



TAG SOLVENT PRODUCTS (PTY)LTD.

MATERIAL SAFETY DATA SHEET

TOLUENE

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Common name	: Toluene		
Supplier	: TAG Solvent Products Mallet Road/Weg Knights Germiston 1401 Republic of South Africa TEL: +27 11 822-1600		
Synonym	: Not available.		
Trade name	: Toluene.		
Material uses	: Fuel blending component, chemical feedstock.		

2 COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS#	EINECS NO.
Toluene	108-88-3	203-625-9

3 HAZARDS IDENTIFICATION

Physical state and appearance	: Liquid.
Emergency overview	: WARNING! HIGHLY FLAMMABLE. Harmful by inhalation. May be irritating to the eyes

4 FIRST AID MEASURES

Eye contact	: Check for and remove any contact lenses. Immediately flush the eyes with running water for at least 15 minutes, keep eyelids open. Get medical attention.
Skin contact	: In the case of contact, flush the skin with plenty of water and wash with soap. Change heavily contaminated clothing as soon as reasonably practicable and wash underlying skin.
Inhalation	: If exposure to vapour, mist or fumes causes drowsiness, headache, blurred vision or irritation of the eyes, nose or throat, remove immediately to fresh air. Keep patient warm and at rest. If any symptoms persist obtain medical advice. Unconscious casualties must be placed in the recovery position. Monitoring breathing and pulse rate and if breathing has failed, or is deemed inadequate, respiration must be assisted, preferably by the mouth-to-mouth method. Administer external cardiac massage if necessary. Seek medical attention immediately.
Ingestion	: If contamination of the mouth occurs, wash out thoroughly with water. Except as a deliberate act, the ingestion of large amounts of the product is unlikely. If this should occur, DO NOT induce vomiting unless directed to do so by medical personnel. Get medical attention.
Notes to physician	: Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor cardiac dysrhythmias.

5 FIRE FIGHTING MEASURES
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Flammability of the product	: Flammable.
Flash points (PMC)	: ASTM D 93 °C 16
Fire fighting media and instructions	: Use foam, dry powder or water fog. DO NOT USE water jets.
Protective clothing (fire)	: Be sure to use an approved/certified respirator or equivalent.
Special remarks on fire and explosion hazards	: For major fires call the fire service. Ensure an escape path is always available from any fire. There is a danger of flashbacks if sparks or hot surfaces ignite vapour. Any spillage should be regarded as a potential fire risk.
Fire fighting procedures	: FIRES IN CONFINED SPACES SHOULD BE DEALT WITH BY TRAINED PERSONNEL wearing approved breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

General spillage or leak procedures	: as this product has a very low flash point any spillage or leak is a severe fire and/or explosion hazard. Isolate spillages from all ignition sources including road traffic. Ensure good ventilation. Evacuate all non-essential personnel from the immediate area. Wear protective clothing. See Exposure Controls/Personal Protection, section 8, of this Safety Data Sheet. Protect drains from potential spills to minimize contamination. Do not wash product into drainage system. Vapour is heavier than air and may travel to remote sources of ignition (e.g. along drainage systems, in basements etc.). If spillage occurs in a confined space, ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry.
Small spill or leak	: Small quantities of spilled material may be allowed to evaporate. Vapour should be dispersed by effective ventilation.
Large spill or leak	: Recovery of large spillages should be effected by specialists personnel. Keep away from heat. Keep away from sources of Ignition. Stop leak if without risk. It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage, which may be reasonably anticipated. Contain and recover spilled material using sand or other inert absorbent material.

