

## SECTION 1: Identification

### 1.1. Identification

Product form	: Substance
Substance name	: Toluene
CAS-No.	: 108-88-3
Formula	: C7H8
Synonyms	: benzyl hydride / methylbenzene / phenylmethane / toluol / toluol oil / toluole

### 1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Solvent
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### 1.3. Supplier

Rolfes Chemicals  
A Division of Rolfes Group of Companies  
Cnr Brammer and Strachan, Industries East  
Germiston  
T +27 11 873 0157 - F +27 11 873 8480  
[info@rolfeschemicals.com](mailto:info@rolfeschemicals.com)

### 1.4. Emergency telephone number

Emergency number	: South Africa: +27 (0)86 044 4411
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## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS-US classification

Flammable liquids, Category 2	H225	Highly flammable liquid and vapour.
Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Reproductive toxicity, Category 2	H361	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs (central nervous system, liver, heart) through prolonged or repeated exposure.
Aspiration hazard, Category 1	H304	May be fatal if swallowed and enters airways.
Hazardous to the aquatic environment — Acute Hazard, Category 3	H402	Harmful to aquatic life

Full text of H statements : see section 16

### 2.2. GHS Label elements, including precautionary statements

#### GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: 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 (central nervous system, liver, heart) through prolonged or repeated exposure.  
H402 - Harmful to aquatic life

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Precautionary statements (GHS-US) :

- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P210 - Keep away from heat, sparks, open flames, hot surfaces. No smoking.
- P233 - Keep container tightly closed.
- P240 - Ground/bond container and receiving equipment.
- P241 - Use explosion-proof electrical, ventilating, lighting equipment.
- P242 - Use only non-sparking tools.
- P243 - Take precautionary measures against static discharge.
- P260 - Do not breathe mist, vapours, spray.
- P264 - Wash exposed skin thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.
- 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.
- 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 and attention if you feel unwell.
- P331 - Do NOT induce vomiting
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P363 - Wash contaminated clothing before reuse.
- P370+P378 - In case of fire: Use carbon dioxide (CO<sub>2</sub>), powder, alcohol-resistant foam to extinguish.
- P403+P235 - Store in a well-ventilated place. Keep cool.
- P405 - Store locked up.
- P501 - Dispose of contents/container to comply with local, state and federal regulations

**2.3. Other hazards which do not result in classification**

Other hazards not contributing to the classification : None under normal conditions.

**2.4. Unknown acute toxicity (GHS US)**

Not applicable

**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Toluene (Main constituent)	(CAS-No.) 108-88-3	100	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 3, H402

Full text of hazard classes and H-statements : see section 16

**3.2. Mixtures**

Not applicable

**SECTION 4: First-aid measures**

**4.1. Description of first aid measures**

First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact : Wash immediately with lots of water. Soap may be used. Do not apply (chemical) neutralizing agents. Remove clothing before washing. Take victim to a doctor if irritation persists. Take victim to a doctor/medical service if irritation persists.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists. Take victim to a doctor/medical service if irritation persists.

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First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not give milk/oil to drink. Do not induce vomiting. Give activated charcoal. Call Poison Information Centre ([www.big.be/antigif.htm](http://www.big.be/antigif.htm)). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Headache. Nausea. Feeling of weakness. Dizziness. Central nervous system depression. Narcosis. Mental confusion. Drunkenness. Coordination disorders. Disturbed motor response. Disturbances of consciousness.

Symptoms/effects after skin contact : Tingling/irritation of the skin. Red skin.

Symptoms/effects after eye contact : Irritation of the eye tissue.

Symptoms/effects after ingestion : Risk of aspiration pneumonia. Nausea. Abdominal pain. Irritation of the gastric/intestinal mucosa. Symptoms similar to those listed under inhalation.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Skin rash/inflammation. Impairment of the nervous system. Tremor. Impaired memory. Impaired concentration. Brain affection. Disturbances of heart rate. Change in the haemogramme/blood composition.

#### 4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (not alcohol-resistant).

Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : DIRECT FIRE HAZARD: Highly flammable liquid and vapour. Gas/vapour flammable with air within explosion limits. INDIRECT FIRE HAZARD: May build up electrostatic charges: risk of ignition. May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard. Reactions involving a fire hazard: see "Reactivity Hazard".

Explosion hazard : DIRECT EXPLOSION HAZARD: Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD: may be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".

Reactivity : Reacts violently with (some) halogens. Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Violent to explosive reaction with (some) acids.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Protective equipment : Gloves. Protective goggles. Head/neck protection. Protective clothing. Large spills/in enclosed spaces: compressed air apparatus. Large spills/in enclosed spaces: gas-tight suit.

Emergency procedures : Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Keep containers closed. Wash contaminated clothes.

##### 6.1.2. For emergency responders

Protective equipment : Do not breathe gas, fumes, vapour or spray. Equip cleanup crew with proper protection.

