary measures against static discharges. Take care as floors and other surfaces may become slippery.
For non-emergency personnel	No specific advice required.
For emergency responders	Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. For waste disposal, see section 13.

6.2. Environmental precautions

Environmental precautions	The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. It is unlikely that the substance will dissolve in water in amounts big enough to have a toxic effect on fish and daphnia.
----------------------------------	---

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	This product is a viscous paste and will not travel if accidentally released. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Approach the spillage from upwind. Wipe up with an absorbent cloth and dispose of waste safely.
--------------------------------	---

6.4. Reference to other sections

BARTOLINE - Superstik Grab Adhesive (High Strength)

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Do not handle until all safety precautions have been read and understood. Read label before use. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. Wear protective clothing as described in Section 8 of this safety data sheet. Do not get in eyes, on skin, or on clothing. Do not breathe vapours. In use may form flammable/explosive vapour-air mixture. Vapours may accumulate on the floor and in low-lying areas. Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapour concentrations. During application and drying, solvent vapours will be emitted. Use only outdoors or in a well-ventilated area. Do not use in confined spaces without adequate ventilation and/or respirator. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash hands thoroughly after handling. Remove contamination with soap and water or recognised skin cleansing agent. Remove contaminated clothing and protective equipment before entering eating areas. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

Advice on general occupational hygiene

Persons with impaired lung function should not handle this product.. Do not eat, drink or smoke when using this product. Wash promptly with soap and water if skin becomes contaminated. Take off immediately all contaminated clothing and wash it before reuse. Promptly remove any clothing that becomes wet or contaminated. Remove contaminated clothing and protective equipment before entering eating areas. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate hand lotion to prevent defatting and cracking of skin.

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 container tightly sealed when not in use. Keep locked up and out of the reach of children. Store in a demarcated bunded area to prevent release to drains and/or watercourses. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with oxidising agents. Keep away from food, drink and animal feeding stuffs. Use containers made of the following materials: Carbon steel. Glass. Mild steel. Stainless steel. High-density polyethylene (HDPE) Polyethylene terephthalate (PET)

Storage class

Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s)

A Ready to Use Panel Adhesive

Usage description

In General:

Keep containers closed when not in use.

Keep containers upright.

Use only in well ventilated areas, ideally outdoors.

Open containers slowly in order to release any pressure build up that may occur.

Keep out of reach of children.

Apply "common sense" measures when using this product.

When using transfer required amount to a suitable container such as glass, metal or HDPE.

Avoid all contact with skin and eyes. Always follow on pack instructions when using this

product. Apply "common sense" measures when handling this product. Avoid all contact with

skin and eyes. Keep out of reach of children. Only apply by using a skeleton/cartridge gun.

BARTOLINE - Superstik Grab Adhesive (High Strength)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

ethyl acetate

Long-term exposure limit (8-hour TWA): WEL 200 ppm

Short-term exposure limit (15-minute): WEL 400 ppm

Naphtha (petroleum), hydrotreated light

Long-term exposure limit (8-hour TWA): WEL 1200 ppm vapour

The data quoted is taken from the Raw Material suppliers MSDS.

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

No information on supplier MSDS and no information in HSE EH40/2005 Workplace Exposure Limits.

WEL = Workplace Exposure Limit

ethyl acetate (CAS: 141-78-6)

DNEL	Workers - Inhalation; Long term systemic effects: 734 mg/m ³ Workers - Dermal; Long term systemic effects: 63 mg/kg/day General population - Inhalation; Long term systemic effects: 367 mg/m ³ General population - Inhalation; Short term systemic effects: 734 mg/m ³ General population - Inhalation; Long term local effects: 367 mg/m ³ General population - Inhalation; Short term local effects: 734 mg/m ³ General population - Dermal; Long term systemic effects: 37 mg/kg/day General population - Oral; Long term systemic effects: 4.5 mg/kg/day
PNEC	Workers - Marine water; 0.024 mg/l Workers - Fresh water; 0.24 mg/l Workers - Intermittent release; 1.65 mg/l Workers - STP; 650 mg/l Workers - Sediment (Freshwater); 1.15 mg/kg Workers - Sediment (Marinewater); 0.115 mg/kg Workers - Hazard for predators; 0.2 g/kg food

Naphtha (petroleum), hydrotreated light (CAS: 64742-49-0)

Ingredient comments	The data quoted below is taken from the supplier MSDS.
DNEL	Workers - Dermal; Long term systemic effects: 300 mg/kg Workers - Inhalation; Long term systemic effects: 2085 mg/m ³ General population - Oral; Long term systemic effects: 149 mg/kg/day
PNEC	No data available from the substance supplier.

