Material Safety Data Sheet

ADOS LEAKSTOP

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1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name
ADOS LEAKSTOP

Product Code
8422

Company Name
ALLPROOF INDUSTRIES

Address
17 Bay Park Place Beach Haven
New Zealand

Telephone/Fax Number
Tel: 09 481 8020

Recommended Use
Used according to manufacturer's directions.
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.
Leak proofing sealant for construction.

2. HAZARD IDENTIFICATION

Hazard Classification
HAZARDOUS SUBSTANCE.
DANGEROUS GOODS.

Classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC).
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Risk Phrase(s)
Classified as hazardous according to criteria of NOHSC

Other Information
GHS Classification:

Acute Aquatic Hazard Category 2
Acute Toxicity (Oral) Category 4
Eye Irritation Category 2A
Flammable Liquid Category 2
Organ Damage Category 2
Reproductive Toxicity Category 2
Respiratory Irritation Category 3
Skin Corrosion/Irritation Category 2

Emergency overview:

HAZARD:
DANGER.

Determined by Chemwatch using GHS/HSNO criteria:
3.1B 6.1D 6.3A 6.4A 6.8B 6.9B 9.3C 9.1B.
Highly flammable liquid and vapour.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Suspected of damaging the unborn child.
May cause damage to organs through prolonged or repeated exposure by inhalation.
Harmful to terrestrial vertebrates.
Toxic to aquatic life.

Precautionary statements:

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
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.
Do not breathe dust/fume/gas/mist/vapours/spray.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
Use personal protective equipment as required.

Response
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Call a POISON CENTER or doctor/physician if you feel unwell.
Get medical advice/attention if you feel unwell.
Rinse mouth.
If eye irritation persists: Get medical advice/attention.

Storage:
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
TOLUENE	108-88-3	20-40 %
Mineral oil	Not avail.	0-5 %
Ingredients determined not to be hazardous		50-70 %

4. FIRST-AID MEASURES

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

Inhalation
If fumes or combustion products are inhaled remove from contaminated area.
Lay patient down. Keep warm and rested.
Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained.
Perform CPR if necessary.

Ingestion
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.
Observe the patient carefully.
Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
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.

Skin
If skin contact occurs:
Immediately remove all contaminated clothing, including footwear.
Flush skin and hair with running water (and soap if available).
Seek medical attention in event of irritation.

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.
Seek medical attention without delay; if pain persists or recurs seek medical attention.
Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Advice to Doctor
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°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.
Primary threat to life from ingestion and/or inhalation is respiratory failure.
Patients should be quickly evaluated for signs of respiratory distress (eg cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases ($pO_2 < 50$ mm Hg or $pCO_2 > 50$ mm Hg) should be intubated.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Water spray or fog.
Alcohol stable foam.
Dry chemical powder.
Carbon dioxide.

Special Protective Equipment for fire fighters

Glasses:	Gloves:	Respirator:
Chemical goggles.	PVC chemical resistant type.	Type A Filter of sufficient capacity

Specific Methods
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.
When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 500 metres in all directions.

Specific Hazards
Liquid and vapour are highly flammable.
Severe fire hazard when exposed to heat, flame and/or oxidisers.
Vapour may travel a considerable distance to source of ignition.
Heating may cause expansion or decomposition leading to violent rupture of containers.
Combustion products include: Carbon dioxide (CO2), other pyrolysis products typical of burning organic material.

Hazchem Code
None.

Decomposition Temperature
Not Available.

Other Information
Fire incompatibility:
Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

6. ACCIDENTAL RELEASE MEASURES

Clean-up Methods - Small Spillages
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.

Clean-up Methods - Large Spillages
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.

Other Information
Personal Protective Equipment advice is contained in Section 8 (EXPOSURE CONTROLS/PERSONAL PROTECTION) of the MSDS.

7. HANDLING AND STORAGE

Precautions for Safe Handling
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.
Electrostatic discharge may be generated during pumping - this may result in fire.
Ensure electrical continuity by bonding and grounding (earthing) all equipment.
Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<= 1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec).
Avoid splash filling.
Avoid all personal contact, including inhalation.
Wear protective clothing when risk of exposure occurs.
Use in a well-ventilated area.
Prevent concentration in hollows and sumps.

