



FISCHEMICALS ABERDEEN

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 | TOEN |
| 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 | Industrial Solvent |
| Uses advised against | The substance is not recommended for professional or consumer use other than the identified application above. |

1.3. Details of the supplier of the safety data sheet

| | |
|----------|---|
| Supplier | FIS Chemicals Ltd. Chapel Croft Bucksburn Aberdeen AB21 9TN Tel: 01224 723796 Fax: 01224 722807 sds@fischem.co.uk |
|----------|---|

1.4. Emergency telephone number

| | |
|---------------------|----------------------------------|
| Emergency telephone | 01224 723796 (Office hours only) |
|---------------------|----------------------------------|

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 Asp. Tox. 1 - H304 |
| Environmental hazards | Not Classified |

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

2.2. Label elements

| | |
|-----------|-----------|
| EC number | 203-625-9 |
|-----------|-----------|

TOLUENE

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.
 H361d Suspected of damaging the unborn child.
 H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P201 Obtain special instructions before use.
 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.
 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.
 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/ shower.
 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.
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog 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.

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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. |
| | P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| | P240 Ground/ bond container and receiving equipment. |
| | P241 Use explosion-proof electrical equipment. |
| | P242 Use only non-sparking tools. |
| | P260 Do not breathe vapour/ spray. |
| | P264 Wash contaminated skin thoroughly after handling. |
| | P302+P352 IF ON SKIN: Wash with plenty of water. |
| | P308+P313 IF exposed or concerned: Get medical advice/ attention. |
| | P314 Get medical advice/ attention if you feel unwell. |
| | P321 Specific treatment (see medical advice on this label). |
| | P332+P313 If skin irritation occurs: Get medical advice/ attention. |
| P362+P364 Take off contaminated clothing and wash it before reuse. | |
| P403+P235 Store in a well-ventilated place. Keep cool. | |

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria. Not available

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 |

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------|---|
| Inhalation | Remove affected person from source of contamination. Keep affected person warm and at rest. Get medical attention immediately. |
| Ingestion | Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention. |
| Skin contact | Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention. |
| Eye contact | Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. |

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

| | |
|---------------------|---|
| Inhalation | May cause drowsiness or dizziness. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression. May cause unconsciousness, blindness and possibly death. |
| Ingestion | May be fatal if swallowed and enters airways. |
| Skin contact | Causes skin irritation. |
| Eye contact | May cause temporary eye irritation. |

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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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Specific hazards Oxides of the following substances: Carbon. Highly flammable liquid and vapour. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

5.3. Advice for firefighters

Protective actions during firefighting Containers close to fire should be removed or cooled with water.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No smoking, sparks, flames or other sources of ignition near spillage. Take precautionary measures against static discharges. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions 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 Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

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 Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Avoid spilling. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Provide adequate ventilation. Static electricity and formation of sparks must be prevented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Highly flammable liquid and vapour. Keep away from heat, sparks and open flame. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Take precautionary measures against static discharges.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

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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 191 mg/m³

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

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

DNEL

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

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

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

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

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

PNEC

Industry - Fresh water; 0.68 mg/l

Industry - Marine water; 0.68 mg/l

Industry - Intermittent release; 0.68 mg/l

Industry - STP; 13.61 mg/l

Industry - Sediment (Freshwater); 16.39 mg/kg

Industry - Sediment (Marinewater); 16.39 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. 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. The selected gloves should have a breakthrough time of at least 8 hours. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber). EN 374

Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact. Provide eyewash station and safety shower.

Hygiene measures

Good personal hygiene procedures should be implemented. When using do not eat, drink or smoke. 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. Combination filter, type A2/P2.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Clear liquid.

Colour Colourless.

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| Odour | aromatic hydrocarbons |
| Melting point | ~ -95°C |
| Initial boiling point and range | ~ 110°C @ 760 mm Hg |
| Flash point | 4°C CC (Closed cup). |
| Upper/lower flammability or explosive limits | Lower flammable/explosive limit: 1.2 % Upper flammable/explosive limit: 8 % |
| Vapour pressure | 3 - 3.5 kPa @ °C |
| Vapour density | 3.1 |
| Relative density | 0.87 @ 20°C |
| Solubility(ies) | Insoluble in water. |
| Auto-ignition temperature | 480°C |
| Viscosity | 0.56-0.63 m ² /s @ 35°C |

9.2. Other information

Other information No information required.

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.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Other health effects Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. Suspected of damaging the unborn child.

General information Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

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| Inhalation | May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure if inhaled. |
| Ingestion | May be fatal if swallowed and enters airways. |
| Skin contact | Causes skin irritation. |
| Eye contact | Vapour or spray in the eyes may cause irritation and smarting. |
| Target organs | Liver Kidneys Central nervous system |

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.

12.1. Toxicity

Acute toxicity - fish LC₅₀, 96 hours: > 25 mg/l, Algae

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 11.5 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: 12.5 mg/l, Fish

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential BCF: ~ 8.3,

12.4. Mobility in soil

Mobility The product has poor water-solubility.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects No information required.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered. Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not puncture or incinerate, even when empty.

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) 1294

UN No. (IMDG) 1294

UN No. (ICAO) 1294

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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 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 The product contains a single, or a mixture of components, listed in Chapter 17 of Annex II MARPOL 73/78 and is assigned Pollution Category Y for Noxious Liquid Substances which, if discharged into the sea from cleaning operations, are deemed to present a hazard to the marine environment and therefore, justify a limitation on the quantity of discharge.

SECTION 15: Regulatory information

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

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| EU legislation | <p>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).</p> <p>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).</p> |
| Restrictions (Title VIII Regulation 1907/2006) | <p>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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/. Conditions of restriction: Toluene shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than 0,1 % by weight where the substance or mixture is used in adhesives or spray paints intended for supply to the general public.</p> |

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

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|---|---|
| General information | Only trained personnel should use this material. |
| Key literature references and sources for data | MARPOL 73/78 Annex II - Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk. European Chemicals Agency (ECHA) (www.echa.europa.eu). European Chemicals Bureau - ESIS : European chemical Substances Information System (www.esis.jrc.ec.europa.eu). Health and Safety Executive (HSE). |
| Revision date | 25/08/2017 |
| Revision | 3 |
| Supersedes date | 29/12/2016 |
| Risk phrases in full | <p>R11 Highly flammable.</p> <p>R38 Irritating to skin.</p> <p>R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.</p> <p>R63 Possible risk of harm to the unborn child.</p> <p>R65 Harmful: may cause lung damage if swallowed.</p> <p>R67 Vapours may cause drowsiness and dizziness.</p> |
| Hazard statements in full | <p>H225 Highly flammable liquid and vapour.</p> <p>H304 May be fatal if swallowed and enters airways.</p> <p>H315 Causes skin irritation.</p> <p>H336 May cause drowsiness or dizziness.</p> <p>H361d Suspected of damaging the unborn child.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p> |
| Signature | Auguste Kavaliauskaite |

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