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Ingredient comments	The data below is taken from the REACH Registration portal for this substance.
DNEL	Workers - Inhalation; Long term systemic effects: 2035 mg/m ³ General population - Inhalation; Long term systemic effects: 608 mg/m ³ General population - Dermal; Long term systemic effects: 699 mg/kg/day General population - Oral; Long term systemic effects: 699 mg/kg/day
PNEC	No PNEC available Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for the risk assessment of this complex substance.

BARTOLINE - Superstik Grab Adhesive (High Strength)

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

This product must not be handled in a confined space without adequate ventilation.

Personal protection

Protective engineering solutions should be implemented and in use before Personal Protective Equipment (PPE) is considered.

Eye/face protection

Wear EN 166 approved chemical safety goggles where eye exposure is reasonably probable.

Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. Wear protective gauntlets made of the following material: Nitrile rubber. Viton rubber (fluoro rubber). 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.

Other skin and body protection

Given the identified use of the product additional skin and body protection should not be required.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Persons susceptible to allergic reactions should not handle this product.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Paste.
Colour	Beige.
Odour	Hydrocarbons.
Odour threshold	Not available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	64°C
Flash point	~ -10°C Not specified.
Evaporation rate	Not available.
Evaporation factor	Not available.
Upper/lower flammability or explosive limits	Not available.

BARTOLINE - Superstik Grab Adhesive (High Strength)

Other flammability	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.18 - 1.27
Bulk density	Not applicable.
Solubility(ies)	Insoluble in the following materials: Water
Partition coefficient	No specific test data are available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	1600000 mPas
Explosive properties	Not considered explosive based on chemical structure and oxygen balance considerations.
Oxidising properties	This product is not considered oxidising based on chemical structure considerations.
Comments	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures. Information given is for the mixture as a whole unless stated otherwise.

9.2. Other information

Volatile organic compound This product contains a maximum VOC content of 373 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The reactivity data for this product will be typical of those for the following class of materials: Hydrocarbons. There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable under the prescribed storage conditions. See Section 10.3 (Possibility of hazardous reactions) for further information.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Containers can burst violently or explode when heated, due to excessive pressure build-up. Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Do not pressurise, cut, weld, drill, grind or otherwise expose containers to heat or sources of ignition. Avoid the accumulation of vapours in low or confined areas.

10.5. Incompatible materials

Materials to avoid Avoid contact with the following materials: Strong acids. Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

BARTOLINE - Superstik Grab Adhesive (High Strength)

Toxicological effects	The product has been assessed following the conventional method and is classified for toxicological hazards accordingly. No data for the product as a whole. Unless stated otherwise the data quoted below is for the hazardous ingredients.
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Irritating to skin. (Mixture as a whole)
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye irritation. (Mixture as a whole)
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met. (Mixture as a whole)
<u>Skin sensitisation</u>	
Skin sensitisation	Based on available data the classification criteria are not met. (Mixture as a whole)
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met. (Mixture as a whole)
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met. (Mixture as a whole)
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure. (Mixture as a whole)
<u>General information</u>	
General information	Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapour concentrations.
<u>Inhalation</u>	
Inhalation	Causes asphyxiation in high concentrations. The victim will not realize that he/she is suffocating. The product contains organic solvents.
<u>Ingestion</u>	
Ingestion	The product is not believed to present a hazard due to its physical nature.
<u>Skin contact</u>	
Skin contact	The product contains organic solvents. Prolonged or repeated exposure may cause severe irritation.
<u>Eye contact</u>	
Eye contact	Causes eye irritation.
<u>Route of exposure</u>	
Route of exposure	Inhalation Skin and/or eye contact
<u>Target organs</u>	
Target organs	Central nervous system Eyes Skin Respiratory system, lungs
<u>Medical considerations</u>	
Medical considerations	The following pre-existing or historic medical conditions of the worker may lead to an increased risk of adverse health effects following exposure to this product: Allergies. History of smoking. Pre-existing eye problems. Skin disorders and allergies.

