

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

##### 1.1. Product identifier

**Product name:** TOLUENE

**REACH registered number(s):** 01-2119471310-51

**CAS number:** 108-88-3

**EINECS number:** 203-625-9

**Index number:** 601-021-00-3

**Synonyms:** METHYLBENZENE

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

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

**Company name:** Rutpen Ltd

Membury Airfield

Lambourn

Berkshire

RG17 7TJ

United Kingdom

**Tel:** 01488 71926

**Fax:** 01488 71947

**Email:** technical@rutpen.co.uk

##### 1.4. Emergency telephone number

**Emergency tel:** 0844 560 5135

#### Section 2: Hazards identification

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

**Classification under CLP:** Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361d; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336

**Most important adverse effects:** Highly flammable liquid and vapour. May be fatal if swallowed and enters airways.  
Causes skin irritation. Suspected of damaging the unborn child. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.

##### 2.2. Label elements

**Label elements:**

**Hazard statements:** H225: Highly flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

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H361d: Suspected of damaging the unborn child.

H336: May cause drowsiness or dizziness.

H373: May cause damage to organs through prolonged or repeated exposure.

**Signal words:** Danger

**Hazard pictograms:** GHS02: Flame

GHS07: Exclamation mark

GHS08: Health hazard



**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.

P260: Do not breathe vapours.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+313: IF exposed or concerned: Get medical advice/attention.

## 2.3. Other hazards

**Other hazards:** In use, may form flammable / explosive vapour-air mixture.

## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** TOLUENE

**CAS number:** 108-88-3

**EINECS number:** 203-625-9

**REACH registered number(s):** 01-2119471310-51

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

[cont...]

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

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

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

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

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

**Exposure hazards:** Highly flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture. Vapour may travel considerable distance to source of ignition and flash back.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

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

**Personal precautions:** Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. Eliminate all sources of ignition.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

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

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 13 of SDS.

## Section 7: Handling and storage

[cont...]

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## 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.  
Do not handle in a confined space. Avoid the formation or spread of mists in the air.  
Smoking is forbidden. Use non-sparking tools.

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

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area.  
Ensure lighting and electrical equipment are not a source of ignition.

## 7.3. Specific end use(s)

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Workplace exposure limits:

#### Respirable dust

| State | 8 hour TWA                     | 15 min. STEL                    | 8 hour TWA | 15 min. STEL |
|-------|--------------------------------|---------------------------------|------------|--------------|
| UK    | 191 mg/m <sup>3</sup> (50 ppm) | 384 mg/m <sup>3</sup> (100 ppm) | -          | -            |

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Impermeable gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

## Section 9: Physical and chemical properties

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

**State:** Liquid

**Colour:** Colourless

**Odour:** Aromatic

**Solubility in water:** Slightly soluble

**Boiling point/range °C:** 110-111

**Flammability limits %: lower:** 1.2

**Flash point °C:** 4

**Autoflammability °C:** 480-536

**Relative density:** 0.871 @15C

**Melting point/range °C:** -95

**upper:** 7.1

**Part.coeff. n-octanol/water:** 2.65

**Vapour pressure:** 30-35 hPa (20C)

[cont...]

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## 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions. Stable at room temperature.

### 10.3. Possibility of hazardous reactions

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat. Hot surfaces. Sources of ignition. Flames.

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicity values:

| Route | Species | Test | Value | Units |
|-------|---------|------|-------|-------|
| ORL   | RAT     | LD50 | 6900  | mg/kg |
| ORL   | MUS     | LD50 | 2     | gm/kg |
| IVN   | RAT     | LD50 | 1960  | mg/kg |

#### Relevant hazards for substance:

| Hazard                    | Route | Basis                 |
|---------------------------|-------|-----------------------|
| Skin corrosion/irritation | DRM   | Hazardous: calculated |
| Reproductive toxicity     | --    | Hazardous: calculated |
| STOT-single exposure      | -     | Hazardous: calculated |
| STOT-repeated exposure    | -     | Hazardous: calculated |
| Aspiration hazard         | -     | Hazardous: calculated |

### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

[cont...]

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## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:**

| Species | Test     | Value | Units |
|---------|----------|-------|-------|
| FISH    | 96H LC50 | 5.5   | mg/l  |

### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

### 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

**UN number:** UN1294

### 14.2. UN proper shipping name

**Shipping name:** TOLUENE

### 14.3. Transport hazard class(es)

**Transport class:** 3

### 14.4. Packing group

**Packing group:** II

### 14.5. Environmental hazards

**Environmentally hazardous:** No

**Marine pollutant:** No

[cont...]

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## 14.6. Special precautions for user

Tunnel code: D/E

Transport category: 2

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

Transport in bulk: EAC: 3YE

## Section 15: Regulatory information

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

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

**Phrases used in s.2 and s.3:** 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 <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.