

ANDREW MINERAL TURPENTINE

Chemwatch Material Safety Data Sheet
 For Domestic Use Only.
 Issue Date: 8-Feb-2008
 XC9477SD

CHEMWATCH 25426
 Version No:6
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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

ANDREW MINERAL TURPENTINE

STATEMENT OF HAZARDOUS NATURE

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation.

OTHER NAMES

"mineral turpentine solvent", "turpentine substitute high flash point", "min turps high aromatic", "white spirit", HAWS, 24/R1337, "BP Mineral Turpentine", "Shell Mineral Turpentine", "Ampol Mineral Turps", "Exxon Mineral Turps", "Mobil Petropine", "HiChem Mineral Turps", "Glendale Mineral Turpentine", "Septone Mineral Turps", "ASMT5 ASMT20"

PROPER SHIPPING NAME

TURPENTINE SUBSTITUTE

PRODUCT USE

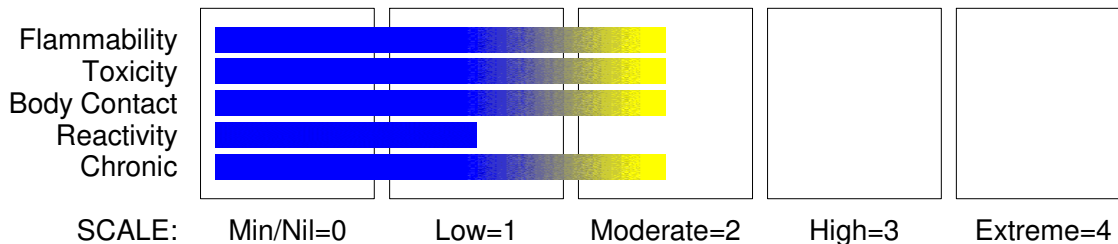
» The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation. Widely used as a general purpose solvent, often as main component in architectural & household paints, undercoats, enamels and primers. Also used to clean equipment, brushes, and rollers.

SUPPLIER

Company: Damar Industries Limited
 Address:
 Eastgate Business Park
 800 Te Ngae Road
 Rotorua
 Telephone: +64 7 345 6007
 Emergency Tel: 0800 2436 2255
 Emergency Tel: 0800 CHEMCALL
 Fax: +64 7 345 6019

Section 2 - HAZARDS IDENTIFICATION

CHEMWATCH HAZARD RATINGS



GHS Classification

Acute Aquatic Hazard Category 2
 Acute Toxicity (Oral) Category 5
 Flammable Liquid Category 3
 Skin Corrosion/Irritation Category 3



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Section 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HAZARD

WARNING

Gazetted by ERMANZ:

3.1C 6.1E 6.3B 9.1B

Flammable liquid and vapour

May be harmful if swallowed

Causes mild skin irritation

Toxic to aquatic life

PRECAUTIONARY STATEMENTS

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Response

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

Call a POISON CENTER or doctor/physician if you feel unwell.

If skin irritation occurs: Get medical advice/ attention.

Storage

Store in a well-ventilated place. Keep cool.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
mineral turpentine	Not avail.	
paraffins (approx. 35%)		
cycloparaffins (approx 20%)		
C8 and higher aromatics (approx 45%) as solvent naphtha petroleum, medium aliphatic	64742-88-7	45-55
naphtha petroleum, light aromatic solvent containing (typically)	64742-95-6.	45-55
xylene	1330-20-7	
ethylbenzene	100-41-4	
trimethylbenzene (mixed isomers)	25551-13-7	^

Section 4 - FIRST AID MEASURES

NEW ZEALAND POISONS INFORMATION CENTRE 0800 POISON (0800 764 766)
NZ EMERGENCY SERVICES: 111

SWALLOWED

• If swallowed do NOT induce vomiting.

• If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Avoid giving milk or oils.

Avoid giving alcohol.

• If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

EYE

» If this product comes in contact with the eyes:

• Wash out immediately with fresh running water.

• Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

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Section 4 - FIRST AID MEASURES

SKIN

- » If skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.

NOTES TO PHYSICIAN

» Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically.

Following acute or short term repeated exposures to toluene:

- Toluene is absorbed across the alveolar barrier, the blood/air mixture being 11.2/15.6 (at 37 degrees C.) The concentration of toluene, in expired breath, is of the order of 18 ppm following sustained exposure to 100 ppm. The tissue/blood proportion is 1/3 except in adipose where the proportion is 8/10.
 - Metabolism by microsomal mono-oxygenation, results in the production of hippuric acid. This may be detected in the urine in amounts between 0.5 and 2.5 g/24 hr which represents, on average 0.8 gm/gm of creatinine. The biological half-life of hippuric acid is in the order of 1-2 hours.
- For acute or short term repeated exposures to xylene:
- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
 - Pulmonary absorption is rapid with about 60-65% retained at rest.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
 - May be violently or explosively reactive.
- When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 500 metres in all directions.

