SAFETY DATA SHEET
JM006

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

1.1. Product identifier

Product name JM006 Contact Adhesive

Product number JM006

UFI UFI: CH00-W0SK-600R-CS51

REACH registration notes All chemicals used in this product have been registered under REACH where required.

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

Identified uses Contact Adhesive.

1.3. Details of the supplier of the safety data sheet

Supplier

Morleys Adhesives (2013) Ltd
Unit 20 Higher Walton Mill
Higher Walton
Preston, Lancashire
PR5 4DJ
Tel: 0044(0)1772 626700
Fax: 0044(0)1772 627372
Email: adhesives@morleys2013.co.uk

1.4. Emergency telephone number

Emergency telephone 44 (0)1772 626700 (Available 08.30 to 17.00)

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 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373

Environmental hazards Aquatic Chronic 3 - H412

Human health The liquid is irritating to eyes and skin. Contains a substance/a group of substances which may damage the unborn child.

Environmental The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Physicochemical The product is highly flammable. Vapours may form explosive mixtures with air.

2.2. Label elements

JM006

Hazard pictograms

Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains ROSIN. May produce an allergic reaction.
Precautionary statements	P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take action to prevent static discharges. P261 Avoid breathing gas, fume, vapours or spray. P273 Avoid release to the environment. P314 Get medical advice/ attention if you feel unwell.
Contains	TOLUENE, Hydrocarbons,C6-C7,n-alkanes,isoalkanes,cyclics,<5%n-hexane, ETHYL ACETATE
Supplementary precautionary statements	P201 Obtain special instructions before use. P241 Use explosion-proof electrical/ ventilating /lighting/…/ equipment. P242 Use non-sparking tools. P260 Do not breathe vapour/ spray. P264 Wash … thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P302+P352 IF ON SKIN: Wash with plenty of water. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor. P312 Call a POISON CENTRE/doctor if you feel unwell. P321 Specific treatment (see medical advice on this label). P330 Rinse mouth. P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use dry powder, dry sand or dry earth to extinguish. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.

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

JM006

TOLUENE **35-50%**

CAS number: 108-88-3 EC number: 203-625-9 REACH registration number: 01-2119471310-51

Classification
Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
Repr. 2 - H361d
STOT SE 3 - H336
STOT RE 2 - H373
Asp. Tox. 1 - H304

Hydrocarbons,C6-C7,n-alkanes,isoalkanes,cyclics,<5%n-hexane **20-35%**

CAS number: — EC number: 921-024-6 REACH registration number: 01-2119475514-35

Classification
Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
STOT SE 3 - H336
Asp. Tox. 1 - H304
Aquatic Chronic 2 - H411

ETHYL ACETATE **5-10%**

CAS number: 141-78-6 EC number: 205-500-4 REACH registration number: 01-2119475103-46

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

ROSIN **<0.4%**

CAS number: 8050-09-7 EC number: 232-475-7

Classification
Skin Sens. 1 - H317

JM006

XYLENE		**<1%**
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32

Classification
Flam. Liq. 3 - H226
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
STOT SE 3 - H335
STOT RE 2 - H373
Asp. Tox. 1 - H304
Aquatic Chronic 3 - H412

HEXANE-norm		**<1%**
CAS number: 110-54-3	EC number: 203-777-6	

Classification
Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
Repr. 2 - H361f
STOT SE 3 - H336
STOT RE 2 - H373
Asp. Tox. 1 - H304
Aquatic Chronic 2 - H411

The full text for all hazard statements is displayed in Section 16.

Composition comments Polychloroprene based adhesive in petroleum solvent

Chemical Nature

chemical nature

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Move affected person to fresh air at once. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention.

Inhalation Remove affected person from source of contamination. Move affected person to fresh air at once. If spray/mist has been inhaled, proceed as follows. 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.

Ingestion Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if a large quantity has been ingested. Show this Safety Data Sheet to the medical personnel.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water.

Eye contact Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes and get medical attention.

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.

JM006

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 may cause headache, fatigue, dizziness and nausea.
Ingestion	May cause stomach pain or vomiting.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
Specific treatments	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.
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	Heating may generate flammable vapours. The product is highly flammable. Vapours may form explosive mixtures with air. Vapours may accumulate on the floor and in low-lying areas.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours. Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen chloride (HCl).

5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Ventilate closed spaces before entering them. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Cool containers exposed to flames with water until well after the fire is out.
Special protective equipment for firefighters	Wear chemical protective suit. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate.
For non-emergency personnel	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
For emergency responders	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

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 Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with sand or other inert absorbent.