Toxicological information on ingredients.

ethyl acetate

Toxicological effects	The data quoted is taken from the REACH registration portal for this substance and the suppliers MSDS.
<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	5,500.0
Species	Guinea pig

BARTOLINE - Superstik Grab Adhesive (High Strength)

ATE oral (mg/kg) 5,500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 20,000.0

Species Rabbit

ATE dermal (mg/kg) 20,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 33.5

Species Mouse

ATE inhalation (vapours mg/l) 33.5

Skin corrosion/irritation

Skin corrosion/irritation May be slightly irritating to skin.

Animal data

A study to examine ethyl acetate as a permeation enhancer solvent for transdermal drug delivery reported mild to moderate irritation to rabbit skin following application of a transdermal drug delivery device containing the drug levonorgestrel and neat ethyl acetate. Control devices containing only water were also found to be mildly irritating. Some residual irritancy may have been caused by adhesive remaining on the skin following test cell removal or the semi-permeable membrane used in the device. Whilst the solvent was not in direct contact with the skin (separated by the 50um membrane), the duration of exposure was significantly longer than required for a guideline study. This study is deemed sufficiently reliable to characterise ethyl acetate as not significantly irritating to the skin.

Serious eye damage/irritation

Serious eye damage/irritation Reddening and slight swelling of the conjunctiva; symptoms were reversible after one to two days

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met. In a guideline (OECD 406) study using the guinea pig maximization test, ethyl acetate showed no evidence of any sensitising properties.

Germ cell mutagenicity

Genotoxicity - in vitro A study that looked at chemically induced chromosome loss in a diploid, triploid, and tetraploid strain of *Saccharomyces cerevisiae* reported increased chromosome loss frequencies when the yeast cultures were incubated with high concentrations of ethyl acetate. Dose-dependent increase of chromosome loss frequencies were induced by the concentration range of 1.23 – 1.96% in the diploid and triploid strains, higher loss frequencies were reached in the tetraploid strain even at the lowest concentration tested.

Genotoxicity - in vivo Ethyl acetate did not induce increased frequency of micronucleated polychromatic erythrocytes in the bone marrow of hamsters treated with a single ip dose of 473 mg/kg, 2/3rds of the LD50 by this dosing route.

Carcinogenicity

BARTOLINE - Superstik Grab Adhesive (High Strength)

Carcinogenicity

The potential for ethyl acetate to induce lung tumors in a mouse pulmonary tumor model was evaluated by Stoner in an 8 week study. A/He Mice received intraperitoneal injections of 150mg/kg or 750mg/kg three times weekly for eight weeks. The animals were sacrificed 24 weeks after the 1st injections and the lungs examined for lesions. Ethyl acetate did not produce an increase in mouse lung tumours compared with controls.

Reproductive toxicity

Reproductive toxicity - fertility

A two-generational study investigated the effects of 5%, 10% and 15% ethanol in drinking water in reproduction and fertility. Male and female CD-1 mice were continuously treated for 1 week prior to mating and for a 14 week breeding period followed by a 21 day holding period when they were separated and housed individually. The F1 offspring of the 15% ethanol pairs had fewer live pups per litter but ethanol treatment had no effect on the proportion of breeding pairs producing at least 1 litter during the continuous breeding phase or the number of litters per pair. The F1 offspring from the 15% group had decreased bodyweight at weaning and mating, and a decreased weight of testis, epididymides and seminal vesicles which was no longer evident when these were adjusted for body weight. There was also a significantly decreased percentage motile sperm but no changes in sperm concentration, and percentage of abnormal sperm or tailless sperm. When reproductive performance of F1 control and 15% ethanol-treated breeding pairs was assessed at 74 days of age, there was no significant difference in mating and fertility between the groups. However, adjusted live pup weight for the ethanol group was significantly reduced compared to controls which was likely due to generalized maternal toxicity. The direct rapid in vivo hydrolysis of ethyl acetate to ethanol allows the use of this study for ethyl acetate hazard assessment.

