

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: *TOLUENE (AMAZING HASTE)*

Other Names: Toluene, Toluol, Benzene, Aromatic Hydrocarbon Solvent, Methylbenzene

Recommended Use: Raw material for manufacture of surface coatings , adhesives, and other products; racing fuel additive.

Supplier: **TMK Packers Ltd**

Address: 2/20 Trugood Drive, East Tamaki.
PO Box 258 031, Botany, Manukau 2163

Telephone: (+64) 9 273 3753

Facsimile: (+64) 9 273 3752

Website: www.tmkpackers.co.nz

Emergency phone: **National Poison Centre**
0800 POISON [0800 764 766]



2. HAZARDS IDENTIFICATION

Product is classified as hazardous according to Schedules 1 to 6 of the *Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001* of the HSNO Act, 1996.

HSNO Classifications: 3.1B, 6.1D, 6.3A, 6.4A, 6.8B, 6.9B, 9.1D, 9.3C

Signal word: **DANGER**

Hazard Statements :

H225 Highly flammable liquid and vapour	H361 Suspected of damaging fertility or the unborn child
H302 Harmful if swallowed	H373 May cause damage to organs through prolonged or repeated exposure
H315 Causes skin irritation	H402 Harmful to aquatic life
H319 Causes serious eye irritation	H433 Harmful to terrestrial vertebrates
H333 Harmful if inhaled	

Precautions Statements :

P102 Keep out of reach of children	P103 Read label before use
P201 Obtains 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 and hot surfaces. No smoking.	P233 Keep container tightly closed
P240 Ground container and receiving equipment	P242 Use non-sparking tools
P261 Avoid breathing vapours	P241 Use explosion-proof equipment
P264 Wash hands thoroughly after handling	P243 Take precautionary measures against static discharge
P270 Do not eat, drink or smoke when using this product	P280 Wear protective clothing, gloves and eye protection
P271 Use only outdoors or in well-ventilated	P273 Avoid release to the environment
	P281 Use personal protection equipment as required



area

3. COMPOSITION : Information on Ingredients

Chemical Ingredient	CAS No.	Proportion (%)
Toluene	108-88-3	100

4. FIRST AID MEASURES

For advice, contact National Poison Centre (0800 POISON ; 0800 764 766) or a doctor.
Have product container or label available.

Swallowed

If swallowed, do NOT induce vomiting. Rinse mouth. Where there is risk of vomiting, lean person forward or place on left side to avoid aspiration of product into lungs. Obtain immediate medical attention.

Skin Contact

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If irritation persists, get medical attention.

Eye Contact

Hold eyelids apart and flush the eye continuously with running water. Continue flushing for at least 15 minutes. Remove contact lenses if present and easy to do after the first 5 minutes and continue rinsing. Get medical attention.

Inhalation

Move the victim to fresh air immediately. Keep warm and at rest until recovered. Get medical attention if symptoms continue.
Begin artificial respiration if breathing has stopped. Get immediate medical attention.

First Aid facilities

Provide eye baths and safety showers close to areas where splashing may occur.

Medical Attention

Treat according to symptoms. Risk of aspiration to lungs. Gastric lavage should only be undertaken after endotracheal intubation.

5. FIRE FIGHTING MEASURES

Flashpoint: 4°C (typical)
Flammable limits: LFL : 1.2% UFL: 8.0%

Extinguishing media:

Dry chemical or alcohol foam. Do not use water jet.

Fire & Explosion hazards:

Liquid and vapours are highly flammable. Vapour is heavier than air, spreads along the ground and



distant ignition is possible. Do not breathe smoke, gases or vapours generated in a fire. Expansion or decomposition of containers may lead to rupture of containers.

Firefighting Equipment:

Full protective clothing and self-contained breathing apparatus (SCBA).

In event of fire:

- Alert Fire Bridge (111); advise location and nature of hazard.
- Wear breathing apparatus and protective gloves.
- Shut off product that may 'fuel' a fire if safe to do so.
- If safe, switch off electrical equipment until vapour hazard removed.
- Allow trained personnel to attend a fire in progress, providing fire-fighters with this Safety Data Sheet.
- Prevent product and extinguishing media from escaping to drains and waterways.

Hazards from combustion products: Carbon dioxide, carbon monoxide

Hazchem Code: 3YE

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures & Containment:

Refer to "Fire Fighting Measures", "First Aid Measures" and "Stability and Reactivity"

Minor spills

- Remove or eliminate all ignition sources.
- Clean up spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Wear personal protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Collect residues and waste material in a labeled container suitable for flammables.
- Seal container and dispose of safely.

Major spills

- Clear area of personnel and move upwind.
- Alert Fire Bridge (111); advise location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.
- Prevent by any means available, spillage from entering drains, sewers, watercourses, or low-lying areas.
- Eliminate sources of ignition, naked lights. No smoking.
- Increase ventilation.
- Water spray or fog may be used to disperse/absorb vapour.
- Use only spark-proof tools, e.g. shovels, and explosion proof equipment, e.g. pumps.
- Collect recoverable product into labeled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.



- Collect solid residues and seal in labeled drums for disposal.
- Wash area and prevent run off into drains.
- If contamination of drains or waterways occurs, advise Emergency Services and Local or Regional authority.

7. HANDLING AND STORAGE

Precautions for safe handling:

Read product label before use.

This product is highly flammable. Do not open near open flame, sources of heat or ignition.

No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static discharge. Use grounding leads to avoid discharge (electrical spark) spark-free tools and equipment suitable for flammables. Do not use plastic buckets.

Use outdoors or in well-ventilated area. Wear personal protective equipment. Wash hands with soap and water after handling. Wash protective clothing separate to household laundry.

