

SAFETY DATA SHEET

TOLUENE

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

1.1. Product identifier

Product name	TOLUENE
Product number	5001
Synonyms; trade names	METHYL BENZENE, METHYL BENZOL, PHENYL METHANE, TOLUOL
REACH registration number	01-2119471310-51-XXXX
CAS number	108-88-3
EU index number	601-021-00-3
EC number	203-625-9

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

Identified uses	Manufacture of substance Use as an intermediate Distribution of substance Formulation & (re)packing of substances and mixtures Uses in coatings Uses in cleaning agents Use in oil field drilling and production operations Use as binders and release agents Use as a fuel Use as a functional fluid Laboratory agents Rubber production and processing
Uses advised against	This product is not recommended for any industrial, professional or consumer uses other than those identified above.

1.3. Details of the supplier of the safety data sheet

Supplier	6 SCIENCE LTD UNIT 6, 10 GREAT NORTHERN WAY NETHERFIELD NOTTINGHAM NG4 2HD
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Tel. + 44 (0) 115 779 0196

Contact person	info@6science.co.uk
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1.4. Emergency telephone number

Emergency telephone	+44(0) 1270 502891
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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 - H361 STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 3 - H412

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Classification (67/548/EEC or 1999/45/EC) F;R11 Repr. Cat. 3;R63 Xn;R48/20,R65 Xi;R38 R67

Human health

Irritating to eyes. Splashes in the eyes may cause redness and irritation. Irritating to skin. Product has a defatting effect on skin. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. Contains a substance/a group of substances which may damage fertility and the unborn child. See Section 11 for additional information on health hazards.

Environmental

Not considered as an environmental hazard according to CLP criteria

Physicochemical

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

2.2. Label elements

EC number

203-625-9

Pictogram



Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

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Supplementary precautionary statements	P201 Obtain special instructions before use.
	P202 Do not handle until all safety precautions have been read and understood.
	P240 Ground/ bond container and receiving equipment.
	P241 Use explosion-proof electrical equipment.
	P242 Use only non-sparking tools.
	P243 Take precautionary measures against static discharge.
	P260 Do not breathe vapour/ spray.
	P261 Avoid breathing vapour/ spray.
	P264 Wash contaminated skin thoroughly after handling.
	P273 Avoid release to the environment.
	P302+P352 IF ON SKIN: Wash with plenty of water.
	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P308+P313 IF exposed or concerned: Get medical advice/ attention.
	P312 Call a POISON CENTER/ doctor if you feel unwell.
	P314 Get medical advice/ attention if you feel unwell.
	P321 Specific treatment (see medical advice on this label).
	P331 Do NOT induce vomiting.
	P332+P313 If skin irritation occurs: Get medical advice/ attention.
	P362+P364 Take off contaminated clothing and wash it before reuse.
	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 substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name	TOLUENE
REACH registration number	01-2119471310-51-XXXX
EU index number	601-021-00-3
CAS number	108-88-3
EC number	203-625-9
Chemical formula	C ₇ H ₈

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Keep affected person under observation. Effects may be delayed. If in doubt, get medical attention promptly.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person under observation. Get medical attention if symptoms are severe or persist. Show this Safety Data Sheet to the medical personnel.
Ingestion	Get medical attention immediately. Keep affected person under observation. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. Show this Safety Data Sheet to the medical personnel.

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Skin contact	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.
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 and get medical attention.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

General information	If adverse symptoms develop as described the casualty should be transferred to hospital as soon as possible.
Inhalation	Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death. Prolonged or repeated exposure may cause the following adverse effects: Dizziness. Drowsiness.
Ingestion	Gastrointestinal symptoms, including upset stomach. Diarrhoea. Nausea, vomiting. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
Skin contact	Repeated exposure may cause skin dryness or cracking. Prolonged and frequent contact may cause redness and irritation. Product has a defatting effect on skin.
Eye contact	Vapour or spray in the eyes may cause irritation and smarting. Irritation, burning, lachrymation, blurred vision after liquid splash.

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

Notes for the doctor	No specific recommendations.
Specific treatments	No specific chemical antidote is known to be required after exposure to this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with 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	Highly flammable liquid and vapour. Containers can burst violently when heated, due to excess pressure build-up. Solvent vapours may form explosive mixtures with air. May ignite at high temperature. 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	Oxides of carbon. Acrid smoke or fumes.

