ASCC LTD
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North Shore 0760, Auckland NZ
Phone: 09 966 2447
CHEMCALL: 0800 243 622

FOR FURTHER INFORMATION, PLEASE REFER TO THE SDS FOLLOWING

Issue: August 20

PRODUCT:	Mineral Turpentine
Other Names:	Petropine, Turpentine Substitute
Uses:	Industrial solvent: cleaning and degreasing
Signal Word:	Danger

UN No.	1300
Dangerous Goods Class	3
Subsidiary Risk	None
Pack Group	III
Hazchem	3Y

Hazardous Nature:	This product is classified as hazardous under HSNO criteria
Hazardous Classification:	3.1C, 6.1E (aspiration), 6.1E (respiratory tract irritant), 6.3B, 6.7B, 6.9B, 9.1B
HSNO Approval Number:	HSR002652
Exposure Standards:	TWA: Ethylbenzene: 434 mg/m^3 (100 ppm): STEL: Ethylbenzene: 543 mg/m^3 (125 ppm); Cumene: 375 mg/m^3 (75 ppm); Naphthalene: 79 mg/m^3 (15 ppm)

Physical Characteristics (Typical) — Section 9 of SDS

Appearance	Clear, colourless liquid
Boiling Point/ Range (°C):	154-192
Flash Point (°C):	41
Specific Gravity/ Density (g/mL @ 20°C):	0.81-0.82
Chemical Stability:	Stable at room temperature and pressure.

Product Ingredients — Section 3 of SDS

Aliphatic hydrocarbon, low aromatic content	64742-82-1	48-58
Solvent Naptha (Petroleum), light aromatic	64742-95-6	47-52

For further ingredients information, please refer to the full SDS.

GHS Pictograms — Section 2 of SDS

For further risk and safety information, please refer to the full SDS.

DEFINITIONS

Dangerous Goods	Products that are classified as Dangerous for Storage and Transport: these products are allocated a UN No., with accompanying Class, Pack Group, and Sub. Risk, if required. Products that do not have a specific description under the code, but have low flash points, or such, must be classified under their most significant risk, eg. Flammable Goods N.O.S. (Not otherwise specified), UN 1993. Products not classed as Dangerous Goods are designated as not regulated for transport or N/R (non-regulated).
Hazardous Substance	Products are considered to be Hazardous if they pose an intrinsic risk to human or environmental health, such as mutagens (able to change DNA), teratogens (able to result in birth defects), carcinogens (able to generate cell abnormalities), etc. Materials classified with risks such as potential for misuse, like flammability, or explosions when heated and ignited, may be both classed as Dangerous Goods and Hazardous Substances.

SUMMARY INFORMATION ONLY

1. IDENTIFICATION

Product Name:	**Mineral Turpentine**
Other Names:	Petropine, Turpentine Substitute
Chemical Family:	Aliphatic, cycloparaffinic hydrocarbon
Recommended Use:	Industrial solvent: cleaning and degreasing
Supplier:	ASCC Limited
Street Address:	112A Bush Road, Rosedale, Auckland, New Zealand
Telephone:	(09) 966 2447
Emergency phone:	**0800 243 622 (24 hours)**
	+64 4 917 9888 (Outside NZ)
National Poisons Centre:	0800 764 766

2. HAZARDS IDENTIFICATION

Hazardous Nature

This product is classified as hazardous under HSNO criteria

Hazardous Classification

3.1C, 6.1E (aspiration), 6.1E (respiratory tract irritant), 6.3B, 6.7B, 6.9B, 9.1B

GHS Pictograms

Signal Word Danger

Dangerous Goods Classification 3

Hazard Statements

H226: Flammable liquid and vapour
H304: May be fatal if swallowed and enters airways
H335: May cause respiratory irritation
H316: Causes mild skin irritation
H351: Suspected of causing cancer
H361: Suspected of damaging fertility or the unborn child
H373: May cause damage to organs through prolonged or repeated exposure
H411: Toxic to aquatic life with long lasting effects

Precautionary Statements

P201: Obtain special instructions before use.
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.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
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.

Response Statements

P301+ P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331: Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312: Call a POISON CENTER/ doctor/…/if you feel unwell.

P308+P313: If exposed or concerned: Get medical advice/attention.

P370+P378: In case of fire: Use dry chemical, carbon dioxide, foam, water spray or fog to extinguish.

P391 Collect spillage

Storage Statements

P403+P235: Store in a well ventilated place. Keep cool.

P233: Keep container tightly closed.

P405: Store locked up.

