

Material Safety Data Sheet

Brake Clean

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 fumes and vapours that are flammable and harmful. 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 is ashless and can be burned directly in appropriate equipment.

14. TRANSPORT INFORMATION

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	3295	UN No.	3295	UN No.	3295
Proper Shipping Name	Petroleum Spirit	Proper Shipping Name	Petroleum Spirit	Proper Shipping Name	Petroleum Spirit
DG Class	3	DG Class	3	DG Class	3
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None
Pack Group	II	Pack Group	II	Pack Group	II
Hazchem	3WE				

Dangerous Goods Segregation

This product is classed as Dangerous Goods Class 3, packing group II. Please consult the Australian Dangerous Goods Code for Transport by Road and Rail for information.

15. REGULATORY INFORMATION

Country/ Region: Australia **Inventory:** AICS **Status:** Listed **Poisons Schedule:** 5

16. OTHER INFORMATION

Reasons for Issue: Upgrade to 16-point MSDS; Amalgamated supplier changes in all sections

Abbreviations:

AICS: Australian Inventory of Chemical Substances

CAS Number: Chemical Abstracts Number

IARC: International Agency for Research on Cancer

NOHSC: National Occupational Health and Safety Council

References:

- Supplier Material Safety Data Sheets
- Sax's Dangerous Properties of Industrial Materials, Richard J. Lewis Snr., pub. Canada (2000)

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 Peak Lubricants.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

Produces hallucinations and narcotic effect. Ingestion of large amounts will result in drowsiness, fatigue, loss of appetite, paresthesia in distal extremities (tingling in hands and feet). Possibility of muscle weakness, cold pulsation in extremities (hands and feet), blurred vision, headache, and nausea. Vomiting may cause this product to be aspirated to the lungs resulting in chemical pneumonitis or pulmonary oedema.

Eye Contact

This product is irritating to eyes, 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

This product is irritating to the respiratory tract. Exposure to large concentrations over an extended period of time will result in muscle weakness, tingling in hands and feet, blurred vision, headaches, nausea, loss of appetite, hallucinations, and possible loss of consciousness.

Chronic Effects

There is evidence of potentially irreversable damage to the peripheral nervous system, particularly arms and legs.

Other Health Effects Information

This product contains n-hexane, where the effects of this constituent show incidents of experimental teratogenic and reproductive effects and mutation data has been reported. The effects of this product in combination with MEK are potentiated (greatly increased). This means that the effects suffered by ingestion or inhalation will be increased, or experienced more quickly. **Toxicological Information** n-hexane: 28710 mg/kg (oral, rat); heptane: LC50: 103 g/m³ (4H, inhalation, rat) n-hexane: 190 ppm (inhalation, human); heptane: 1000 ppm (inhalation, human)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Toxicity

Fish Toxicity (rainbow trout, goldfish, bluegill):

LC₅₀(96hr): Based on data for a similar component or preparation, this product is expected to be toxic to aquatic organisms.

Daphnia Magna EC₅₀ (24 hr):

Daphnia Magna EC₅₀ (48 hr):

Long term adverse effects to aquatic organisms are possible if continuous exposure is maintained.

Blue-green algae (Toxicity threshold 7-8 days):

Green algae (Toxicity threshold 7-8 days):

Persistence/ degradability

This product can degrade rapidly in air. This substance is expected to be removed in wastewater treatment. Based upon data for a similar components or estimated data, this product is expected to biodegrade rapidly and be 'readily' biodegradable according to OECD guidelines.

Mobility

This product is highly volatile and will rapidly evaporate to the air if released into the water

Material Safety Data Sheet

Brake Clean

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

National Exposure Standards

The time weighted average concentration (TWA) for this product is: 600 mg/m³ (159 ppm), which means the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short-term exposure limit (STEL) is: Not specified, which is the maximum allowable exposure concentration at any time.

Biological limit values 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 filter mask to protect from overexposure by inhalation. A type "A" filter material is considered suitable for this product.

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 be worn when handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Clear, colourless liquid
Boiling Point/ Range	°C	75 - 115
Flash Point	°C	-15
Density @ 15°C	g/ml	0.720
Vapour Pressure @ 20°C	kPa	8.65
Explosive Limits (LEL – UEL)	%	1.0 – 7.0
Vapour Density @ 20°C	kPa	Not available
Autoignition Temperature	°C	> 200
Viscosity @ 20°C	cSt	Not applicable
Percent Volatiles	%	100%
Solubility with Water	% w/w	< 0.10

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

Material Safety Data Sheet

Brake Clean

Chemical Stability

Stable under normal conditions of use

Conditions to avoid

Sources of heat and ignition, open flames.

Hazardous decomposition products

No decomposition products except on burning. See "Fire Fighting Measures".