Synopsis

NOAEL (lowest seen in P, F1 and F2 generations): 13800mg/kg ethanol, equivalent to 26400mg/kg for ethyl acetate

Reproductive toxicity - development

Maternal toxicity: - NOAEL: 17 %, Oral, Mouse

Naphtha (petroleum), hydrotreated light

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,001.0

Species Rat

ATE oral (mg/kg) 5,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,001.0

Species Rabbit

ATE dermal (mg/kg) 2,001.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 20.01

Species Human

BARTOLINE - Superstik Grab Adhesive (High Strength)

ATE inhalation (vapours mg/l) 20.01

Skin corrosion/irritation

Skin corrosion/irritation Full-range catalytically reformed naphtha (API 83-05) was administered via occlusive dermal patch on non-abraded and abraded skin of 6 New Zealand White rabbits at doses of 0.5 ml for 24 hours to assess dermal irritation. Clinical observations were made at 24, 72, and 5, 7, and 14 days after treatment. Full-range catalytically reformed naphtha produced slight to severe levels of irritation (erythema and edema) to the skin of rabbits as a result of 24 -hour exposure. Erythema and edema at the test site were fully reversible within 14 days after treatment. No sign of systemic toxicity was seen during the study. The mean erythema and edema scores for full-range catalytically reformed naphtha (API 83-05) were 1.35 and 1.6, respectively. This study does not meet the EU OECD testing criteria necessary for classification. This study should be used for supporting purposes only.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation No information available on the ECHA REACH Registration portal or the suppliers MSDS.

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro DNA damage and/or repair: Negative.

Genotoxicity - in vivo Chromosome aberration: Negative.

Carcinogenicity

Carcinogenicity Sweetened naphtha was examined for its carcinogenic potential. Sweetened naphtha was administered via dermal application to the skin of 50 C3H mice twice weekly during the lifetime of the mice. A vehicle control group was administered 50 ul of toluene while the two positive control groups were administered 50 ul of 0.01% BaP in toluene and 50 ul of 0.05% BaP in toluene. The negative control group received no treatment. Mortality in the test group was comparable with that in the negative and vehicle control groups, with a Final Effective Number (FEN) of 46 animals. Histopathological examination revealed 3 tumours, 2 of which were benign and 1 malignant. This compares with 4 malignant tumours for the vehicle control group and none for the negative control group. The mean latency for the test substance was 113 weeks, compared with 111 weeks for the toluene control group. Significant dermal irritation was observed at the treatment sites. The skin tumors are considered the result of a promotional process secondary to repeated irritation and/or skin injury. Based on the findings of this study, sweetened naphtha is not expected to display carcinogenic properties in the absence of repeated skin injury. This finding does not warrant the classification of sweetened naphtha as a carcinogen under the new Regulation (EC) 1272/2008 on classification, labeling, and packaging of substances and mixtures (CLP).

Reproductive toxicity

BARTOLINE - Superstik Grab Adhesive (High Strength)

Reproductive toxicity - fertility - NOAEC >20000 mg/m³, Inhalation, Rat P

Reproductive toxicity - development Light catalytically cracked naphtha was administered once daily to pregnant rats on gestation days 0-19 via dermal application at doses of 30, 125, and 500 mg/kg to assess for developmental toxicity. Maternal parameters (food consumption, body weight gain, serum chemistry) were monitored throughout gestation and were not adversely affected by treatment. No adverse effects were observed on reproductive parameters (number of implants, resorptions, or viable fetuses) or on fetal parameters (body weight or crown:rump length). No evidence of teratogenicity was observed in fetuses from pregnant dams exposed to the test material. Based on the study results, the maternal NOAEL and the teratogenicity NOAEL were greater than 500mg/kg.

These findings do not warrant the classification of light catalytically cracked naphtha as a developmental hazard under the new Regulation (EC) 1272/2008 on classification, labeling, and packaging of substances and mixtures (CLP).