Emergency procedures : Stop leak if safe to do so. Ventilate area. If a major spill occurs, all personnel should be immediately evacuated and the area ventilated.

#### 6.2. Environmental precautions

Prevent soil and water pollution.

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

For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.

Methods for cleaning up : Liquid spill: cover with foam. Take up liquid spill into inert absorbent material, e.g.: sand, earth, vermiculite. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

**6.4. Reference to other sections**

No additional information available

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Precautions for safe handling : Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly. Work under local exhaust/ventilation. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.

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

Incompatible products : Strong oxidizers.

Incompatible materials : Direct sunlight. Heat sources. Sources of ignition.

Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.

Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. halogens.

Storage area : Store at ambient temperature. Ventilation at floor level. Fireproof storeroom. Provide for a tub to collect spills. Provide the tank with earthing. Under a shelter/in the open. Store only in a limited quantity. May be stored under nitrogen. Meet the legal requirements. Keep out of direct sunlight.

Special rules on packaging : SPECIAL REQUIREMENTS: closing. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials : SUITABLE MATERIAL: metal. stainless steel. carbon steel. aluminium. nickel. polypropylene. glass. tin. MATERIAL TO AVOID: polyethylene.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

<b>Toluene (108-88-3)</b>		
ACGIH	ACGIH TWA (ppm)	20 ppm
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
OSHA	OSHA PEL (STEL) (ppm)	500 ppm 10-min peak per 8 hour shift
OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm
IDLH	US IDLH (ppm)	500 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	375 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	560 mg/m <sup>3</sup>
NIOSH	NIOSH REL (STEL) (ppm)	150 ppm

**8.2. Appropriate engineering controls**

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation.

**8.3. Individual protection measures/Personal protective equipment**

**Materials for protective clothing:**

GIVE GOOD RESISTANCE: tetrafluoroethylene. viton. PVA. GIVE LESS RESISTANCE: butyl rubber. natural rubber. neoprene. nitrile rubber. polyethylene. neoprene/natural rubber. nitrile rubber/PVC. GIVE POOR RESISTANCE: chloroprene rubber

**Hand protection:**

Gloves

**Eye protection:**

Safety glasses

**Skin and body protection:**

Head/neck protection. Protective clothing

**Respiratory protection:**

Full face mask with filter type A at conc. in air > exposure limit

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Colourless
Odour	: Aromatic odour
Odour threshold	: 0.2 - 69 ppm 0.8 - 276 mg/m <sup>3</sup>
pH	: No data available
Melting point	: -95 °C (1013 hPa)
Freezing point	: No data available
Boiling point	: 110.6 °C (1013 hPa)
Critical temperature	: 321 °C
Critical pressure	: 41077 hPa
Flash point	: 4.4 °C (Closed cup, 1013 hPa)
Relative evaporation rate (butylacetate=1)	: 2.24
Flammability (solid, gas)	: No data available
Vapour pressure	: 30.89 hPa (21.1 °C)
Vapour pressure at 50 °C	: 109 hPa
Relative vapour density at 20 °C	: 3.1
Relative density	: 0.87 (20 °C)
Relative density of saturated gas/air mixture	: 1.6
Density	: 870 kg/m <sup>3</sup>
Molecular mass	: 92.14 g/mol
Solubility	: Insoluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Soluble in carbondisulfide. Soluble in acetic acid. Soluble in ethylacetate. Soluble in petroleum spirit. Water: 0.057 - 0.059 g/100ml (25 °C) Ethanol: complete Ether: complete Acetone: > 10 g/100ml
Log Pow	: 2.73 (Experimental value, 20 °C)
Auto-ignition temperature	: 480 °C (1013 hPa)
Decomposition temperature	: No data available
Viscosity, kinematic	: 0.69 mm <sup>2</sup> /s (20 °C)
Viscosity, dynamic	: 0.6 mPa.s (20 °C)

Explosive limits : 1.3 - 7 vol %  
 46 - 270 g/m<sup>3</sup>  
 Lower explosive limit (LEL): 1.3 vol %  
 Upper explosive limit (UEL): 7 vol %

Explosive properties : No data available

Oxidising properties : No data available

#### 9.2. Other information

Minimum ignition energy : 0.3 mJ

Specific conductivity : < 1 pS/m

Saturation concentration : 110 g/m<sup>3</sup>

VOC content : 100 %

Other properties : Gas/vapour heavier than air at 20°C. Clear. Volatile. Substance has neutral reaction. May generate electrostatic charges.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reacts violently with (some) halogens. Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Violent to explosive reaction with (some) acids.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Heat. Direct sunlight. Sparks. Open flame.

#### 10.5. Incompatible materials

Strong oxidizers.

#### 10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eyes contact

Acute toxicity : Not classified

<b>Toluene (108-88-3)</b>	
LD50 oral rat	5580 mg/kg bodyweight (Equivalent or similar to EU Method B.1: Acute Toxicity (Oral), Rat, Male, Experimental value)
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Other, 24 h, Rabbit, Male, Experimental value)
LC50 inhalation rat (mg/l)	25.7 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male, Experimental value)
ATE US (oral)	5580 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) : May cause damage to organs (central nervous system, liver, heart) through prolonged or repeated exposure.

