



MATERIAL SAFETY DATA SHEET

SOLVENT DEGREASER

Classified as hazardous according to criteria of NOHSC

MANUFACTURER

Sierra (Aust)

17 Delta Street, GEEBUNG QLD 4034
Australia

Ph (0)7 3216 5099
Fx (0)7 3216 5199

Email: sierra@optusnet.com.au
www.sierrachem.com.au

Every endeavor has been made to ensure that the information contained in this publication is reliable and offered in good faith. It is meant to describe the safety requirements of our product and should not be construed as guaranteeing specific properties. Customers are encouraged to conduct their own tests as end user suitability of the product for particular uses is beyond our control.

IDENTIFICATION

Product Name:	Solvent Degreaser
Other Names:	None Allocated
Manufacturer's Product Code:	4720 (20 ltr) , 4722 (200 ltr)
UN Number:	1223
Dangerous Goods Class and Subsidiary Risk:	3(3.2)
Hazchem Code:	3[Y]
Poisons Schedule No.:	Not Scheduled
Use:	Strong Multi-purpose degreaser

Physical Description/Properties:

Appearance:	Clear flammable liquid
Boiling Point:	275
Vapour Pressure:	Not available
Specific Gravity:	0.81
Flashpoint:	39 deg C
Flammability Limits:	Not available
Solubility in Water:	Slightly soluble

Other Properties:

Lower Explosive Limit (%)	0.7
Upper Explosive Limit (%)	5.0

Ingredients:

Chemical Name	CAS Number:	Proportion:
Kerosene	8008-20-6	>60%
Non ionic surfactant		<10%
Pine oil	8002-09-3	<5%

HEALTH HAZARD INFORMATION

Health Effects:**Acute****Swallowed:**

Considered an unlikely route of entry in commercial/industrial environments. The liquid is discomforting and may be harmful if swallowed. Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis. Absorption from the gastro-intestinal tract is rapid and systemic effects include diarrhoea and in severe cases drowsiness and central nervous system depression, progressing to coma and death.

Eye:

The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and / or transient eye inflammation, ulceration. The vapour is discomforting to the eyes. The vapour when concentrated has pronounced eye irritation effect and this gives some warning of high vapour concentrations. If eye irritation occurs seek to reduce exposure with available control measures, or evacuate area.

Skin:

The liquid is highly discomforting to the skin if exposure is prolonged and may cause drying of the skin, which may lead to dermatitis. The material may accentuate any pre-existing skin condition. Open cuts, abraded or irritated skin should not be exposed to this material. The material may produce severe 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 (oedema) which may progress to vesiculation, scaling and thickening of the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis. Prolonged contact is unlikely, given the severity of response, but repeated exposures may produce severe ulceration.

Inhaled:

The vapour/mist is discomforting to the upper respiratory tract and the material presents a hazard from repeated exposures over long periods. Inhalation of vapour is more likely at higher than normal temperatures. Acute effects from inhalation of high concentrations of vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterised by headache and dizziness, increased reaction time, fatigue and loss of co-ordination. Degenerative changes in liver and kidneys and hypoplasia of bone marrow have occurred after long term inhalation of high vapour concentrations.

Chronic

Principal routes of exposure are usually by inhalation of vapour and skin contact with the material. Repeated or prolonged exposure to mixed hydrocarbons may produce narcosis with dizziness, weakness, irritability, concentration and/or memory

loss, tremor in the fingers and tongue, vertigo, olfactory disorders, constriction of visual field, paraesthesias of the extremities, weight loss and anaemia and degenerative changes in the liver and kidney. Chronic exposure by petroleum workers, to the lighter hydrocarbons, has been associated with visual disturbances, damage to the central nervous system, peripheral neuropathies (including numbness and paraesthesias), psychological and neurophysiological deficits, bone marrow toxicities (including hypoplasia possibly due to benzene) and hepatic and renal involvement. Chronic dermal exposure to petroleum hydrocarbons may result in defatting which produces localised dermatoses. Surface cracking and erosion may also increase susceptibility to infection by microorganisms. One epidemiological study of petroleum refinery workers has reported elevations in standard mortality ratios for skin cancer along with a dose-response relationship indicating an association between routine workplace exposure to petroleum or one of its constituents and skin cancer, particularly melanoma. Other studies have been unable to confirm this finding.

First Aid

Advice	For advise, contact a Poisons Information Centre (Phone eg. Australia 13 11 26; or a doctor at once).
Swallowed	If swallowed, do NOT induce vomiting.
Eyes	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
Skin	If skin contact occurs, immediately remove contaminated clothing. Flush skin under water for 15 minutes. They apply calcium gluconate gel. Contact the Poisons Information Centre.

Safety Points

Wear eye protection when mixing or using.
Wear protective gloves when mixing or using
Do not mix with hot water

Advice to Doctor:

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

1. Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
2. Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ <50 mm Hg or pCO₂ >50 mm Hg) should be intubated.
3. Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance
4. A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
5. Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
6. Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology].