Hazardous reactions

Oxidizing agents, mineral acids, halogenated organic compounds. Combination with MEK will result in potentiated (greatly increased) health effects similar to those in ingestion and inhalation

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Prevent fluid 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 liquid 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 the ground water.
- Contain the spilled liquid with sand or earth.
- Recover 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

This product is 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 charge. Use grounding leads to avoid discharge (electrical spark).

Conditions for safe storage

Store in a cool, dry place away from direct sunlight. Do not pressurise, cut, heat or weld containers residual vapours are flammable. This product is flammable and will fuel a fire in progress.

Incompatible materials

Natural Rubber, Butyl Rubber, EPDM, Polystyrene

3. COMPOSITION: Information on Ingredients

Petroleum Spirit

64742-49-0

Chemical Ingredient	CAS No.	Proportion (%v/v)
Heptane and Isomers	various	32 - 36
Cyclohexane	110-82-7	25 - 27
n-hexane	110-54-3	15 - 20
Methyl Cyclohexane	108-87-2	< 10
Other ingredients determined not to be hazardous	various	< 10

4. FIRST AID MEASURES

For advice, contact Poisons Information Centre (Phone Australia: 13 1126) or a doctor.

Ingestion

If swallowed, DO NOT induce vomiting. Keep at rest. Seek immediate medical attention.

Eye Contact

Flush eyes with large amounts of water until irritation subsides. Seek immediate medical attention.

Skin Contact

Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing, including shoes, and launder before reuse. Seek medical attention for skin irritations.

Inhalation

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek immediate 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 Material Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media

Dry chemical or foam

Hazards from combustion products

Carbon dioxide and carbon monoxide

Precautions for fire fighters and special protective equipment

Full protective clothing and self-contained breathing apparatus

Hazchem Code:

3WE

1. IDENTIFICATION

Product Name:	Brake Clean
Other Names:	Petroleum spirit
Chemical Family:	Aliphatic, cycloparaffinic hydrocarbon
Molecular formula:	
Recommended Use:	Industrial solvent: cleaning and degreasing
Supplier:	Dyna Australia
ABN:	15631258607
Street Address:	94 /38-40 popes Road Keysborough , Victoria, 3173
Telephone:	(03) 97080023
Fax:	0405749145
Mobile Telephone:	
All other inquiries:	

2. HAZARDS IDENTIFICATION

Health Hazard Classification	C criteria	
This product is classified as hazardous under NOHS		
Hazard Category		
Xn: Harmful; Xi: Irritant		
Risk Phrases	R 48/20	
R 38	Irritating to skin	Harmful: Danger of serious damage to health by prolonged exposure through inhalation
R 62	Possible risk of impaired fertility	R 65 Harmful: May cause lung damage if swallowed
R 67	Vapours may cause drowsiness and dizziness	
Safety Phrases		
S 9	Keep container in a well ventilated place	S 16 Keep away from sources of ignition - No smoking
S 23	Do not breathe gas, fumes, vapour, or spray	S 24 Avoid contact with skin

Brake Clean

Material Safety Data Sheet

S 43A In case of dire use sand, earth,
chemical powder or foam

S 62 If swallowed, do not induce
vomiting: seek medical advice
immediately and show this
container or label

Dangerous Goods Classification

3

Poisons Schedule

5

Issue: March 2005

PRODUCT: Brake Clean

Other Names: Petroleum spirit

Uses: Industrial solvent: cleaning and degreasing

Pack Sizes: 20L,

UN No.	3295
Dangerous Goods Class	3
Subsidiary Risk	None
Pack Group	II
Hazchem	3WE
Poison Schedule	5

Hazardous Nature: This product is classified as hazardous under NOHSC criteria

Exposure Standards: TWA: 600 mg/m³ (159 ppm): STEL: Not specified

Physical Characteristics (Typical)

Section 9 of MSDS

Appearance	Clear, colourless liquid
Boiling Point/ Range (°C):	75 - 115
Flash Point (°C):	-15
Specific Gravity/ Density (g/ml @ 15°C):	0.720
Chemical Stability:	Stable under normal conditions of use
Reactivity:	No decomposition products except on burning. See "Fire Fighting Measures".

Product Ingredients

Section 3 of MSDS

Heptane and Isomers	various	32 - 36
Cyclohexane	110-82-7	25 - 27
n-hexane	110-54-3	15 - 20
Methyl Cyclohexane	108-87-2	< 10

For further ingredients information, please refer to the complete Section 3.

Risk Phrases

Section 2 of MSDS

R 38	Irritating to skin	R 48/20	Harmful: Danger of serious damage to health by prolonged exposure through inhalation
R 62			Possible risk of impaired fertility R 65 Harmful: May cause lung damage if swallowed
R 67	Vapours may cause drowsiness and dizziness		

For further ingredients information, please refer to the complete Section 2.

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
Poisonous Substance	Products that are classified under the poisons schedule are a poisonous substance. The proportion of the poison in the product will determine its numerical classification.

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 are not hazardous substances if they pose risks such as potential for misuse, like flammability, or explosions when heated and ignited.
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SUMMARY INFORMATION ONLY