Conditions for Safe Storage

Suitable container:
Packing as supplied by manufacturer.
Plastic containers may only be used if approved for flammable liquid.
Check that containers are clearly labelled and free from leaks.
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°C)
For manufactured product having a viscosity of at least 250 cSt. (23°C)
Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25°C).

Storage incompatibility:
Avoid reaction with oxidising agents.

Storage requirements:
Store in original containers in approved flame-proof area.
No smoking, naked lights, heat or ignition sources.
DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
Keep containers securely sealed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards

Source	Material	TWA ppm	TWA mg/m³	Notes
New Zealand Workplace Exposure Standards (WES)	Toluene (Toluene)	50	188	Skin

Engineering Controls
For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required.
Ventilation equipment should be explosion-resistant.
Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant:	Air Speed:
Solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min.)
Aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation).	0.5-1 m/s (100-200 f/min.)
Direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion).	1-2.5 m/s (200-500 f/min.)

Respiratory Protection
Type A Filter of sufficient capacity.

Eye Protection
Safety glasses with side shields.
Chemical goggles.
Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

Hand Protection

Wear chemical protective gloves, eg. PVC.
Wear safety footwear or safety gumboots, eg. Rubber.

Personal Protective Equipment
Other:
Overalls.
PVC Apron.
PVC protective suit may be required if exposure severe.
Eyewash unit.
Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets), non sparking safety footwear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties
Physical properties:
Does not mix with water.

Appearance
Black viscous paste with a solvent odour; not miscible with water.

Decomposition Temperature
Not Available.

Melting Point
Not Available.

Boiling Point
111°C (initial).

Solubility in Water
Immiscible.

Specific Gravity
Not Available.

pH Value
Not Applicable (1% solution).
Not Applicable (as supplied).

Vapour Pressure
Not Available.

Vapour Density (Air=1)
> 1.

Evaporation Rate
Not Applicable.

Physical State
Free-flowing Paste.

Viscosity
Not Available.

Volatile Component
Not Available.

Flash Point
4°C (toluene).

Auto-Ignition Temperature
Not Available.

Molecular Weight
Not Applicable.

Explosion Limit - Upper
Not Available.

Explosion Limit - Lower
Not Available.

10. STABILITY AND REACTIVITY

Stability and reactivity
Conditions contributing to instability:
Presence of incompatible materials.
Product is considered stable.
Hazardous polymerisation will not occur.
For incompatible materials - refer to Section 7 - Handling and Storage.

11. TOXICOLOGICAL INFORMATION

Toxicology Information
Toxicity and irritation:
MINERAL OIL:
TOLUENE:
Unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

Unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

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.
For toluene:
Acute Toxicity:
Humans exposed to intermediate to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis, and death. Similar effects are observed in short-term animal studies.<</>.

TOLUENE:

TOXICITY	IRRITATION
Oral (human) LDLo: 50 mg/kg	Skin (rabbit):20 mg/24h- Moderate
Oral (rat) LD50: 636 mg/kg	Skin (rabbit):500 mg - Moderate
Inhalation (human) TCLo: 100 ppm	Eye (rabbit):0.87 mg - Mild
Inhalation (man) TCLo: 200 ppm	Eye (rabbit): 2 mg/24h - SEVERE
Inhalation (rat) LC50: > 26700 ppm/1h	Eye (rabbit):100 mg/30sec - Mild
Dermal (rabbit) LD50: 12124 mg/kg	

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.
For toluene:
Acute Toxicity:
Humans exposed to intermediate to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis, and death. Similar effects are observed in short-term animal studies.<</>.

MINERAL OIL:
Toxicity and Irritation data for petroleum-based mineral oils are related to chemical components and vary as does the composition and source of the original crude.
A small but definite risk of occupational skin cancer occurs in workers exposed to persistent skin contamination by oils over a period of years.
Petroleum oils which are solvent refined/extracted or severely hydrotreated, contain very low concentrations of both.

Inhalation
The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

Skin
Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.

Toluene	New Zealand Workplace Exposure Standards (WES) - Skin	Notes	Skin

Eye
The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.
Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Eye contact may cause significant inflammation with pain.

Chronic Effects
Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Serious damage (clear functional disturbance or morphological change which may have toxicological significance) is likely to be caused by repeated or prolonged exposure. As a rule the material produces, or contains a substance which produces severe lesions.