5.3. Advice for firefighters

Protective actions during firefighting	Move containers from fire area if it can be done without risk. Containers close to fire should be removed or cooled with water. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
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Special protective equipment for firefighters Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents. Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid inhalation of vapours and contact with skin and eyes. Eliminate all ignition sources. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Take precautionary measures against static discharges. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions Environmental Manager must be informed of all major spillages. Do not discharge into drains or watercourses or onto the ground. Avoid discharge into drains. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. DO NOT touch spilled material! Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid the spillage or runoff entering drains, sewers or watercourses. Take care as floors and other surfaces may become slippery. Contain and absorb spillage with sand, earth or other non-combustible material. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Dispose of contents/container in accordance with national regulations. Do not allow material to enter confined spaces, due to the risk of explosion.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours and spray/mists. Avoid spilling. Avoid release to the environment. Do not use in confined spaces without adequate ventilation and/or respirator. Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Use explosion-proof electrical, ventilating and lighting equipment. Eliminate all sources of ignition. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Earth container and transfer equipment to eliminate sparks from static electricity. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/sec until fill pipe is submerged to twice its diameter, then ≤ 7 m/sec). Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Advice on general occupational hygiene Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Clean equipment and the work area every day. Discard contaminated shoes and clothing. Contaminated clothing should be placed in a closed container for disposal or decontamination. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

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Storage precautions

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Bund storage facilities to prevent soil and water pollution in the event of spillage. Earth container and transfer equipment to eliminate sparks from static electricity. Storage tanks and other containers must be earthed. Keep away from food, drink and animal feeding stuffs. Only store in correctly labelled containers. Suitable container materials: Carbon steel. Mild steel. Stainless steel. May attack some plastics, rubber and coatings.

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

Long-term exposure limit (8-hour TWA): WEL 50 ppm(Sk) 191 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 384 mg/m³(Sk)

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Biological limit values

No biological limit allocated

DNEL

Industry - Inhalation; Short term systemic effects: 384 mg/m³

Industry - Inhalation; Long term systemic effects: 192 mg/m³

Industry - Dermal; Long term systemic effects: 384 mg/kg/day

Consumer - Inhalation; Short term systemic effects: 226 mg/m³

Consumer - Inhalation; Long term systemic effects: 56.5 mg/kg/day

Consumer - Dermal; Long term systemic effects: 226 mg/kg/day

Consumer - Oral; Long term : 8.13 mg/kg/day

PNEC

Industry - Fresh water; Long term 0.68 mg/l

Industry - Marine water; Long term 0.68 mg/l

Industry - STP; Long term 13.61 mg/l

Industry - Sediment (Freshwater); Long term 13.39 mg/kg

Industry - Sediment (Marinewater); Long term 16.39 mg/kg

Industry - Soil; Long term 2.89 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist. Ensure the ventilation system is regularly maintained and tested. Use explosion-proof electrical, ventilating and lighting equipment. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. This product must not be handled in a confined space without adequate ventilation.

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Eye/face protection	Wear eye protection. If risk of splashing, wear safety goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	For prolonged or repeated skin contact use suitable protective gloves. The selected gloves should have a breakthrough time of at least 8 hours. It is recommended that gloves are made of the following material: Viton rubber (fluoro rubber). Polyethylene. Polyvinyl alcohol (PVA). For short-term / splash protection the following are recommended Nitrile rubber To protect hands from chemicals, gloves should comply with European Standard EN374. 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.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station and safety shower.
Hygiene measures	Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes wet or contaminated. Do not eat, drink or smoke when using this product.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Organic vapour filter. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Gas and combination filter cartridges should comply with European Standard EN14387. Change filter cartridge on respirator daily. Check that the respirator fits tightly and the filter is changed regularly. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator.
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	Colourless.
Odour	Characteristic. Aromatic. Hydrocarbons.
Melting point	- 95°C
Initial boiling point and range	110 - 111°C @ 1013 hPa
Flash point	4°C CC (Closed cup).
Evaporation rate	2 BuAc=1
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.2 % V Upper flammable/explosive limit: 7.1 % V
Vapour pressure	1 kPa @ 0°C 3 kPa @ 20°C 12 kPa @ 50°C
Vapour density	3.1
Bulk density	0.871 kg/l @ 15°C
Solubility(ies)	0.55 g/l water @ 20°C Soluble in the following materials: Organic solvents.
Partition coefficient	log Pow: 2.65
Auto-ignition temperature	480 - 536°C
Viscosity	0.63 m2/s @ 25°C

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9.2. Other information

Refractive index	1.497
Molecular weight	92.14
Volatility	100

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Strong oxidising agents.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reacts with strong oxidising agents
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Oxides of carbon. Acrid smoke or fumes.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD ₅₀)	LD ₅₀ 5880 mg/kg, Oral, Rat
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Acute toxicity - dermal

Notes (dermal LD ₅₀)	LD ₅₀ > 5000 mg/kg, Dermal, Rabbit
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Acute toxicity - inhalation

Notes (inhalation LC ₅₀)	LC50 28.1 mg/l/4hr/day, Inhalation, Rat
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Skin corrosion/irritation

Animal data	Classified as irritating to skin
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Serious eye damage/irritation

Serious eye damage/irritation	Not classified as irritating to eyes
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Respiratory sensitisation