Conditions for safe storage:

Keep out of reach of children. Store in a cool, dry place away from direct sunlight. This product will fuel a fire in progress. Check containers periodically for leaks or distortion.

Incompatible materials:

Natural rubber, butyl rubber, EDPM, polystyrene.

8. EXPOSURE CONTROLS : PERSONAL PROTECTION

Health Exposure Standards:

Workplace Exposure Standards (WES), 2002 have been set by the Occupational Safety and Health Service , NZ Department of Labour for components in this product.

	WES-TWA	WES-STEL
Toluene SKIN	50 ppm (188 mg/m ³)	-

Biological limit values :

None established

Engineering Controls:

Ventilation:

Do not breathe vapours. Use product outdoors or in well-ventilated area. The use of local exhaust ventilation is recommended to control emissions near the source. Provide mechanical ventilation in confined spaces. Use explosion-proof ventilation equipment. Use personal protective respiratory equipment if concentrations in air are unknown, or meet or exceed Health Exposure Limits.

Personal Protective Equipment:

Respiratory Protection: It is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type "A" filter material is considered suitable for this product. Where



concentrations in air may exceed the limits described in the Workplace Exposure Standards, use an appropriate positive pressure breathing apparatus.

Eye Protection: Protect eyes from splashes or vapour. It is recommended safety glasses with side shields or goggles be worn.

Skin/ Body Protection:

Wear chemical resistant gloves if any risk of contact with liquid. It is also recommended to wear long sleeves and long trousers or coveralls, and chemical resistant shoes or boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Clear colourless liquid
Odour	-	Characteristic
Flash Point	°C	4
Boiling Point	°C	110
Specific gravity @ 20°C	g/ml	0.872
Vapour Pressure @ 20°C	kPa	3.5
Vapour Density @ 20°C	kPa	3.1
Explosive Limits in Air	%	1.2 – 8.0
Alkalinity/acidity (as pH)	-	Not applicable
Solubility in Water	kg/m ³	0.515

The values listed are indicative of this product's physical and chemical properties.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature and pressure.

Conditions to avoid: Sources of heat and ignition, open flames.

Hazardous decomposition products: No decomposition products except on burning. See "Fire Fighting Measures" and "Hazardous Reactions".

Hazardous reactions: Oxidizing agents, mineral acids, halogenated organic compounds and peroxides. In combination with ethyl alcohol will increase the risk of adverse health effects.

Hazardous polymerization: Not known to occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

Harmful if swallowed. Will irritate throat and tube to stomach. May cause nausea. Aspiration into the lungs by ingestion or vomiting may result in chemical pneumonitis..



Eye Contact

Irritating to eyes with possible symptoms of redness, swelling, burning sensation and blurred vision.

Skin Contact

Harmful and irritating to skin. Prolonged or repeated exposure may cause dermatitis and will increase risk of dryness and cracking of skin.

Inhalation

Harmful by inhalation. Vapour may be irritating to nose and throat. Exposure to high concentrations over an extended time will result in dizziness and drowsiness and other adverse central nervous system effects (nausea, headaches, loss of consciousness, coma and death).

Chronic Effects

Repeated over-exposure may cause hemolysis of the red blood cells leading to possible liver and kidney damage. There is evidence of potentially irreversible damage to the peripheral nervous system, particularly arms and legs. Prolonged contact with product will result in irritant contact dermatitis. Any existing dermatitis may be aggravated.

Other Health Effects Information:

Toluene is suspected of causing adverse effects to fertility or development.

Toxicological Information:

Toluene	Oral, LD ₅₀ , rat	636mg/kg
	Dermal, LD ₅₀ , rabbit	>2000 mg/kg
	Inhalation, LC ₅₀ , rat	12.5 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Aquatic toxicity: Product is classified as being ecotoxic to aquatic life with long-lasting effects.

Ecotoxicity Information: Not available

Persistence/degradability: Does not bioaccumulate significantly. Product is expected to rapidly biodegrade.

Mobility: Product floats on water. Evaporates rapidly. If product enters soil, it will be mobile and may contaminate ground-water.

Other information: None

Environmental Exposure Standards:

EEL (WATER):	Not set
EEL (SOIL)	Not set
EEL (SEDIMENTS)	Not set



13. DISPOSAL CONSIDERATIONS

Disposal Methods:

Care should be taken to ensure compliance with national, regional and local authority regulations. Packaging may still contain vapours that are flammable. Ensure that empty packaging is allowed to dry. If not recycled, puncture and crush before disposal to landfill. Do not use container for storage of other products.

14. TRANSPORT INFORMATION

UN Number: 1294
Shipping name: TOLUENE
Class: 3
Packing group: II
Hazchem code: 3YE

Dangerous Goods Segregation

This product is classified as Dangerous Goods Class 3, packing group II.
Please consult NZS 5433:2007 Transport of Dangerous Goods on Land for information.

15. REGULATORY INFORMATION

Country/ Region: New Zealand

Inventory: NZCIL

Status: Listed

ERMA New Zealand Approval Code:

TOLUENE; HSR001227

Refer www.ermanz.govt.nz for information on Controls.

16. OTHER INFORMATION

Date of Issue: 27th April , 2010
Reasons for Issue: Change to format; add heading.
Replaces: 22nd March, 2010

Abbreviations:

CAS No Chemical Abstracts Number
ERMA Environmental Risk Management Authority
HSNO Hazardous Substances and New Organisms
NZCI New Zealand Chemical Inventory
STEL Short Term Exposure Limit
TWA Time Weighted Average
WES Workplace Exposure Standard

References:

Supplier Material Safety Data Sheets



ERMA website: www.ermanz.govt.nz

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact TMK Packers Ltd.

END OF SAFETY DATA SHEET

