



SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Engine Up
Other Names: Smith Lubricants Engine Formulation
Environmentally Hazardous Substance, Liquid, N.O.S.
(100% Liquid Hydrocarbon)
Recommended Use: Friction Modifier, Extreme Pressure Additive for engine oil.
Supplier: Smith Lubricants
Street Address: 26 Hall Street
Texas, Queensland 4385
AUSTRALIA
Telephone Number: +61 427 274 152

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

This material is hazardous according to criteria of Safe Work Australia. Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail. Hazardous Chemical according to the GHS 7 and WHS regulations. Dangerous Goods according to the ADG Code.
Combustible Liquid.

Risk Phrases: May cause harm to breastfed babies. Repeated exposure may cause skin dryness or cracking. Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.

Safety Phrases: Avoid contact with skin. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions safety data sheets.

Poisons Schedule: Not applicable

Classification

Reproductive Toxicity	Effects on or via lactation
Aquatic Hazard-Acute	Category 1
Aquatic Hazard - Chronic	Category 1

Label Elements including precautionary statements

Signal Word

WARNING



GHS Hazard Pictograms

Hazard Statement(s)

H362

May cause harm to breast fed children

H410

Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

P102

Keep out of reach of children

P103

Read label carefully and follow all instructions.

P201

Obtain special instructions before use

P260

Do not breathe mist/vapours/spray.

P264

Wash hands, face, and all exposed skin thoroughly after handling.

P270

Do not eat, drink, or smoke when using this product.

P273

Avoid release to the environment.

Precautionary Statements - Response

P101

If medical advice is needed, have product container or label at hand.

P301+P312

IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

P330

Rinse mouth.

P302+P352

IF ON SKIN: Gently wash with plenty of soap and water.

P304+P340

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

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P312

Call a POISON CENTER / Doctor if you feel unwell.

P331

DO NOT induce vomiting.

P362+P364

Take off contaminated clothing and wash before re-use.

Precautionary Statements - Storage

P403

Store in a well ventilated place



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Precautionary Statements - Disposal

P501 Dispose of contents/container in accordance to local, regional, national and international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Ingredient	CAS No.	Proportion % v/v
Distillates (petroleum), hydrotreated, light paraffinic	64742-55-8	>30 - <45
Alkanes, C14-17, chloro-	85535-85-9	>30 - <44
Trimethylolpropane, caprylate caprate triester	11138-60-6	< 20
Calcium Petroleum Sulfonate	61789-86-4	< 5

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

If vapours or fumes or decomposition products are inhaled remove from contaminated area.

- Move patient to a source of fresh air & keep calm.
- Remove contaminated clothing and loosen remaining clothing.
- Allow patient to assume most comfortable position and keep warm.
- Keep at rest until fully recovered.
- If rapid recovery does not occur, seek immediate medical assistance.

Skin Contact:

If skin contact occurs:

- Remove contaminated clothing and wash before re-use.
- Wash skin and hair thoroughly with running water.
- If irritation occurs, seek medical assistance.

Eye Contact:

If this product comes in contact with the eyes:

- Immediately rinse cautiously with water for several minutes.
- Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.



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Ingestion:

If swallowed do NOT induce vomiting.

- Immediately rinse mouth with water.
- If swallowed, DNOT induce vomiting. Give a glass of water.
- Seek medical assistance.

Symptoms Caused by Exposure

Symptoms/Effects:

Symptoms/Effects after
eye contact:

Eye irritation

Medical attention and special treatment:

Ingestion:

- Immediately rinse mouth with water.
- Give a glass of water.
- If vomiting occurs, give further water
- Seek medical assistance.

Skin Contact:

- Rinse with soap & water.
- If mild irritation occurs, apply a topical skin lotion to the effected area

Eye Contact:

- Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival cul-de-sacs. Irrigation should last at least 20-30 minutes. DNOT use neutralising agents or any other additives. Several litres of saline are required.

5. FIRE FIGHTING MEASURES

Heat and Vapours and incompatibility

- Non-Combustible liquid.
- Heating may cause expansion or decomposition leading to rupture of containers.
- A solid stream of water will spread the burning material.
- Material creates a special hazard because it floats on water.

Fire Fighting

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.



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Fire/Explosion Hazard

- Non-Combustible liquid.
- Vapour accumulation could flash and/or explode if in contact with open flame.
- Heating may cause expansion or decomposition leading to rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO), hydrogen chloride, chlorine. Combustible products include: carbon dioxide (CO₂) other pyrolysis products typical of burning organic material.
- Environmentally hazardous.

May emit acrid smoke.

Precautions for firefighters and special protective equipment:

- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.

Suitable Extinguishing Media:

- Water spray or fog.
- Foam.
- Dry powder.
- Carbon dioxide.
- Do not use water jet to extinguish flames as this will spread the fire.

