



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.

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: None allocated.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Ingredient	CAS No.	Proportion % v/v
Distillates(petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	30 - 50
Alkanes, C14-17, chloro-	85535-85-9	30 - 44
Butylated Hydroxy Toluene	128-37-0	< 10
Calcium Petroleum Sulfonate	61789-86-4	< 5

Issued: 1st July 2011
Revised: 10th September 2012

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:

Remove victim from area of exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

Eye Contact:

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice.

Medical attention and special treatment:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazards from combustion products:

Non-combustible material. Decomposes on heating emitting toxic fumes including those of hydrogen chloride, chlorine, oxides of carbon and other compounds of chlorine.

Precautions for fire fighters and special protective equipment:

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition. Decomposes on heating emitting toxic fumes. If safe to do so, remove containers from path of fire.

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal protein foam can be used.

Hazchem Code: • 3Z

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:

Wear protective equipment to prevent skin and eye contact. Clear area of all unprotected personnel. Avoid breathing in vapours. Work up wind or increase ventilation.

Methods and materials for containment and clean up:

Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Wash area down with high pressure hot water jet. If contamination of sewers or waterways has occurred advise local emergency services.

7. HANDLING AND STORAGE

Conditions for safe storage:

Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols.

Storage Life:

In excess of 2 years if stored in accordance with the advice given above.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

No value assigned for this specific material by the National Occupational Health and Safety Commission.

Engineering controls:

Use in well ventilated areas. If inhalation risk exists: Use with local exhaust ventilation or while wearing organic vapour respirator. Keep containers closed when not in use.

Personal Protective Equipment:

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors. Wear overalls, safety glasses and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. If risk of inhalation exists, wear organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear Liquid
Odour	Distinctive Sweet
pH	N/A (Organic Matrix)
Boiling point/range	165°C
Freezing Point (°C)	-9 (Pour Point)
Flash Point (°C)	Not applicable
Flammability	Not applicable
Autoignition Temperature	Not applicable
Volatile %	30-35%

Lower Explosion Limit (Vol%)	1.0%
Upper Explosion Limit (Vol%)	7.0%
Oxidising Properties	None
Vapour Pressure	>1.0
Relative Vapour Density(air=1.0)	>1.0@20 °C
Density (Kg/m ³)	1.09@20 °C
Solubility in water	Insoluble
Solubility in solvent	Partially Soluble in polar and non-polar organic solvents

10. STABILITY AND REACTIVITY

Chemical Stability:	The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Conditions to avoid:	Avoid exposure to heat, sources of ignition and open flame. Avoid contact with oxidising agents.
Incompatible materials:	Incompatible with strong oxidising agents.
Hazardous decomposition products:	Hydrogen Chloride. Oxides of carbon.
Hazardous reactions:	Hazardous polymerisation will not occur.

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:	No adverse effects expected, however, large amounts may cause nausea and vomiting.
Eye contact:	May be an eye irritant.
Skin contact:	Contact with skin may result in irritation. Repeated exposure may cause skin dryness or cracking.
Inhalation:	Where this material is used at elevated temperatures, vapour may cause irritation to mucous membranes of the respiratory tract, headache and nausea.

Long Term Effects:

Available evidence from animal studies indicates that repeated or prolonged exposure to this material could result in effects on the liver and kidneys.

Toxicological Data:

No LD50 data available for the product.

Material may accumulate in body tissues and fluids rich in lipid content hence may cause harm to breastfed babies.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Avoid contaminating waterways.

Aquatic toxicity: Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to local government authority for disposal recommendations. Dispose of material through a licensed waste contractor.

14. TRANSPORTATION INFORMATION

Road and Rail Transport:

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN No: 3082
Class-primary: 9 Miscellaneous Dangerous Goods
Packing Group: III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (100% Liquid Hydrocarbon)
Hazchem Code: · 3Z

Marine Transport:

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

UN No: 3082
Class-primary: 9 Miscellaneous Dangerous Goods
Packing Group: III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (100% Liquid Hydrocarbon)
IMDG EMS Fire: F-A
IMDG EMS Spill: S-F



SAFETY DATA SHEET

Air Transport:

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

UN No: 3082
Class-primary: 9 Miscellaneous Dangerous Goods
Packing Group: III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (100% Liquid Hydrocarbon)

15. REGULATORY INFORMATION

Classification: This material is hazardous according to criteria of Safe Work Australia; HAZARDOUS SUBSTANCE.

Hazard Category: Xn: Harmful
N: Dangerous for the Environment

Risk Phrase(s): R64: May cause harm to breastfed babies.
R66: Repeated exposure may cause skin dryness or cracking.
R50/53: Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

Safety Phrase(s): S24: Avoid contact with skin.
S60: This material and its container must be disposed of as hazardous waste.
S61: Avoid release to the environment. Refer to special instructions Safety Data Sheets.

Poisons Schedule: None allocated.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

This safety data sheet has been prepared by Bitron International Technical Services.

Date of issue / Revision: 10th September 2012
Reason for revision: Reflect change of principal business address

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Bitron International Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.