7 HANDLING AND STORAGE

Handling	: Keep away from heat sparks and flame. Keep container closed. Use only with adequate ventilation. Avoid contact with skin and observe good personal hygiene. Avoid contact with eyes. If splashing occurs wear full face visor or chemical goggles as appropriate. Do not siphon product with mouth. Whilst using do not eat, drink or smoke.
Storage	: Store and disperse only in well-ventilated areas away from heat and sources of ignition. Store and use only in equipment/containers for use with this product. Containers must be properly labeled and kept closed when not in use. Do not remove warning labels from containers. Empty packages may contain some remaining product. Retain hazard warning labels on empty packages as a guide on the safe handling, storage and disposal of empty packaging.
Fire prevention	: Light hydrocarbon vapours can build up in the headspace of tanks. These can cause flammability /explosion hazards even at temperatures below the normal flash points (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapour in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. When the product is pumped (e.g. during filling, discharged or ullaging) and when earthed or bonded to the tank structure. Explosive air/vapour mixtures may form at ambient temperature. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use. Empty containers represent a fire hazard as they may contain some remaining flammable product and vapour. Never cut, weld, solder or braze empty containers

11 TOXICOLOGICAL INFORMATION

Eyes	: May be irritating to the eyes.
Skin	: Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis.
Ingestion	: Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhea. Will injure lungs if aspiration occurs, e.g. during vomiting.
Inhalation	: Harmful if vapour, mists or fumes generated during use are inhaled. Likely to be irritating to the respiratory tract if high concentrations of vapour are inhaled. ABUSE: Under normal conditions of use of the product is not hazardous, abuse involving deliberate inhalation of very high concentrations of vapour, even for short periods, can produce unconscious and/or result in a sudden fatality.

12 ECOLOGICAL INFORMATION

Mobility	: Spillages may penetrate the soil causing ground water contamination.
Persistence and degradability	: This product is inherently biodegradable.
Bioaccumulative potential	: There is no evidence to suggest bioaccumulation will occur.
Aquatic toxicity	: Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired. Harmful to aquatic organisms.

13 DISPOSAL CONSIDERATIONS

Product disposal	: Dispose of via an authorized person/licensed waste disposal contractor in accordance with local regulations.
Container disposal	: Hazard warning labels should not be removed from empty containers as they may still contain some product. Hazard labels are a guide to the safe handling of empty packaging and shouldn't be removed. Do not cut, puncture or weld on or near the container (may still contain product). Materials contaminated with the product should be treated as highly inflammable. Disposal should be in accordance with local regulations.

*Consult your local or regional authorities.

14 TRANSPORT INFORMATION

ADR/RID Classification	: Toluene, Flammable liquid, class 3, Item 3(b), Hazardous Identification No 33
UN	: TOLUENE, Flammable liquid, Class 3, Pack Gp II, UN number 1294
IATA.ICAO	: Toluene, Flammable liquid, Class 3, Pack Group II
IMO	: Toluene, Flammable liquid, Class #.2, Pack Group 22
EMERGENCY ACTION CODE	: Flammable liquid, 3[Y]E

15 REGULATORY INFORMATION

EU Category of Danger	: Highly flammable. Harmful.
EU labelling	: Symbol - Flame, St. Andrew's Cross. Indication of danger – HIGHLY FLAMMABLE, HARMFUL
Risk phrases	: R11 – Highly flammable r20 – Harmful by inhalation.
Safety phrases	: S2 – Keep out of reach of children. S16 – Keep container away from sources of ignition – No smoking. S25 – Avoid contact with eyes. S29 – Do not empty into drains. S33 – Take precautionary measures against static charges.
	The label must carry the following additional information: "EC Label", Toluene, 203-625+9

National legislation: Occupational Health and Safety Act (ACT 85 of 1993)

16 OTHER INFORMATION

Notice to reader:

This MSDS summarizes at the date of issue our best knowledge of the health, safety and environmental hazard information related to the product, and in particular how to safely handle, use and transport the product in the workplace. Since TAG Solvent Products (PTY) LTD. and its subsidiaries cannot anticipate or control the conditions under which the product may be handled, used, stored or transported, each user must, prior to usage, review MSDS in the context of how the user intends to handle, use, store or transport the product in the workplace and beyond, and communicate such information to all relevant parties. If clarification or further information is required to ensure that an appropriate assessment can be made, the user should contact the company.

We shall not assume any liability for the accuracy or completeness of the information contained herein or any advice given unless there has been gross negligence on our part. In such event our liability shall be limited only to direct damages suffered. Our responsibility for the product as sold is subject to our standards terms and conditions, a copy of which is sent to our customers and is also available upon request. All risk with possession and application of the product passes on delivery.