Hazchem Code: · 3Z

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Protection

and Exposure: Refer to section 8

Environmental Precautions

Environmental Refer to section 12

Methods and materials for containment and clean up:

Minor Spills	<p>Clean up all spills immediately.</p> <p>Control personal contact with the substance, by using protective equipment.</p> <p>Contain and absorb spill with sand, earth, inert material, or vermiculite.</p> <p>Place in a suitable, labelled container for waste disposal.</p>
Major Spills	<p>Clear area of personnel.</p> <p>Isolate all possible sources of ignition.</p> <p>Alert Fire Brigade and tell them location and nature of hazard.</p> <p>Control personal contact with the substance, by using protective equipment as required.</p> <p>Prevent spillage from entering drains or waterways.</p> <p>Contain spill with sand, earth, or vermiculite.</p> <p>Collect recoverable product into labelled containers for recycling.</p> <p>Absorb remaining product with sand, earth, or vermiculite and place in appropriate containers for disposal.</p> <p>Wash area and prevent run off into drains and waterways.</p> <p>If contamination of drains occurs, advise emergency services.</p>

7. HANDLING AND STORAGE

Conditions for safe storage including any incompatibilities:

Safe storage:

- Check regularly for spills and leaks
- Store in original containers.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Provide good ventilation in process area to prevent formation of vapour. Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

Incompatible products & materials:

- Avoid contact with incompatible materials.
- Heat, sparks, flames
- Strong oxidisers.
- Refer Section 10.

Precautions for safe handling:

Safe handling:

- Do not breathe mist, vapours, spray.
- Protect containers against physical damage and check regularly for leaks.
- Wear protective clothing when risk of exposure occurs. The risk assessment should consider the work situation, handling methods, the physical form of the chemical, and other environmental factors that may be present.
- Use in a well-ventilated area.
- When handling, do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
- Always wash hands with soap and water after handling.
- Use good occupational work practice.
- Do not allow clothing wet with material to stay in contact with skin.
- Observe manufacturer's storage and handling recommendations contained within this SDS.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

None of the components have assigned exposure limits.

Engineering controls:

- Ensure ventilation is adequate to maintain air concentrations below exposure standards.
- Use explosion proof ventilation equipment.
- Prevent vapour concentrating in hollows or sumps.
- DNOT enter confined space where vapour may have collected.
- Keep containers closed when not in use.
- Ensure eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment:



Eye and face protection

- Safety glasses with side shields; or as required,
- Chemical goggles.
- Face shield.



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Skin protection

- See Hand Protection below

Hands/feet protection

- Nitrile or neoprene gloves
- The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Body protection

- See Other Protection below.

Other protection

- Barrier cream
- Eyewash unit

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half Face Respirator	Full Face Respirator	Powered Aire Respirator
UP to 10 x ES	AB-AUS	-	AB-PAPR-AUS Class1
UP to 50 x ES	-	AB-AUS/Class1	-
UP to 100 x ES	-	AB-2	AB-PAPR-2^

A (All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = acid gas or hydrogen cyanide (HCN), B3 = acid gas or hydrogen cyanide (HCN), E = Sulphur dioxide (SO₂), G = Agricultural chemicals, K = Ammonia (NH₃), Hg = Mercury, N= oxides of nitrogen, MB = Methyl bromide, AX = low boiling point organic compounds (below 65°C)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in

which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid, colourless to slight amber. Sweet ester odour.
Odour	Sweet, characteristic
Odour Threshold	Not Available
Physical State	Liquid – colourless to pale amber
pH	Not Available
Boiling point/range	>200(°C)
Melting/Freezing Point (°C)	Not Available
Flash Point (°C)	>260
Flammability	Not Available
Evaporation Rate	Not Available
Autoignition Temperature	Not Available
Decomposition Temperature	Not Available
Lower Explosion Limit (Vol%)	Not Available
Upper Explosion Limit (Vol%)	Not Available
Relative Density (Water=1)	1.12 @ 20°C
Solubility in water	Insoluble
Partition Coefficient	
n-octanol/water:	Not Available
Viscosity, cSt @ 20°C:	34
Vapour Pressure @ 40°C (Pa)	Not Available
Vapour Density (Air=1)	Not Available
Volatile Component (% vol)	Not Available

10. STABILITY AND REACTIVITY

Reactivity:	See Section 7
Chemical Stability:	See Section 7 Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of Hazardous Reactions	See Section 7 Hydrogen Chloride, chlorine compounds, carbon monoxide, carbon dioxide. The variable nature of the source material must be closely monitored and risk assessments done to ensure the chance of hazardous reaction is minimised.
Conditions to Avoid:	Heat, sparks, open flame, and other ignition sources.



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Incompatible materials: See Section 7
Strong Oxidisers. Alkali and alkaline earth metals.
See Section 7

Hazardous Decomposition Products
See Section 5
Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), acrid smoke.
Hydrogen Chloride, chlorine compounds.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:

- Accidental ingestion of the material may be damaging to the health of the individual.
- Swallowing can result in nausea, vomiting, diarrhoea, & irritation of the gastrointestinal tract.
- Small amounts of liquid aspirated into the respiratory system during ingestion or vomiting may cause bronchopneumonia or pulmonary oedema.