Disposal Statements

P501: Dispose of contents, or container in accordance with local/regional/national/international regulation.

3. COMPOSITION: Information on Ingredients

Chemical Ingredient	CAS No.	Proportion (%v/v)
Aliphatic hydrocarbon, low aromatic content	64742-82-1	48-58
Contains:	95-63-6	2.0-9.0
1,2,4 Trimethyl benzene	108-67-8	0.6-3.0
1,3,5 -Trimethyl benzene	100-41-4	≤0.3
Ethylbenzene		
Solvent Naptha (Petroleum), light aromatic	64742-95-6	47-52
Contains:	98-82-8	1 - <5
Cumene;	108-67-8	5 - <10
Mesitylene (1,3,5-trimethyl benzene);	91-20-3	<1
Naphthalene;	95-63-6	30 - 35
Pseudocumene (1,2,4-trimethylbenzene)		

4. FIRST AID MEASURES

For advice, contact National Poisons Centre (Phone New Zealand: 0800 764 766) or a doctor.

Ingestion

If swallowed, do NOT induce vomiting. Obtain immediate medical advice. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into lungs.

Eye Contact

Hold eyelids apart and flush the eye with running water for at least 15 minutes. Check for and remove any contact lenses. Continue rinsing. Seek medical attention if irritation persists

Skin/Hair Contact

If skin contact occurs, remove contaminated clothing and wash skin with soap and water. If skin irritation occurs, get medical advice. Launder contaminated clothing before re-use.

Inhalation

Move the victim to fresh air and keep at rest in a position comfortable for breathing. Begin artificial respiration if breathing has stopped. Seek medical attention

First Aid facilities

Provide eye baths and safety showers.

Medical Attention

Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media

Water fog and foam. Dry chemical or carbon dioxide (CO_2), sand and earth suitable for small fires. Do NOT use straight streams of water

Hazards from combustion products

Smoke, fume, carbon dioxide and carbon monoxide and incomplete combustion products.

Specific Hazards

Flammable liquid and vapour

Precautions for fire fighters and special protective equipment

Full protective clothing and self-contained breathing apparatus

Hazchem Code: 3Y

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Controls

Flammable liquid and vapours. NO SMOKING. Shut off product that may 'fuel' a fire if safe to do so. Remove all sources of ignition. Use non-sparking (non-metallic) tools. Prevent spill from spreading. Avoid contact with spilled material. Wear personal protective equipment.

Emergency Procedures

Prevent material from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

Methods and materials for containment

Major Land Spill

- Eliminate sources of ignition
- Warn occupants of downwind areas of possible fire and explosion hazard
- Prevent product from entering sewers, watercourses, or low-lying areas
- Keep the public away from the area
- Shut off the source of the spill if possible and safe to do so
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation
- Take measures to minimise the effect on ground water
- Contain any spilled liquid with sand or earth
- Recover liquid spills by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations
- See "First Aid Measures" and "Stability and Reactivity"

Major Water Spill

- Eliminate any sources of ignition
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard
- Notify the port or relevant authority and keep the public away from the area
- Shut off the source of the spill if possible and safe to do so
- Confine the spill if possible
- Remove the product from the surface by skimming or with suitable absorbent material
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations
- See "First Aid Measures" and "Stability and Reactivity".

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhaling vapour and contact with skin and eyes. Wear personal protective equipment. This product is flammable. Do not open near open flame, sources of heat or ignition. NO SMOKING. Keep container closed when not in use. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge which may cause an elctrical sprak (ignition source). Use bonding and/or earthing measures to avoid discharge (electrical spark) but note this may not eliminate hazard.

Do not pressurise, cut, heat or weld containers - residual vapours are flammable. This product will fuel a fire in progress.

Conditions for safe storage

Store in tightly closed original container in a dry, cool and well-ventilated place.

Incompatible materials

Natural Rubber, Butyl Rubber, EPDM, Polystyrene

Compatible materials: Carbon steel, stainless steel, polyethylene, polypropylene, polyester, Teflon.

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

National Exposure Standards

The time weighted average (TWA) concentration, which means the highest allowable exposure concentration in an eight-hour day for a five-day working week for this product is: Ethylbenzene: 434 mg/m^3 (100 ppm). The short-term exposure limit (STEL), which is the maximum allowable exposure concentration at any time.is: Ethylbenzene: 543 mg/m^3 (125 ppm); Cumene: 375 mg/m^3 (75 ppm); Naphthalene: 79 mg/m^3 (15 ppm).