Aspiration hazard

Aspiration hazard Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Toxicological effects The data quoted is taken from the REACH registration portal for this substance and the suppliers MSDS.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,840.0

Species Rat

ATE oral (mg/kg) 5,840.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,800.0

Species Rat

ATE dermal (mg/kg) 2,800.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 33.0

Species Rat

ATE inhalation (vapours mg/l) 33.0

Skin corrosion/irritation

BARTOLINE - Superstik Grab Adhesive (High Strength)

Skin corrosion/irritation	An in vivo study examined the skin irritation of the test substance, hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics. Test substance was placed on abraded or non-abraded skin of 4 male and 4 female rabbits, and covered with an occlusive patch. After 24 hrs of exposure, animals were scored for dermal irritation 24 h, 48h, and 72 hrs after patch removal, and also on day 7. The test substance was not irritating to the skin according to the criteria of the EU and the GHS.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	In Vivo. The purpose of this test was to determine the irritation potential of hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics to rabbit eye. 0.2 mL of test substance was added to the right eye of two male and two female rabbits. The animals were scored for irritation at 0.5 hrs after applications, and also at 1, 2, 3, and 7 days after application. All animals showed conjunctival redness (score of 0-1) at the 0.5 hr observation. No other signs of irritation were noted. The test substance is not irritating to eyes according to OECD GHS guidelines.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available on the ECHA REACH Registration portal or the suppliers MSDS.
<u>Skin sensitisation</u>	
Skin sensitisation	A Guinea pig maximisation test was conducted. The purpose of this study was to determine the skin sensitization potential of the test substance, hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics. Ten male and ten female guinea pigs were used as a test group, and five male and five female guinea pigs were used as a control group. The test group underwent an intradermal induction of 1.0 %w/v test material in corn oil. Then a topical induction of 50% w/v test substance in corn oil. The challenge was done with 25% w/v test material in corn oil. No skin reactions were noted during the challenge. The test substance is not sensitizing.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	DNA damage and/or repair: Negative.
Genotoxicity - in vivo	Chromosome aberration: Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	No information ofn the substance MSDS or in the REACH Registartion portal for carcinogenicity.
<u>Reproductive toxicity</u>	

BARTOLINE - Superstik Grab Adhesive (High Strength)

Reproductive toxicity - fertility	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study). The purpose of this study was to determine the effect of commercial hexane on reproduction in rats. Groups of 25 male and 25 female rats were exposed to nominal concentrations of 0, 900, 3000, or 9000 ppm of test substance for 10 weeks pre-breeding, 3 weeks during breeding, and postnatal days 4 -28. After weaning, pups were selected to be parents for the F2 generations, and treated similarly to their parents, except their pre-breeding exposure was 8 weeks. During exposure, animals were monitored for mortality, clinical signs, food consumption, and body weight. Offspring were examined for body weight, survival, and viability. Both parents and offspring were sacrificed and examined for gross abnormalities, and in the case of adults histopathology. Reproductive parameters were similar in exposure groups and control groups. There was reduced body weight in the F1 and F2 generation in both sexes in the 9000 ppm exposure group in both adults and offspring. The NOAEL is therefore 3000 ppm, and the LOAEL is 9000 ppm. Since there were no adverse effects in offspring without adverse maternal effects, the NOAEL for reproduction is 9000 ppm.
Reproductive toxicity - development	OECD Guideline 414 (Prenatal Developmental Toxicity Study). The purpose of this study was to examine the developmental toxicity of commercial hexane in rats. Groups of 25 pregnant female rats were exposed to concentrations of 0, 900, 3000, or 9000 ppm for 6 hrs/day during gestational days 6 -15. The animals were then sacrificed on GD 21. During the study, the animals were examined for clinical signs, mortality, food and water consumption, and body weights taken. After sacrifice, the internal organs were examined, and the uterus was examined for viable fetuses, number of resorptions, and number of corpora lutea. Fetuses were examined for malformations. Necropsy revealed color changes in the lungs of females in the 9000 ppm groups along with reduced body weight gain, and reduced food consumption. No treatment related abnormalities was seen in the fetuses. The maternal NOAEL in rats was 3000 ppm, and the LOAEL 9000 ppm based on lung color changes, reduced body weight gain, and reduced food consumption. The developmental NOAEL in rats was 9000 ppm.
<u>Aspiration hazard</u>	
Aspiration hazard	Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. May be fatal if swallowed and enters airways.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity	No data for the product as a whole. The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment. The product should not be allowed to enter drains or watercourses or be deposited where it can effect ground or surface waters. See information on ingredient substances below.
-----------------	--

Ecological information on ingredients.

ethyl acetate

Toxicity	Not regarded as dangerous for the environment. The data quoted is taken from the REACH registration portal for this substance and the suppliers MSDS.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	In a study for which key basic details are available, 96 -hr, semi-static LC50 values of 425 and 484 mg/L in two assays of ethyl acetate in <i>Salmo gairdneri</i> (Rainbow trout) were reported.