Respiratory sensitisation	Not classified as a respiratory sensitiser
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Skin sensitisation

Skin sensitisation	Not classified as a skin sensitiser
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Germ cell mutagenicity

Genotoxicity - in vitro	Does not contain any substances known to be mutagenic.
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Carcinogenicity

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Carcinogenicity	Does not contain any substances known to be carcinogenic.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Suspected of damaging fertility or the unborn child
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Inhalation of vapours or mists may cause irritation to the respiratory system May cause drowsiness or dizziness
Target organs	Respiratory system, lungs Central nervous system
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death High concentrations may cause severe lung damage.
Target organs	Central nervous system Respiratory system, lungs
<u>Aspiration hazard</u>	
Aspiration hazard	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
General information	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation	Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Overexposure may depress the central nervous system, causing dizziness and intoxication. When working extensively on big surfaces in small and badly ventilated rooms, vapours may develop in concentrations which may cause headache and irritation of the eyes and the respiratory system. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. May cause sensitisation or allergic reactions in sensitive individuals.
Ingestion	May cause discomfort if swallowed. Gastrointestinal symptoms, including upset stomach. Diarrhoea. Nausea, vomiting. Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal
Skin contact	Causes skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. May cause skin sensitisation or allergic reactions in sensitive individuals.
Eye contact	Vapour or spray in the eyes may cause irritation and smarting. May be slightly irritating to eyes. May cause discomfort.
Route of entry	Ingestion Inhalation Skin and/or eye contact
Target organs	Central nervous system Respiratory system, lungs
Medical symptoms	Gastrointestinal symptoms, including upset stomach. Central nervous system depression. Dry skin. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. Central nervous system depression. Gastrointestinal symptoms, including upset stomach. Skin irritation Dermatitis
Medical considerations	Skin disorders and allergies. Convulsive disorders, CNS problems.

SECTION 12: Ecological Information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.
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12.1. Toxicity

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Acute toxicity - fish LC₅₀, 96 hours: 5.5 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 3.78 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 3 hours: 134 mg/l, Freshwater algae

Chronic toxicity - fish early life stage NOEC, 40 days: 1.39 mg/l,

Chronic toxicity - aquatic invertebrates NOEC, 7 days: 0.74 mg/l,

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable Oxidises rapidly by photochemical reactions in air.

12.3. Bioaccumulative potential

Bioaccumulative potential Does not bioaccumulate significantly

Partition coefficient log Pow: 2.65

12.4. Mobility in soil

Mobility The product is insoluble in water and will spread on the water surface. Floats on water. If product enters soil it will be mobile and may contaminate groundwater.

Surface tension 28.5 mN/m @ 20°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.

12.6. Other adverse effects

Other adverse effects The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Contaminated packages must be completely emptied before sending away for laundering and re-use When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods Collect and place in suitable waste disposal containers and seal securely. Empty containers or liners may retain some product residues and hence be potentially hazardous. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. 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. Confirm disposal procedures with environmental engineer and local regulations. Avoid the spillage or runoff entering drains, sewers or watercourses.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1294

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UN No. (IMDG) 1294

UN No. (ICAO) 1294

UN No. (ADN) 1294

14.2. UN proper shipping name

Proper shipping name (ADR/RID) TOLUENE

Proper shipping name (IMDG) TOLUENE

Proper shipping name (ICAO) TOLUENE

Proper shipping name (ADN) TOLUENE

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

ADN class 3

Transport labels



14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ADN 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

ADR transport category 2

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

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Pollution category: Cat Y Ship type: 3 Special precaution: Refer to chapter 7, Handling and storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). Control of Substances Hazardous to Health Regulations 2002 (as amended). Dangerous Substances and Explosive Atmospheres Regulations 2002. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EU legislation	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). 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.
Guidance	Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. Safety Data Sheets for Substances and Preparations.
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.

Inventories

EU - EINECS/ELINCS

Listed

Canada - DSL/NDSL

Listed

US - TSCA

Listed

Australia - AICS

Listed

Japan - MITI

Listed

Korea - KECI

Listed

China - IECSC

Listed

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Philippines – PICCS

Listed

New Zealand - NZIOC

Listed

SECTION 16: Other information

Key literature references and sources for data	Dangerous Properties of Industrial Materials Report, N.Sax et.al. Registry of Toxic Effects of Chemical Substances (RTECS). ECHA
Issued by	Technical and Compliance Manager
Revision date	30/11/2017
Revision	4
SDS number	5001
SDS status	Approved.
Risk phrases in full	R11 Highly flammable. R38 Irritating to skin. R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation. R63 Possible risk of harm to the unborn child. R65 Harmful: may cause lung damage if swallowed. R67 Vapours may cause drowsiness and dizziness.
Hazard statements in full	H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects.

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.