Biological limit values

No values established

Engineering Controls: Ventilation

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protective Equipment

Respiratory Protection: Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face or full-face filter mask to protect from overexposure by inhalation.

Recommended Filter Type: Type A filter (organic vapour).

For high airborne concentrations, use an approved supplied-air respirator operated in positive pressure mode.

Refer to AS/NZS 1715: *Selection, Use and Maintenance of Respiratory Equipment* and AS/NZS 1716*: Respiratory Protective Devices* for further details on the use of respiratory protective equipment.

Eye Protection: Always use safety glasses or a face shield when handling this product.

Skin/ Body Protection: Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves (e.g. PVC) be worn when handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Clear, colourless liquid
Odour	-	Hydrocarbon
Odour Threshold	ppm	Not available
Melting Point/Range	°C	Not available
Boiling Point/ Range	°C	154-192
Flash Point	°C	41
Flammability	-	Flammable
Specific Gravity / Density @ 20°C	g/mL	0.81-0.82
Vapour Pressure @ 20°C	kPa	Not available
Explosive Limits (LEL – UEL)	%	0.6 – 7.0
Vapour Density @ 20°C	kPa	Not available
Autoignition Temperature	°C	> 200
Decomposition Temperature	°C	Not available
Viscosity @ 20°C	cSt	Not applicable
pH	-	Not applicable
Partition Coefficient	-	Not available
Percent Volatiles	%	100
Solubility with Water	% w/w	Negligible
Other Solubility	% w/w	Not available
Other Information	-	-

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

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

Carbon monoxide, carbon dioxide and other organic complexes on incomplete burning or oxidation.

Hazardous reactions

Oxidizing agents, mineral acids, halogenated organic compounds

Hazardous Polymerisation

Will not occur

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

Minimally toxic. Small amounts of liquid aspirated into the lungs during ingestion, or from vomiting, may cause chemical pneumonitis, or pulmonary oedema.

Eye Contact

This product is slightly irritating to eyes, with short lasting discomfort, but will not permanently damage the eye tissue.

Skin Contact

This product is irritating to the skin with prolonged exposure. It may result in dryness and cracking.

Inhalation

May be irritating to eyes, nose, throat and lungs. May cause central nervous system depression.

Chronic Effects

This product may contain 0.1 to 1% of ethylbenzene. IARC has evaluated ethylbenzene and classified it as a "possible human carcinogen" (Group 2B) based on sufficient evidence for cancer in exposed humans. This product may contain 0.1 to 1% naphthalene. IARC evaluated naphthalene and concluded that there was sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cance in exposed humans. Accordingly, IARC classified napthalene as a possible human carcinogen (Group 2B).

Other Health Effects Information

Short term single exposure may cause drowsiness and dizziness.

Individuals with pre-existing skin or respiratory conditions may be sensitive to this product.

Toxicological Information

Oral / Dermal LD_{50}: Naphthalene: LD_{50} (oral, rat): 490 mg/kg; LD_{50} (dermal, rat): 1120 mg/kg; Ethylbenzene: LD_{50} (oral, rat): 3,280 mg/kg; 1,2,4 Trimethyl benzene: LD_{50} (oral, rat) = 3280 mg/kg

Inhalation LC_{50}: Ethyl benzene: LC_{50} (inhalation, rat): 18 mg/L/4 h; 1,2,4 Trimethyl benzene: LC_{50} (Inhalation, rat) = 18 mg/L/4 h

Acute Toxicity (6.1A, 6.1B, 6.1C, 6.1D): Not classified as an acute toxicant.

Aspiration Hazard (6.1E): May be fatal if swallowed and enters airways.

Respiratory Irritation (6.1E): May cause respiratory irritation

Skin Corrosion/Irritation (8.2A, 8.2B, 8.2C, 6.3A): Causes mild skin irritation

Serious Eye damage/irritation (8.3A, 6.3A): Not classified

Respiratory or Skin Sensitisation (6.5A, 6.5B): Not classified

Germ cell mutagenicity (6.6A, 6.6B): Not classified

Carcinogenicity (6.7A, 6.7B): Suspected of causing cancer

Reproductive Toxicity (6.8A, 6.8B, 6.8C): Suspected of damaging fertility or the unborn child.

Specific Organ Toxicity (Repeated and Single Exposure) (6.9A, 6.9B): May cause damage to organs through prolonged or repeated exposure.