BARTOLINE - Superstik Grab Adhesive (High Strength)

Acute toxicity - aquatic invertebrates

In a 24 hour acute toxicity study, Daphnia magna were exposed to ethyl acetate at concentrations to enable the determination of the EC0, EC50 and EC100 under static conditions. An EC50 of 3090mg/l was determined. Based on the results of this study, this substance would not be classified toxic to the environment according to the classification system of the EU.

This toxicity study is classified as acceptable and satisfies the basic requirements for an invertebrate toxicity study although the duration is shorter than normally required and can therefore be considered only as a supporting study..

Results synopsis: EC50 = 3090mg/l

Acute toxicity - aquatic plants

NOEC, 72 hours: >100 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms

EC₅₀, 5 minutes: 1180 mg/l, Photobacterium phosphoreum

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates

The chronic toxicity of ethyl acetate was evaluated in the 21 -day Daphnia reproduction test under static renewal conditions to a German draft regulatory test protocol. A NOEC value of 2.4 mg/L (measured concentration) was reported based on parental mortality and reproduction rate. The 24 -hr EC50 value for ethyl acetate was reported in the same study to be 2306 mg/L, yielding an 24 -hr EC50/21 -day NOEC ratio of 192.

Naphtha (petroleum), hydrotreated light

Acute aquatic toxicity

Acute toxicity - fish

LL₅₀, 96 hour: 11 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates

LL₅₀, 96 hour: 13.8 mg/l, Mysidopsis bahia (new name: Americamysis bahia)

Acute toxicity - aquatic plants

LL₅₀, 72 hour: 6.4 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - microorganisms

LL₅₀, 72 hour: 15.41 mg/l, Tetrahymena pyriformis.

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Acute aquatic toxicity

Acute toxicity - fish

A study examined the short-term toxicity of hydrocarbons, C7 -C9, n-alkanes, isoalkanes, cyclics to fish. Groups of 7 fish were exposed to loading rates of 0, 1, 3, 10, 30, or 100 mg/L. Fish were exposed for 96 -hrs with the test solution renewed daily. Fish were observed at 3, 24, 48, 72, and 96 hrs after start of exposure for signs of toxicity and mortality. No analytical monitoring was done as studies of closely related products has shown that the solubility of the test substance is likely to be less than the determination limit of the analytical equipment. All fish exposed to 30 mg/L or greater concentrations of test substance died. 4 fish in the 10 mg/L died, while the remaining 3 exhibited signs of toxicity. Though fish in the 3 mg/L group exhibited toxicity early in the experiment, by the end of the exposure period, they no longer showed signs of toxicity. The 96-hr LL50 for fish is 3-10 mg/L WAF.

BARTOLINE - Superstik Grab Adhesive (High Strength)

Acute toxicity - aquatic invertebrates	The acute toxicity, as measured by immobility to the water flea (<i>Daphnia magna</i>) was evaluated in freshwater. Under the conditions of this study, the test substance, hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, produced acute toxicity to <i>Daphnia magna</i> at 7.4 mg/L, based on nominal loading of the test substance in water.
Acute toxicity - aquatic plants	The toxicity, as measured by biomass and growth rate to the green alga (<i>Pseudokirchneriella subcapitata</i> formerly <i>Raphidocelis subcapitata</i>) was evaluated in freshwater. Under the conditions of this study, the test substance, hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, produced a significant effect on biomass at 13 mg/L, based on nominal loading of the test substance in water.
Acute toxicity - microorganisms	The aquatic toxicity was estimated using the Petrotox computer model, which combines a partitioning model used to calculate the aqueous concentration of hydrocarbon components as a function of substance loading with the Target Lipid Model used to calculate acute and chronic toxicity of non-polar narcotic chemicals. Petrotox computes toxicity based on the summation of the aqueous-phase concentrations of hydrocarbon block(s) that represent a hydrocarbon substance and membrane-water partition coefficients (K _{MW}) that describe the partitioning of the hydrocarbons between the water and organism. The estimated protozoan, <i>Tetrahymena pyriformis</i> , 48-hr EL50 value for this substance is 11.14 mg/L based on growth inhibition