Aspiration hazard : May be fatal if swallowed and enters airways.

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Potential adverse human health effects and symptoms	: May be fatal if swallowed and enters airways. Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg). Causes skin irritation. Non-toxic in contact with skin (LD50 skin > 5000 mg/kg). May cause drowsiness or dizziness. Non-toxic by inhalation (LC50 inh, rat > 20 mg/l/4h). Moderately irritant for eyes. Caution! Substance is absorbed through the skin.
Symptoms/effects after inhalation	: EXPOSURE TO HIGH CONCENTRATIONS: Headache. Nausea. Feeling of weakness. Dizziness. Central nervous system depression. Narcosis. Mental confusion. Drunkenness. Coordination disorders. Disturbed motor response. Disturbances of consciousness.
Symptoms/effects after skin contact	: Tingling/irritation of the skin. Red skin.
Symptoms/effects after eye contact	: Irritation of the eye tissue.
Symptoms/effects after ingestion	: Risk of aspiration pneumonia. Nausea. Abdominal pain. Irritation of the gastric/intestinal mucosa. Symptoms similar to those listed under inhalation.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Skin rash/inflammation. Impairment of the nervous system. Tremor. Impaired memory. Impaired concentration. Brain affection. Disturbances of heart rate. Change in the haemogramme/blood composition.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.
Ecology - air	: Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	: Toxic to crustacea. Toxic to fishes. Groundwater pollutant. Fouling to shoreline. Inhibits photosynthesis of algae. Harmful to bacteria. Taste alteration in fishes/aquatic organisms.

#### Toluene (108-88-3)

LC50 fish 1	5.5 mg/l (96 h, Oncorhynchus kisutch, Flow-through system, Fresh water, Experimental value)
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### 12.2. Persistence and degradability

#### Toluene (108-88-3)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	2.15 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.52 g O <sub>2</sub> /g substance
ThOD	3.13 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.69

### 12.3. Bioaccumulative potential

#### Toluene (108-88-3)

BCF fish 1	90 (72 h, Leuciscus idus, Static system, Fresh water, Experimental value)
Log Pow	2.73 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

### 12.4. Mobility in soil

#### Toluene (108-88-3)

Surface tension	27.73 N/m (25 °C)
Ecology - soil	Low potential for adsorption in soil.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Regional legislation (waste) : LWCA (the Netherlands): KGA category 03.

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Waste disposal recommendations : Do not discharge into drains or the environment. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Do not landfill. Incinerate under surveillance with energy recovery. May be discharged to company wastewater treatment plant.

Additional information : Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

**SECTION 14: Transport information**

**Department of Transportation (DOT)**

In accordance with DOT

Transport document description : UN1294 Toluene, 3, II

UN-No.(DOT) : UN1294

Proper Shipping Name (DOT) : Toluene

Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : II - Medium Danger

Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / (1 + a (tr - tf))$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

Other information : No supplementary information available.

**SECTION 15: Regulatory information**

**15.1. US Federal regulations**

<b>Toluene (108-88-3)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 311/312 Hazard Classes	Health hazard - Skin corrosion or Irritation Health hazard - Reproductive toxicity Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Aspiration hazard

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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Toluene	CAS-No. 108-88-3	100%
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**15.2. International regulations**

**CANADA**

<b>Toluene (108-88-3)</b>
Listed on the Canadian DSL (Domestic Substances List)

**EU-Regulations**

No additional information available

**National regulations**

<b>Toluene (108-88-3)</b>
Listed on the Canadian IDL (Ingredient Disclosure List)

**15.3. US State regulations**

<b>Toluene (108-88-3)</b>	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
No significant risk level (NSRL)	7000 µg/day

This product can expose you to Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**SECTION 16: Other information**

Full text of H-statements: see section 16:

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.
H402	Harmful to aquatic life

NFPA health hazard

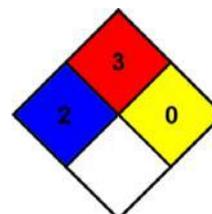
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health

: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

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Flammability	: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
Physical	: 2 Moderate Hazard - Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.
Personal protection	: H H - Splash goggles, Gloves, Synthetic apron, Vapor respirator

All reasonable efforts were exercised to compile this SDS in accordance with GHS SANS 10234. The SDS provides information regarding the health, safety and environmental hazards, at the date of issue, to facilitate the safe receipt, use and handling of the product in the workplace. Rolfes Chemicals cannot anticipate or control all conditions under which the product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which the product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place as regards health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of the product. Although all reasonable efforts were exercised in the compilation of this SDS, Rolfes Chemicals does not expressly warrant the accuracy or assume any liability for the incompleteness of the information contained herein or any advice given. The product is sold and risk passes in accordance with the specific terms and conditions of sale.