PRECAUTIONS FOR USE

Exposure Standards:	<p>None assigned. Refer to individual constituents. <kerosene> ACGIH Intended Addition TLV TWA 100 mg/m³ A3 CAUTION: This substance has been classified by the ACGIH as A3 Animal Carcinogen (at relatively high doses). OEL TWA: 14 ppm, 100 mg/m³ [NIOSH, 1985] REL TWA: 150 ppm [Shell] CEL TWA: 300 ppm, 900 mg/m³ ** for the following ** <kerosene> <pine oil> No exposure limits set by NOHSC or ACGIH.</p>																								
Engineering Controls:	<p>Use in a well-ventilated area. General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in special circumstances. If risk of overexposure exists, wear SAA approved respirator SAA approved respirator (supplied air type) may be required in special circumstances. Correct fit is essential to ensure adequate protection. Provide adequate ventilation in warehouses and enclosed storage areas.</p>																								
Personal Protection:																									
Eye	<p>Safety glasses with side shields; or as required, Chemical goggles. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.</p>																								
Hands/Feet	<p>Wear chemical protective gloves. eg. PVC gloves with barrier cream Wear safety footwear.</p>																								
Other	<p>No special equipment needed when handling small quantities. OTHERWISE: Overalls. Barrier cream. Eyewash unit.</p>																								
Respirator	<p>Respiratory protection may be required when ANY "Worst Case" vapour- phase concentration is exceeded (see Computer Prediction in "Exposure Standards")</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Protection</th> <th style="text-align: left;">Half-Face</th> <th colspan="2" style="text-align: left;">Full-Face Spray/ Mist</th> </tr> <tr> <th style="text-align: left;">Factor (Min)</th> <th style="text-align: left;">Respirator</th> <th style="text-align: left;">Respirator</th> <th style="text-align: left;">Spatter</th> </tr> </thead> <tbody> <tr> <td>10 x ES</td> <td>Air-line*</td> <td>A -2</td> <td>A -2 ^</td> </tr> <tr> <td></td> <td style="text-align: center;">-</td> <td>A -PAPR-2</td> <td>A -PAPR-2 ^</td> </tr> <tr> <td>20 x ES</td> <td style="text-align: center;">-</td> <td>A -3</td> <td>A -3 ^</td> </tr> <tr> <td>20+ x ES</td> <td style="text-align: center;">-</td> <td>Air-line**</td> <td>Air-line** ^</td> </tr> </tbody> </table> <p>* - Continuous-flow; ** - Continuous-flow or positive pressure demand ^ - Full-face.</p> <p>The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information, consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.</p>	Protection	Half-Face	Full-Face Spray/ Mist		Factor (Min)	Respirator	Respirator	Spatter	10 x ES	Air-line*	A -2	A -2 ^		-	A -PAPR-2	A -PAPR-2 ^	20 x ES	-	A -3	A -3 ^	20+ x ES	-	Air-line**	Air-line** ^
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Flammability:	2																								

SAFE HANDLING INFORMATION

Storage and Transport:

Suitable Container	Metal can Metal drum Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage Incompatibility	Avoid storage with oxidisers.
Storage Requirement	Store in original containers in approved flammable liquid storage area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Keep containers securely sealed. Store away from incompatible materials in a cool, dry, well-ventilated area. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storing and handling recommendations.
Transportation	Class 3 - Flammable liquids shall not be loaded in the same vehicle or packed in the same freight container with: Class 1 - Explosives; Class 2.1 - Flammable gases (where both flammable liquids and flammable gases are in bulk); Class 2.3 - Poisonous gases; Class 4.2 - Spontaneously combustible substances; Class 5.1 - Oxidising agents; Class 5.2 - Organic peroxides; Class 7 - Radioactive substances.

Spills and Disposal:

Minor Spills	Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact by using protective equipment. Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.
Major Spills	Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Water spray or fog may be used to disperse / absorb vapour. Contain spill with sand, earth or vermiculite. Use only spark-free shovels and explosion proof equipment. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.
Disposal	Consult manufacturer for recycling options and recycle where possible . Consult State Land Waste Management Authority for disposal. Incinerate residue at an approved site. Recycle containers where possible, or dispose of in an authorised landfill. Reclaim solvent at an approved site.

Fire/Explosion Hazard: Liquid and vapour are flammable.
Moderate fire hazard when exposed to heat or flame.
Vapour forms an explosive mixture with air.
Moderate explosion hazard when exposed to heat or flame.
Vapour may travel a considerable distance to source of ignition.
Heating may cause expansion or decomposition leading to violent rupture of containers.
On combustion, may emit toxic fumes of carbon monoxide (CO).
Other combustion products include carbon dioxide (CO₂).

OTHER INFORMATION

Toxicity	1
Body Contact	1
Reactivity	1

SCALE: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4

CAS RN No(s)	None
Subsidiary Risk	None

CONTACT POINT

ORGANISATION	TELEPHONE	ASK FOR
Poisons Information Centre – Australia Wide	131126	
Sierra (Aust) Pty Ltd	(07) 3216 5099	Glyn McDonald
Fire Brigade	000	Fire Brigade
Police	000	Police

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