12.2. Persistence and degradability

Ecological information on ingredients.

ethyl acetate

Biodegradation	The substance is readily biodegradable. A well reported study established that 93.9% biodegradation of ethyl acetate occurs after 28 days in an assay described as essentially the same as the Sturm CO ₂ Production Test described in OECD Guidelines and suitable for volatile substances as it uses a sealed system. The study showed >90% biodegradation after 8 days indicating ready biodegradability.
-----------------------	--

Naphtha (petroleum), hydrotreated light

Biodegradation	Scientifically unjustified. <u>Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics</u>
Stability (hydrolysis)	Not known.
Biodegradation	The substance is readily biodegradable. This study examined the ready biodegradability of hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% hexane. Activated sludge was exposed to a concentration of 100 mg/l of test substance. The O ₂ consumption was then monitored for the next 28 days. Sodium benzoate was used as the reference substance. The test substance was 98% degraded at the end of 28 days, and 83% degraded at the end of the 10-day window. The reference substance was 104% degraded, therefore the test is valid. The test substance is readily biodegradable under the conditions of the study and is not expected to persist in the environment under aerobic conditions.

BARTOLINE - Superstik Grab Adhesive (High Strength)

12.3. Bioaccumulative potential

Partition coefficient No specific test data are available.

Ecological information on ingredients.

ethyl acetate

Bioaccumulative potential BCF: ~ 13500,

Naphtha (petroleum), hydrotreated light

Bioaccumulative potential Most of the hydrocarbon blocks comprising gasoline have a Log Kow > 3, indicating these constituents have a potential to bioaccumulate. However, biotransformation is expected to play an important mitigating role in limiting actual bioaccumulation, particularly in higher organisms that possess extensive enzymatic capabilities to metabolize hydrocarbons.

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Ecological information on ingredients.

ethyl acetate

Mobility No data available.

Naphtha (petroleum), hydrotreated light

Mobility The distribution of the substance in the environmental compartments, air, water, soil, and sediment, has been calculated using the PETRORISK Model, version 5.0. Based on the regional scale exposure assessment, the multimedia distribution of the substance is 93.0% to air, 5.83% to water, 0.81% to sediment and 0.34% to soil.

Adsorption/desorption coefficient Estimated log Koc is approximately 2

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Mobility The distribution of the substance in the environmental compartments, air, water, soil, and sediment, has been calculated using the PETRORISK Model, version 5.2. Based on the regional scale exposure assessment, the multimedia distribution of the substance is 14.6% to air, 3.4% to water, 26.4% to soil and 55.6% to sediment.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Based on available data, the classification criteria are not met. (Mixture as a whole)

Ecological information on ingredients.

ethyl acetate

Results of PBT and vPvB assessment According to REACH Registration portal this substance is not PBT/vPvB

BARTOLINE - Superstik Grab Adhesive (High Strength)

Naphtha (petroleum), hydrotreated light

Results of PBT and vPvB assessment According to REACH Registration portal this substance is not PBT/vPvB

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Results of PBT and vPvB assessment According to REACH Registration portal this substance is not PBT/vPvB

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

The generation of waste should be minimised or avoided wherever possible. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. External recovery, treatment, recycling and disposal of waste should comply with all applicable local and/or national regulations. Waste material and any included combustible absorbent and containers should be suitable for incineration at an approved facility. This material and its container must be disposed of as hazardous waste. Waste packaging should be collected for reuse or recycling. The packaging must be empty (drop-free when inverted). When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods

Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Waste material and any included combustible absorbent and containers should be suitable for incineration at an approved facility. This material and its container must be disposed of as hazardous waste.

BARTOLINE - Superstik Grab Adhesive (High Strength)

Waste class

The following EU Waste Catalogue codes are applicable to this product: When this product, in its liquid state, as supplied becomes waste it should be disposed of using the following waste code. 08.04.09 Waste Adhesives and Sealants containing organic solvents or other hazardous substances. Part-used containers should be disposed of using waste code: 08.04.09 Waste Adhesives and Sealants containing organic solvents or other hazardous substances. Empty used containers should be disposed of as waste code 15 01 10 packaging containing residues of or contaminated by dangerous substances. Note For a waste container to be classed as a packaging waste (15 01) it must be effectively 'empty'.