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

Usage precautions Keep away from heat, sparks and open flame. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Avoid inhalation of vapours/spray and contact with skin and eyes.

Advice on general occupational hygiene Wash promptly with soap and water if skin becomes contaminated. Use appropriate hand lotion to prevent defatting and cracking of skin.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at temperatures between 5°C and 25°C.

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.

Usage description Adhesive.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

TOLUENE

Long-term exposure limit (8-hour TWA): 50 191
Short-term exposure limit (15-minute): 100 384

ETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm
Short-term exposure limit (15-minute): WEL 400 ppm

ROSIN

Long-term exposure limit (8-hour TWA): WEL 0.05 mg/m³
Short-term exposure limit (15-minute): WEL 0.15 mg/m³

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³
Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³
Sk

HEXANE-norm

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m³
Short-term exposure limit (15-minute): WEL

ETHYLBENZENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³
Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³
Sk

JM006

FORMALDEHYDE ...%

Long-term exposure limit (8-hour TWA): WEL 2 ppm 2.5 mg/m³

Short-term exposure limit (15-minute): WEL 2 ppm 2.5 mg/m³

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through the skin.

TOLUENE (CAS: 108-88-3)

DNEL

Consumer - Oral; Long term systemic effects: 8.13 mg/m³
Industry - Dermal; Long term systemic effects: 384 mg/kg/day
Consumer - Inhalation; Short term local effects: 226 mg/m³
Consumer - Inhalation; Short term systemic effects: 226 mg/m³
Industry - Inhalation; Short term systemic effects: 384 mg/m³
Industry - Inhalation; Short term local effects: 384 mg/m³
Industry - Inhalation; Long term local effects: 192 mg/m³
Consumer - Inhalation; Long term systemic effects: 56.5 mg/m³
Industry - Inhalation; Long term systemic effects: 192 mg/m³

PNEC

- Fresh water; 0.68 mg/l
- Sediment (Freshwater); 16.39 mg/kg
- STP; 13.61 mg/l
- Soil; 2.89 mg/kg

Hydrocarbons,C6-C7,n-alkanes,isoalkanes,cyclics,<5%n-hexane

DNEL

Consumer - Oral; Long term systemic effects: 699 mg/kg/day
Industry - Oral; Long term systemic effects: 2035 mg/kg/day
Consumer - Dermal; Long term systemic effects: 699 mg/kg/day
- Dermal; Long term systemic effects: 773 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 608 mg/m³

ETHYL ACETATE (CAS: 141-78-6)

DNEL

Industry - Inhalation; Short term systemic effects: 1468 mg/m³
Industry - Inhalation; Short term local effects: 1468 mg/m³
Consumer - Inhalation; Short term systemic effects: 734 mg/m³
Consumer - Inhalation; Short term local effects: 734 mg/m³
Industry - Inhalation; Long term local effects: 734 mg/m³
Industry - Dermal; Long term systemic effects: 63 mg/kg/day
Industry - Inhalation; Long term systemic effects: 734 mg/m³
Consumer - Dermal; Long term systemic effects: 37 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 367 mg/m³

PNEC

- Fresh water; 0.26 mg/l
- Intermittent release; 1.65 mg/l
- Sediment (Freshwater); 1.25 mg/kg
- Sediment (Marinewater); 0.125 mg/kg
- Soil; 0.24 mg/kg
- STP; 650 mg/l

XYLENE (CAS: 1330-20-7)

Ingredient comments WEL = Workplace Exposure Limits

JM006

DNEL	Consumer - Dermal; Long term systemic effects: 108 mg/kg/day Industry - Dermal; Long term systemic effects: 180 mg/kg/day Consumer - Inhalation; Short term local effects: 174 mg/m³ Consumer - Inhalation; Short term systemic effects: 174 mg/m³ Industry - Inhalation; Short term systemic effects: 289 mg/m³ Industry - Inhalation; Short term local effects: 289 mg/m³ Consumer - Inhalation; Long term systemic effects: 14.8 mg/m³ Industry - Inhalation; Long term systemic effects: 77 mg/m³
PNEC	- Fresh water; 0.327 mg/l - Soil; 2.31 mg/kg

ETHYLBENZENE (CAS: 100-41-4)

DNEL	Workers - Inhalation; Short term local effects: 293 mg/m³
PNEC	- marine water; 0.01 mg/l - Intermittent release; 0.1 mg/l - Sediment (Marinewater); 1.37 mg/l

