

SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: RETARDER THINNERS
Recommended Use: Paint thinner
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 Poisons 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 (oral, inhalation), 6.1E (aspiration), 6.3A, 6.4A, 6.8B, 6.9B, 9.1C, 9.3C

Signal word: DANGER



Hazard Statements:

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H304
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
H433 Harmful to terrestrial vertebrates.



Prevention Statements:

- P102** Keep out of reach of children.
P103
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 and hot surfaces. No smoking. **P233** Keep container tightly closed.
P240 Ground container and receiving equipment.
P241 Use explosion-proof equipment.
P242 Use non-sparking tools.
P243 Take precautionary measures against static discharge.
P273 Avoid release to the environment.
P260 Do not breathe vapours.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in well-ventilated area.
P280 Wear protective clothing, gloves and eye protection.
P281 Use personal protection equipment as required.

Response Statements:

- P101** If medical advice is needed, have product container or label at hand.
P314 Get medical advice if you feel unwell.
- P308 + P313** IF exposed or concerned: Get medical advice.
- P301 + P312** IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
P330 Rinse mouth.
P331 Do NOT induce vomiting.
- P303 + P361 + P353** IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P312 Call a POISON CENTRE or doctor if you feel unwell.
P332 + P313 If skin irritation occurs: Get medical advice.
P362 Take off contaminated clothing and wash before re-use.
- P304 + P340** IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTRE or doctor if you feel unwell.
- P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice.
- P370 + P378** In case of fire: Stop leak if safe to do so.
- P303 + P361 + P353** IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

Storage Statements:

- P403 + P235** Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal Statements:

- P501** Dispose of product and containers in accordance with local regulations.



3. COMPOSITION: Information on Ingredients

Chemical Ingredient	CAS No.	Proportion (%)
Toluene	108-88-3	30 – 60
Acetone	67-64-1	5 - 15
Solvent naphtha (petroleum), light aliphatic	64742-49-0	0 - 5
Isopropyl Alcohol	67-63-0	0 - 5
Methyl Iso Butyl Ketone	108-10-1	0 - 5
N-Butanol	71-36-3	40-60

4. FIRST AID MEASURES

For advice, contact the National Poisons Centre (0800 POISON; 0800 764 766) or a doctor. If exposed or concerned: Get medical advice Have product container or label available.

Swallowed

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

Skin Contact

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with water then soap and 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 if irritation persists.

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 and 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: <5 °C (4°C typical)
Flammable limits: LFL:1.2% UFL: 8.0% (for toluene)

Extinguishing media:

Dry chemical, carbon dioxide, alcohol foam, fine water spray. 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. Use water spray to disperse vapours. Prevent from entering drains or watercourses. 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: Toxic and/or irritating fumes, smoke and gases including carbon dioxide, carbon monoxide and oxides of nitrogen.

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.
- Ensure area is well-ventilated.
- 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.
- Use non-sparking tools or equipment.
- 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 contains 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. Approved Handler required when storing certain quantities. 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 locked up in a cool, dry place away from direct sunlight. This product will fuel a fire in progress. Have fire extinguisher(s) at hand. Check containers periodically for leaks or distortion.

Incompatible materials:

Natural rubber, butyl rubber, EDPM, polystyrene.
Oxidising agents, strong acids.

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

Health Exposure Standards:

A Workplace Exposure Standards (WES) has been set for this product.

	WES-TWA	WES-STEL
Acetone <small>B10</small>	500 ppm (1185 mg/m ³)	1000 ppm (2375 mg/m ³)
Toluene <small>SKIN</small>	50 ppm (188 mg/m ³)	-

Biological limit values:

Acetone in urine (end of shift) BEI 50 mg/L

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 chemical goggles be worn depending on circumstances of use.

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 (typical for toluene)
Boiling Point	°C	47 - 126
Specific gravity @ 20°C	g/ml	0.86 - 0.89 (estimated)
Vapour Pressure @ 20°C	kPa	Not available
Vapour Density @ 20°C	kPa	Not available
Explosive Limits in Air	%	1.2 - 8.0 (toluene)
Alkalinity/acidity (as pH)	-	Not applicable
Solubility in Water	-	Not available

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, contact with incompatible materials, contact with foodstuffs.

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

May be fatal if swallowed and aspirated into lungs. Aspiration into the lungs by ingestion or vomiting may result in chemical pneumonitis.

Harmful if swallowed. Will irritate throat and tube to stomach. May cause nausea.

Eye Contact

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

Skin Contact

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, throat and respiratory system. 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).

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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 reproductive 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
Acetone	Oral, LD ₅₀ ,mouse	3000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Aquatic toxicity: Product is classified as being harmful 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:

Product is harmful to terrestrial vertebrates.

Environmental Exposure Standards: 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:	1993
Shipping name:	FLAMMABLE LIQUID, N.O.S (CONTAINS TOLUENE)
Class:	3
Packing group:	III
Hazchem code:	3YE

Dangerous Goods Segregation

This product is classified as Dangerous Goods Class 3, Packing Group II. Please consult NZS 5433:2012 Transport of Dangerous Goods on Land for information.





15. REGULATORY INFORMATION

Country/ Region: New Zealand

Inventory: NZ Inventory of Chemicals

Status: Listed

EPA New Zealand HSNO Approval Code: HSR002650 Solvents (Flammable) Group Standard 2006.

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

Approved Handler control applies when present in quantities greater than 250 L (when in containers greater than 5 L) or 500 L (when in containers up to and including 5 L), a HSNO 3.1B substance must be—

(a) under the personal control of an approved handler who holds a current test certificate to manage HSNO class 3 substances; or

(b) secured so that a person cannot gain access to the substance without tools, keys, or any other device used for operating locks.

16. OTHER INFORMATION

Issue: 1

Date of Issue:

5th October 2022

Reasons for Issue: New Product

Replaces:

Abbreviations:

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

References:

Supplier Safety Data Sheet

EPA website: www.epa.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

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