It is usually obvious if a container is 'empty', for example a half empty tin of solidified paint is not empty, but where there is a small amount of residual material a container will not be empty if that residual material can be removed by physical or mechanical means by applying normal industry standards or processes.

This means that all reasonable efforts must have been made to remove any left-over contents from the container. This may involve for example washing, draining or scraping. The method of emptying will depend on the container and the type of material it contains.

Note: if the design of the packaging, its aperture, or the adherent nature of the material does not permit it to be emptied then it will not be a packaging waste.

If a container is not 'empty' it is not packaging waste. It should be classified on the basis of its contents and the source or activity that produced it. These codes have been assigned based on the actual composition of the product as supplied. If mixed with other wastes, the waste codes quoted may not be applicable.

SECTION 14: Transport information

General

Limited quantity size 5 litres (LQ 7). As supplied, this product is consigned under the Limited Quantities provisions.

14.1. UN number

UN No. (ADR/RID)	1133
UN No. (IMDG)	1133
UN No. (ICAO)	1133
UN No. (ADN)	1133

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ADHESIVES
Proper shipping name (IMDG)	ADHESIVES
Proper shipping name (ICAO)	ADHESIVES
Proper shipping name (ADN)	ADHESIVES

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3

BARTOLINE - Superstik Grab Adhesive (High Strength)

ADN class 3

Transport labels



14.4. Packing group

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

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-E, S-D
 ADR transport category 3
 Emergency Action Code •3Y
 Hazard Identification Number (ADR/RID) 30
 Tunnel restriction code (D/E)

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

SECTION 15: Regulatory information

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

National regulations

Users of this product are reminded of their duties under the current Control of Substances Hazardous to Health Regulations and a suitable and sufficient assessment of all the risk should be undertaken before using this product. The guidelines given in the HSE publication COSHH ESSENTIALS - Easy Steps To Control Chemicals gives sound advice for deciding safe working control measures.

Control of Substances Hazardous to Health Regulations 2002 (as amended).

Dangerous Substances and Explosive Atmospheres Regulations 2002.

EH40/2005 Workplace exposure limits.

Health and Safety at Work etc. Act 1974 (as amended).

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EU legislation

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

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).

BARTOLINE - Superstik Grab Adhesive (High Strength)

Guidance	Labelling and Packaging in accordance with Regulation (EC) No 1272/2008. Workplace Exposure Limits EH40.
Health and environmental listings	Control of Pollution Act 1974. Regulation (EC) 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals (as amended).
Authorisations (Title VII Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Title VIII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for the hazardous ingredients.

SECTION 16: Other information

General information	When surfaces are to be prepared for painting account must be taken of the age of the property and the possibility that lead may be present. As a working rule you should assume that this will be the case if the age of the property is pre 1960. Where possible wet flattening or chemical stripping methods should be used with surfaces of this type to avoid the formation of lead dust. Only trained personnel should use this material.
Training advice	The information on directions for use can be found on the product label. It is important to ensure that anyone using this product in the workplace has been adequately trained and in particular: The use of personal protective equipment, methods of cleaning up and disposal of waste. The basic first aid arrangements.
Revision comments	DUE TO CHANGE OF CLASSIFICATION DATABASE THE REVISION NUMBERING HAS BEEN RESET. You should therefore look at the revision date rather than the revision number to ensure you have the most up to date version.
Issued by	Product Compliance Assistant
Revision date	23/11/2018
Revision	2
Supersedes date	17/02/2016
SDS number	4891
Hazard statements in full	H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

The information contained in this data sheet is provided in accordance with the requirements of the Regulation (EC) No 1907/2006 Annex II as amended by Regulation (EU) 2015/830 and Regulation (EC) No 1272/2008 (CLP). The product should not be used for purposes other than those shown in Section 1.2. As the specific conditions of use are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet is based on the present knowledge and the current EU and UK Legislation. It provides guidance on health, safety and environmental aspects of the product and should not be taken as a product specification. 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.