Exposure to the material may cause concerns for humans owing to possible developmental toxic effects, generally on the basis that results in appropriate animal studies provide strong suspicion of developmental toxicity in the absence of signs of marked maternal toxicity, or at around the same dose levels as other toxic effects but which are not a secondary non-specific consequence of other toxic effects.
On the basis, primarily, of animal experiments, concern has been expressed by at least one classification body that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment.
Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.
Chronic toluene habituation occurs following intentional abuse (glue sniffing) or from occupational exposure. Ataxia, incoordination and tremors of the hands and feet (as a consequence of diffuse cerebral atrophy), headache, abnormal speech, transient memory loss, convulsions, coma, drowsiness, reduced colour perception, frank blindness, nystagmus (rapid, involuntary eye-movements), hearing loss leading to deafness and mild dementia have all been associated with chronic abuse.

Reproductive Toxicity

Toluene	ILO Chemicals in the electronics industry that have toxic effects on reproduction	Reduced fertility or sterility

Carcinogenicity

Toluene	International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs	Group 3

12. ECOLOGICAL INFORMATION

Ecological information
Toluene 96 hr LC50 (8.11) mg/L Coho salmon, silver salmon Fish Source: Experimental.

This material and its container must be disposed of as hazardous waste.

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Toluene	LOW	MED	LOW	MED

13. DISPOSAL CONSIDERATIONS

Disposal considerations
Containers may still present a chemical hazard/danger when empty.
Return to supplier for reuse/recycling if possible.
Otherwise:
If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
Where possible retain label warnings and MSDS and observe all notices pertaining to the product.
DO NOT allow wash water from cleaning or process equipment to enter drains.
It may be necessary to collect all wash water for treatment before disposal.
In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
Where in doubt contact the responsible authority.
Recycle wherever possible.
Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
Dispose of by: Burial in a land-fill specifically licenced to accept chemical and/or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material).
Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

14. TRANSPORT INFORMATION

Transport Information
Labels Required: FLAMMABLE LIQUID.

Land Transport UNDG:
Class or division: 3.
Subsidiary risk: None.
UN No.: 1133.
UN packing group: II.
Shipping Name: ADHESIVES containing flammable liquid ADHESIVES.

Air Transport IATA:
ICAO/IATA Class: 3.
ICAO/IATA Subrisk: None.
UN/ID Number: 1133.
Packing Group: II.
Special provisions: A3.
Cargo Only.
Packing Instructions: 307.
Maximum Qty/Pack: 60 L.
Passenger and Cargo Packing Instructions: 305.
Passenger and Cargo Maximum Qty/Pack: 5 L.
Passenger and Cargo Limited Quantity Packing Instructions: Y305.
Passenger and Cargo Limited Quantity Maximum Qty/Pack: 1 L.

Shipping Name: ADHESIVES.

Maritime Transport IMDG:
IMDG Class: 3.
IMDG Subrisk: None.
UN Number: 1133.
Packing Group: II.
EMS Number: F-E, S-D.
Special provisions: None.
Limited Quantities: 5 L.
Shipping Name: ADHESIVES containing flammable liquid.

U.N. Number
1133

Proper Shipping Name
ADHESIVES

DG Class
3

Packing Group
II

Hazchem Code
None.

IERG Number
14

15. REGULATORY INFORMATION

Regulatory information
Regulations for ingredients:

Toluene (CAS: 108-88-3) is found on the following regulatory lists;
"GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "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", "United Nations List of Precursors and Chemicals Frequently used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control - Table II", "WHO Guidelines for Drinkingwater Quality - Guideline values for chemicals that are of health significance in drinking-water".

No data for Ados Leakstop.
No data for mineral oil (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.

16. OTHER INFORMATION

Other Information
Version No: 2.0.

C9477EC.

Company: CRC Industries Ltd
Address:
10 Highbrook Drive
East Tamaki
Auckland,
New Zealand
Telephone: +64 9 272 2700
Fax: +64 9 274 9696
Email: customerservices@crc.co.nz
Website: http://www.crcindustries.com

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

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.

This MSDS has been transcribed into Infosafe NOHSC format from an original issued by the manufacturer on the date shown. Any disclaimer by the manufacturer may not be included in the transcription.

END OF MSDS