Eye contact:

- May be an eye irritant.

Skin contact:

- Contact with skin may result in irritation.
- Repeated exposure may cause dryness or cracking of the skin.

Inhalation:

- Material may be an irritant to the mucous membranes and respiratory tract.
- The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
- Inhalation of vapours can result in headaches, dizziness and possible nausea.

Chronic

- Mutagenicity: The material has been classified as not a mutagen.
- Carcinogenicity: The material has been classified as not a carcinogen.

Acute Toxicity

Oral	LD ₅₀ Oral (rat) > 5000 mg/kg
Dermal	Not Available
Inhalation	Not Available



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Skin corrosion/irritation	Not Available
Serious eye damage/irritation	The material has been classified as not corrosive or irritating to eyes.
Respiratory or Skin sensitisation	Inhalation: The material has been classified as not a respiratory sensitiser. Skin: The material has been classified as not a skin sensitiser.
Germ cell mutagenicity	The material has been classified as not a mutagen.
Carcinogenicity	The material has been classified as not a carcinogen.
Reproductive toxicity	The material has been classified as not a reproductive toxicant.
Aquatic Hazard	The material has been classified as a Category 1 hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Acute Toxicity: Very toxic to aquatic organisms. May cause long lasting harmful effects to aquatic life.

- Fish	Not Available
- Aquatic invertebrate	Not Available
- Algae	Not Available
- Microorganisms	Not Available

Chronic Toxicity:

- Fish	Not Available
- Aquatic invertebrate	Not Available
- Algae	Not Available
- Microorganisms	Not Available

Persistence and Degradability

Degradability: Water/Soil No information available.

Persistence: Air Low – oxidise by photo-chemical reactions in air

Bioaccumulative Potential

Bioaccumulation No information available.

Mobility in Soil

Mobility Expected to be mobile in soil. Floats on water.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Product/Packaging disposal

- 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.
- Consult state land waste authority for disposal.
- Recycle packaging where possible.

14. TRANSPORTATION INFORMATION

Labelling



Marine Pollutant	Yes
HAZCHEM	3Z

Land Transport:

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

UN No:	3082
Class-primary:	9 Miscellaneous Dangerous Goods
Packing Group:	III
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazchem Code:	3Z
Environmental Hazards (for Transport)	Environmentally Hazardous Substances meeting the descriptions of UN 3077 or 3082 are not subject to the provisions of the Australian Code for the Transport of



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Dangerous Goods by Road and Rail when transported by road or rail in packagings, IBC's, or any other receptacle not exceeding 500 kg(L).

Special Precautions For User Limited Quantity

Marine Transport:

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

UN No: 3082
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport Hazard Class:
IMDG Code Class 9
IMDG Subrisk Not Applicable
Packing Group: III
Environmental Hazards (for Transport)
Marine Pollutant
Special Precautions for User:
EMS Number F-A / S-F
Special Provisions
Limited Quantities

Transport in bulk according to Annex II of MARPOL and the IBC Code
Not Applicable

Air Transport:

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 3082
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport Hazard Class:
ICAO/IATA Class 9
ICAO/IATA Subrisk Not Applicable
ERG Code
Packing Group III
Environmental Hazards For Transport
Marine Pollutant
Special Precautions For User
Special provisions Not applicable
Cargo Only Packing Instructions
Cargo Only Maximum Qty/pack



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Passenger & Cargo Packing Instructions
Passenger & Cargo Maximum Qty/pack
Passenger and Cargo Limited Quantity Packing Instructions
Passenger and Cargo Limited Maximum Qty/pack

15. REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

- Ingredients are shown on regulatory lists
- Australia Exposure Standards
- Australia Hazardous Substances Information System - Consolidated Lists
- Australian Inventory of Chemical Substances (AICS)
- International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
- Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2
- Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4
- Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
- The Stockholm Convention (Persistent Organic Pollutants)
- International Convention for the Prevention of Pollution from Ships (MARPOL)

National Inventory Status

Australia – AICS:	Y
Canada – DSL:	Y
Canada – NDSL:	Y
China – IECSC:	Y
Europe – IENEC / ELINCS / NLP	Y
Japan – ENCS:	Y
Korea – KECL:	Y
Mexico – INSQ:	Y
New Zealand – NZIOC:	Y
Philippines – PICCS:	Y
Russia – ARIPS:	Y
Taiwan – TCSI:	Y
USA – TSCA:	Y
Vietnam – NCI:	Y

Y = All ingredients are on the inventory

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets)



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16. OTHER INFORMATION

This safety data sheet has been prepared by Smith Lubricants

Date of issue / Revision: 25th September 2023

This 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. Risks may be determined by reference to Exposures Scenarios, scale of use, frequency of use and current or available engineering controls must be considered.

Disclaimer

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