PARATERTIARYBUTYLPHENOL (CAS: 98-54-4)

PNEC	- Soil; 0.324 mg/kg - Fresh water; 0.01 mg/l - Sediment (Freshwater); 0.975 mg/l - Sediment (Marinewater); 0.0975 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients. Maintain efficient ventilation/extraction using flameproof equipment where necessary.
Eye/face protection	Wear chemical splash goggles. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	Wear protective gloves made of the following material: Nitrile rubber. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 6 hours. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. When used with mixtures, the protection time of gloves cannot be accurately estimated.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination.
Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Wash promptly with soap and water if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.
Thermal hazards	Contact with hot product can cause serious thermal burns.
Environmental exposure controls	Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Amber.
Odour	Organic solvents.
Odour threshold	Not determined.
pH	Not available.
Melting point	Not applicable.
Flash point	-8°C Closed cup.
Evaporation rate	Not available.
Evaporation factor	Not determined.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.9 Upper flammable/explosive limit: 11.5
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	0.880 @ @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Not determined. Insoluble in water. Soluble in the following materials: Organic solvents.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	5,500- - 6,500 cP @ 20°C
Explosive properties	Not determined.
Oxidising properties	Not determined.
Comments	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

9.2. Other information

Refractive index	Not applicable.
Particle size	Not available.
Molecular weight	Not applicable.

Saturation concentration	Not available.
Critical temperature	Not determined.
Volatile organic compound	This product contains a maximum VOC content of 632 g/l.

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 applicable.

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	Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen chloride (HCl).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD_{50})	Not determined.

Acute toxicity - dermal

Notes (dermal LD_{50})	Not determined.

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Not determined.

Skin corrosion/irritation

Human skin model test	Not determined.
Extreme pH	Not determined.

Serious eye damage/irritation

Serious eye damage/irritation	Not determined.

General information	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation	Vapours may cause drowsiness and dizziness.
Ingestion	May cause stomach pain or vomiting.
Skin contact	Product has a defatting effect on skin. May cause allergic contact eczema. Irritating to skin.
Eye contact	May cause temporary eye irritation.

JM006

Acute and chronic health hazards	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Nausea, vomiting. Contains a substance/a group of substances which may damage the unborn child. May cause damage to organs through prolonged or repeated exposure.
Route of exposure	Inhalation Skin absorption

Toxicological information on ingredients.

TOLUENE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	4,328.0
Species	Rat
ATE oral (mg/kg)	4,328.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	6,000.0
Species	Rabbit
ATE dermal (mg/kg)	6,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	21.0
Species	Rat
ATE inhalation (vapours mg/l)	21.0

Hydrocarbons,C6-C7,n-alkanes,isoalkanes,cyclics,<5%n-hexane

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,000.0
Species	Rabbit

ETHYL ACETATE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	4,100.0
Species	Mouse
ATE oral (mg/kg)	4,100.0

JM006

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,005.0
Species	Rabbit
ATE dermal (mg/kg)	2,005.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	30.0
Species	Rat
ATE inhalation (vapours mg/l)	30.0

Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Negative

Reproductive toxicity

Reproductive toxicity - fertility	- NOAEL 16000 ppm, Inhalation, Rat P
Reproductive toxicity - development	- NOAEL: 20000 ppm, Inhalation, Rat

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Conclusive data but not sufficient for classification.

XYLENE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	4,300.0
Species	Rat
ATE oral (mg/kg)	4,300.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,000.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	10.0
Species	Rat
ATE inhalation (vapours mg/l)	10.0

Carcinogenicity

IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

JM006

PARATERTIARYBUTYLPHENOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,660.0
Species	Rat
ATE oral (mg/kg)	5,660.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	4,100.0
Species	Rabbit
ATE dermal (mg/kg)	4,100.0

SECTION 12: Ecological information

Ecotoxicity The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish	Not determined.
Acute toxicity - aquatic invertebrates	Not determined.
Acute toxicity - aquatic plants	Not determined.
Acute toxicity - microorganisms	Not determined.
Acute toxicity - terrestrial	Not determined.

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	Not determined.
Short term toxicity - embryo and sac fry stages	Not determined.
Chronic toxicity - aquatic invertebrates	Not determined.

Ecological information on ingredients.