FIRE/EXPLOSION HAZARD

- Liquid and vapour are flammable.
 - Moderate fire hazard when exposed to heat or flame.
- Combustion products include: carbon monoxide (CO), carbon dioxide (CO₂), other pyrolysis products typical of burning organic material.
- Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.
- May emit clouds of acrid smoke.

FIRE INCOMPATIBILITY

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

- Remove all ignition sources.
- Clean up all spills immediately.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.

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Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Containers, even those that have been emptied, may contain explosive vapours.
 - Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- Contains low boiling substance:
Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.
- Check for bulging containers.
 - Vent periodically.
 - DO NOT allow clothing wet with material to stay in contact with skin.
 - Electrostatic discharge may be generated during pumping - this may result in fire.
 - Ensure electrical continuity by bonding and grounding (earthing) all equipment.
 - Avoid all personal contact, including inhalation.
 - Wear protective clothing when risk of overexposure occurs.

SUITABLE CONTAINER

- Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.
- For materials with a viscosity of at least 2680 cSt. (23 deg. C).

STORAGE INCOMPATIBILITY

- Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- Store in original containers in approved flammable liquid storage area.
- Store away from incompatible materials in a cool, dry, well-ventilated area.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³
New Zealand Workplace Exposure Standards (WES)	xylene (Xylene)	50	217		
New Zealand Workplace Exposure Standards (WES)	xylene (Xylene)	50	217		
New Zealand Workplace Exposure Standards (WES)	xylene (Xylene)	50	217		
New Zealand Workplace Exposure Standards (WES)	xylene (Xylene)	50	217		
New Zealand Workplace Exposure Standards (WES)	ethylbenzene (Ethyl benzene)	100	434	125	543
New Zealand Workplace Exposure Standards (WES)	trimethylbenzene (mixed isomers) (Trimethyl	25	123		

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³
(WES)	benzene)				

The following materials had no OELs on our records

- solvent naphtha petroleum, medium aliphatic:
- naphtha petroleum, light aromatic solvent:

CAS:64742- 88- 7

CAS:64742- 95- 6

PERSONAL PROTECTION



RESPIRATOR

Type A Filter of sufficient capacity

EYE

- Safety glasses with side shields.
- Chemical goggles.

HANDS/FEET

- Wear chemical protective gloves, eg. PVC.
 - Wear safety footwear or safety gumboots, eg. Rubber.
- Suitability and durability of glove type is dependent on usage. Factors such as:
- frequency and duration of contact,
 - chemical resistance of glove material,

OTHER

- Overalls.
 - PVC Apron.
- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.

ENGINEERING CONTROLS

» CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear.

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required.

Ventilation equipment should be explosion-resistant.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Clear, colourless, flammable liquid with mild solvent odour; floats on water. Petroleum hydrocarbons distilling 98% min. under 200 C. General physical properties in accordance with Australian Standard AS 3530-1988 for solvents - Mineral Turpentine.

PHYSICAL PROPERTIES

Does not mix with water.
Floats on water.

Molecular Weight: Not applicable.
Melting Range (°C): <- 40
Solubility in water (g/L): Immiscible
pH (1% solution): Not applicable.
Volatile Component (%vol): 100
Relative Vapour Density (air=1): 4.3- 4.8 approx
Lower Explosive Limit (%): 0.4 approx.
Autoignition Temp (°C): 250 approx.
State: LIQUID

Boiling Range (°C): 145 to 200 approx
Specific Gravity (water=1): 0.82- 0.86
pH (as supplied): Not applicable
Vapour Pressure (kPa): < 3.325 @ 20 C
Evaporation Rate: Slow
Flash Point (°C): 31- 36
Upper Explosive Limit (%): 6.0 approx
Decomposition Temp (°C): Not Available
Viscosity: Not Available

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Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
 - Product is considered stable.
- For incompatible materials - refer to Section 7 - Handling and Storage.*

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

- » Harmful if swallowed.
- » HARMFUL- May cause lung damage if swallowed.
- » Irritating to eyes and skin.

- » Vapours may cause dizziness or suffocation.
- » Vapours may cause drowsiness and dizziness.
- » May produce discomfort of the respiratory system*.
- » Inhalation and/or skin contact may produce health damage*.
- » * (limited evidence).