Narcotic Effects (6.9B): Not classified

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Toxicity

Fish toxicity, LC_{50} (96 hr):	Cumene: Rainbow Trout: 2.7 mg/L
Crustacean toxicity (Daphnia Magna), EC_{50} (48 hr):	Cumene: EC_{50}: 1.4 mg/L
Green algae toxicity, EC_{50} (72 hr):	Mesitylene: 2.5 mg/L
Blue-green algae toxicity (Cyanobacteria), EC_{50} (72 hr):	Cumene: 2.6 mg/L

Persistence/Degradability

Expected to be biodegradable. Oxidises rapidly by photo-chemical reactions in air.

Mobility

This product is highly volatile and partition rapidly in air. Not expected to partition to sediment and wastewater solids.

Bioaccumulative Potential

Not expected to bioaccumulate significantly

Other Information

Product classified as toxic in the aquatic environment with long-lasting effects.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain harmful residue and/or fumes and vapours that are flammable. Ensure that empty packaging is allowed to dry.

Special Precautions for Landfill or Incineration

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product must be disposed as chemical waste in accordance with the local authority.

14. TRANSPORT INFORMATION

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	1300	UN No.	1300	UN No.	1300
Proper Shipping Name	TURPENTINE SUBSTITUTE	Proper Shipping Name	TURPENTINE SUBSTITUTE	Proper Shipping Name	TURPENTINE SUBSTITUTE
DG Class	3	DG Class	3	DG Class	3
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None
Pack Group	III	Pack Group	III	Pack Group	III
Hazchem	3Y	Hazchem	3Y	Hazchem	3Y

Dangerous Goods Segregation

This product is classified as Dangerous Goods Class 3, packing group III.

15. REGULATORY INFORMATION

Country/ Region: New Zealand

Inventory: NZIoC

Status: All components are listed in NZIoC

HSNO Approval: HSR002652: Solvents (Flammable, Toxic [6.7]) Group Standard 2017

HSNO/HSWA Controls: Refer to the above Group Standard, Health and Safety at Work Act 2015, www.epa.govt.nz and www.worksafe.govt.nz for further information on controls

Certified Handler: Not required

Tracking: Not required

Restriction to workplace: Not applicable

Signage: Threshold quantity: 1,000 L

Fire extinguishers: Threshold quantity: 500 L

Emergency Response Plan: Threshold quantity: 1,000 L

Secondary containment: Threshold quantity: 1,000 L

Other: Location and transit depot test certification: 500 L (closed containers greater than 5 L); 1,500 L (closed containers up to and including 5 L); 250 L (open containers)

Agricultural Compounds and Veterinary Medicines Act 1997 (ACVM): Not applicable

Montreal Protocol on Substances that Deplete the Ozone Layer: Not applicable

Stockholm Convention: Not applicable

Rotterdam Convention: Not applicable

16. OTHER INFORMATION

Reasons for Issue: Section 14: subrisk correction

Replaces SDS dated: 12 May 2020

New SDS issue date: 28 August 2020

Abbreviations:

ACGIH: American Conference of Governmental Industrial Hygienists

AS/NZS: Standards Australia & Standards New Zealand

BCF: Bioconcentration Factor

BEI: Biological Exposure Index

CAS: Chemical Abstracts Service

CCID: Chemical Classification and Information Database

EC_{50}: Effective Concentration, 50 per cent

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

HSNO: Hazardous Substances and New Organisms Act 1996

HSWA: Health and Safety at Work Act 2015

IARC: International Agency for Research on Cancer

IC_{50}: Half Maximal Inhibitory Concentration

LC_{50}: Lethal Concentration, 50 per cent

LD_{50}: Lethal Dose, 50 per cent

LEL: Lower Explosive Limit

LOAEL: Lowest-observed-adverse-effect level

N/R: Not Regulated

NOAEL: No-observed-adverse-effect-level

NOEC: No Observed Effect Concentration

NZIoC: New Zealand Inventory of Chemicals

NZS 5433 New Zealand Standard Transport of Dangerous Goods on Land

OECD: Organisation for Economic Co-operation and Development

STEL: Short-Term-Exposure Limit

TLV: Threshold Limit Value

TWA: Time-Weighted Average

UEL: Upper Explosive Limit

References:

- Supplier Safety Data Sheets
- EPA CCID https://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/

- Workplace Exposure Standards and Biological Exposure Indices. 11th Edition, published by WorkSafe New Zealand November 2019. https://worksafe.govt.nz/topic-and-industry/work-related-health/monitoring/exposure-standards-and-biological-exposure-indices
- US EPA Toxnet ChemIDPlus: http://chem.sis.nlm.nih.gov/chemidplus (August 20)
- OECD eChemPortal Substance Search https://www.echemportal.org/echemportal/participant/page.action?pageID=9