TOLUENE

Acute aquatic toxicity

Acute toxicity - fish	LC50, 96 hours: 13 mg/l, Carassius auratus (Goldfish) LC50, 96 hours: 24 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 11.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC_{50}, 72 hours: 12 mg/l, Selenastrum capricornutum

JM006

Acute toxicity - microorganisms	NOEC, : 29 mg/l, Activated sludge

Hydrocarbons,C6-C7,n-alkanes,isoalkanes,cyclics,<5%n-hexane

Acute aquatic toxicity

Acute toxicity - fish	NOEC, : 1 - 10 mg/l, LC_{50}, 96 hours: 1 - 10 mg/l, Fish
Acute toxicity - aquatic plants	IC_{50}, 72 hours: 10 - 100 mg/l, Algae
Acute toxicity - microorganisms	EC_{50}, : 1 - 10 mg/l, Activated sludge

ETHYL ACETATE

Acute aquatic toxicity

Acute toxicity - fish	LC50, 96 hours: 230 mg/l, Pimephales promelas (Fat-head Minnow) NOEC, 192 hours: >9.65 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 610 mg/l, Daphnia magna NOEC, 192 hours: 2.4 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 48 hours: 5,600 mg/l, Freshwater algae

XYLENE

Acute aquatic toxicity

Acute toxicity - fish	LC50, 96 hours: 8.9 - 16.4 mg/l, Pimephales promelas (Fat-head Minnow) EC_{50}, 96 hours: 86 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 3.2- 9.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 48 hours: 1 - 10 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	, : ,

PARATERTIARYBUTYLPHENOL

Acute aquatic toxicity

Acute toxicity - fish	LC50, 96 hours: > 4.71 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: > 3.5 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability	The product is expected to be slowly biodegradable.
Phototransformation	Not relevant.
Stability (hydrolysis)	Not determined.
Biodegradation	Not determined.
Biological oxygen demand	Not determined.

Chemical oxygen demand Not determined.

Ecological information on ingredients.

TOLUENE

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation (%) 86: 20 days
readily biodegradable

Biological oxygen demand 1.23 g O_2/g substance

ETHYL ACETATE

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation (%) 79: 20 days
readily biodegradable

XYLENE

Biodegradation Water - Degradation (%) 60: > 28 days
readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

TOLUENE

Bioaccumulative potential The product is not bioaccumulating. BCF: ,

ETHYL ACETATE

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating. BCF: 30, Leuciscus idus (Golden orfe) readily biodegradable

Partition coefficient log Pow: 0.73

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Adsorption/desorption coefficient Not determined.

Henry's law constant Not determined.

Surface tension Not determined.

Ecological information on ingredients.

TOLUENE

JM006

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

ETHYL ACETATE

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Adsorption/desorption coefficient Water - Koc: 1.43 @ 25°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

TOLUENE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

ETHYL ACETATE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

XYLENE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste liquid components should be suitable for incineration at an approved facility.

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) 1133

UN No. (IMDG) 1133

UN No. (ICAO) 1133

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ADHESIVES

Proper shipping name (IMDG) ADHESIVES

Proper shipping name (ICAO) ADHESIVES

JM006

Proper shipping name (ADN) ADHESIVES

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID label 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

EmS F-E, S-D

Emergency Action Code 3YE

Hazard Identification Number (ADR/RID) 33

Tunnel restriction code (D/E)

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

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

National regulations Control of Pollution Act 1974.
Control of Substances Hazardous to Health Regulations 2002 (as amended).
Health and Safety at Work etc. Act 1974 (as amended).
EH40/2005 Workplace exposure limits.

EU legislation 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).
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).

Guidance Safety Data Sheets for Substances and Preparations.

JM006

Authorisations (Annex XIV Regulation 1907/2006) No specific authorisations are known for this product.

Restrictions (Annex XVII Regulation 1907/2006) No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ADR : European Agreement concerning the International Transport of Dangerous Goods by Road
RID : Regulations Concerning the International Transport of Dangerous Goods by Rail
IMDG : International Maritime Code for Dangerous Goods
IATA : International Air Transport Association
ICAO : International Civil Aviation Organization
GHS : Globally Harmonized System of Classification and Labelling of Chemicals
EINECS : European Inventory of Existing Commercial Chemical Substances
CAS : Chemical Abstracts Service
DNEL ; Derived No Effect Level (REACH)
PNEC : Predicted No Effect Concentration (REACH)
LC50 : Lethal Concentration 50 percent
LD50 : Lethal Dose 50 percent

Key literature references and sources for data Dangerous Properties of Industrial Materials Report, N.Sax et.al.

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 03/12/20

Revision 3

Supersedes date 01/11/2017

Hazard statements in full

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H361f Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains ROSIN. May produce an allergic reaction.