CHRONIC HEALTH EFFECTS

- » Possible risk of harm to the unborn child.
- » Limited evidence of a carcinogenic effect*.
- » Cumulative effects may result following exposure*.
- » * (limited evidence).

TOXICITY AND IRRITATION

- » Lifetime exposure of rodents to gasoline produces carcinogenicity although the relevance to humans has been questioned. Gasoline induces kidney cancer in male rats as a consequence of accumulation of the alpha2-microglobulin protein in hyaline droplets in the male (but not female) rat kidney.
- The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
- The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis.

CARCINOGEN

xylene	International Agency for Research on Cancer (IARC) Carcinogens	Group	3
ethylbenzene	International Agency for Research on Cancer (IARC) Carcinogens	Group	2B

REPROTOXIN

xylene	ILO Chemicals in the electronics industry that have toxic effects on reproduction	Reduced fertility or sterility
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Section 12 - ECOLOGICAL INFORMATION

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
This material and its container must be disposed of as hazardous waste.
Avoid release to the environment.
Refer to special instructions/ safety data sheets.

Section 13 - DISPOSAL CONSIDERATIONS

- Recycle where possible
Otherwise ensure that:
- licenced contractors dispose of the product and its container.

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Section 14 - TRANSPORTATION INFORMATION



Labels Required: FLAMMABLE LIQUID
HAZCHEM: None

UNDG:

Dangerous Goods Class:	3	Subrisk:	None
UN Number:	1300	Packing Group:	III
Shipping Name:	TURPENTINE SUBSTITUTE		

Air Transport IATA:

ICAO/IATA Class:	3	ICAO/IATA Subrisk:	None
UN/ID Number:	1300	Packing Group:	III
Special provisions:	A3		
Shipping Name:	TURPENTINE SUBSTITUTE †		

Maritime Transport IMDG:

IMDG Class:	3	IMDG Subrisk:	None
UN Number:	1300	Packing Group:	III
EMS Number:	F- E, S- E	Special provisions:	223 944
Limited Quantities:	5 L	Marine Pollutant:	Not Determined
Shipping Name:	TURPENTINE SUBSTITUTE		

Section 15 - REGULATORY INFORMATION

REGULATIONS

mineral turpentine (CAS:Not avail):
No regulations applicable

solvent naphtha petroleum, medium aliphatic (CAS: 64742-88-7) is found on the following regulatory lists;
International Council of Chemical Associations (ICCA) - High Production Volume List
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Hazardous Substances Register
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Pesticides
New Zealand Inventory of Chemicals (NZIoC)
OECD Representative List of High Production Volume (HPV) Chemicals
OSPAR List of Chemicals for Priority Action

naphtha petroleum, light aromatic solvent (CAS: 64742-95-6) is found on the following regulatory lists;
International Council of Chemical Associations (ICCA) - High Production Volume List
New Zealand Inventory of Chemicals (NZIoC)
OECD Representative List of High Production Volume (HPV) Chemicals

xylene (CAS: 1330-20-7) is found on the following regulatory lists;
GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships
IMO IBC Code Chapter 17: Summary of minimum requirements
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk
IMO Provisional Categorization of Liquid Substances - List 1: Pure or technically pure products
International Agency for Research on Cancer (IARC) Carcinogens
International Council of Chemical Associations (ICCA) - High Production Volume List
New Zealand Biological Exposure Indices
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Hazardous Substances Register
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Pesticides
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Poisons Schedule [NLV]
New Zealand Workplace Exposure Standards (WES)
OECD Representative List of High Production Volume (HPV) Chemicals
WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water

ethylbenzene (CAS: 100-41-4) is found on the following regulatory lists;
GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships
IMO IBC Code Chapter 17: Summary of minimum requirements
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk
IMO Provisional Categorization of Liquid Substances - List 1: Pure or technically pure products
IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by

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Section 15 - REGULATORY INFORMATION

weight of components already assessed by
IMO

International Agency for Research on Cancer (IARC) Carcinogens
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Hazardous Substances Register
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Pesticides
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)
OECD Representative List of High Production Volume (HPV) Chemicals
WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water

No data available for mineral turpentine as CAS: Not avail.
Specific advice on controls required for materials used in New Zealand can be found at
<http://www.ermanz.govt.nz/search/registers.html>

Section 16 - OTHER INFORMATION

NEW ZEALAND POISONS INFORMATION CENTRE
0800 POISON (0800 764 766)

NZ EMERGENCY SERVICES: 111

» Classification of the preparation and its individual components has drawn on official and authoritative sources as well as

independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references.

» The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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Issue Date: 8-Feb-2008
Print Date: 2-Apr-2009