

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: Nulon Fuel Stabiliser and Algae Killer

Synonyms

Nulon Fuel Stabiliser & Algae Killer

Product Code

FSAK; FSAK-1

Recommended use: Fuel treatment.

Supplier: Nulon Products Australia

Street Address: Head Office
49 McIntyre Road
Sunshine VIC 3020
Australia

Telephone: +61 2 9608 7800 (Australia)
+64 9 828 3255 (New Zealand)

Website www.nulon.com.au

Email sds@nulon.com.au

Emergency Telephone number: Australia 1800 638 556 (24hr)
New Zealand 0800 154 166 (24hr)

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.



Signal Word

Danger

Hazard Classifications

- Flammable Liquids - Category 4
- Aspiration Hazard - Category 1
- Skin Corrosion/Irritation - Category 1B
- Eye Damage/Irritation - Category 1
- Sensitisation - Skin - Category 1A
- Germ Cell Mutagenicity - Category 2
- Carcinogenicity - Category 1B
- Specific Target Organ Toxicity (Single Exposure) - Category 3 Narcotic Effects
- Specific Target Organ Toxicity (Repeated Exposure) - Category 2
- Acute Hazard to the Aquatic Environment - Category 3
- Chronic Hazard to the Aquatic Environment - Category 2

Hazard Statements

- H227 Combustible liquid.
- H304 May be fatal if swallowed and enters airways.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H336 May cause drowsiness or dizziness.
- H341 Suspected of causing genetic defects .
- H350 May cause cancer (by inhalation).
- H373 May cause damage to organs through prolonged or repeated exposure.

Safety Data Sheet



H411 Toxic to aquatic life with long lasting effects.

Prevention Precautionary Statements

P102 Keep out of reach of children.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P260 Do not breathe mist, vapours or spray.
P264 Wash hands, face and all exposed skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing including eye/face protection and suitable respirator.

Response Precautionary Statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use water fog (or fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder) to extinguish.
P391 Collect spillage.

Storage Precautionary Statements

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal Precautionary Statement

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

Poison Schedule: S6. Poison

DANGEROUS GOOD CLASSIFICATION

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".

Dangerous Goods Class: 8

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Kerosine, petroleum, hydrodesulfurised	64742-81-0	30-60 %
Solvent naphtha, petroleum, heavy aromatic	64742-94-5	10-30 %
Reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2); [MBO] (*contains free formaldehyde)		10-15 %
*Formaldehyde	50-00-0	<6 %
Coconut diethanolamide	68603-42-9	1-10 %
Naphthalene	91-20-3	<5 %
2,6-di-tert-butylphenol	128-39-2	<1 %
Ingredients determined to be non-hazardous		Balance

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact: Effects may be delayed. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Ingestion: Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Immediately call Poisons Centre or Doctor.

Notes to physician: Treat symptomatically. Effects may be delayed. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

Hazchem Code: 2X

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Combustible liquid.

Fire fighting further advice: On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

If safe to do so, shut off all possible sources of ignition. Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Use a spark-free shovel. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods – Initial Emergency Response Guide No: 37

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

This material is classified as a Class 8 Corrosive as per the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and/or the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison Schedule 6 (Poison) and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m ³	ppm	mg/m ³	
Formaldehyde	1	1.2	2	2.5	Sen
Naphthalene	10	52	15	79	-
Oil mist, refined mineral	-	5	-	-	-

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Sen' Notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, APRON, CHEMICAL GOGGLES, RESPIRATOR.

Wear safety shoes, overalls, gloves, apron, chemical goggles, respirator. Use with adequate ventilation. If

inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from butyl rubber, nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid
Colour: Amber
Odour: Characteristic

Solubility in water: Insoluble
Density: 0.87 g/cm³ @ 15°C (typical)
Relative Vapour Density (air=1): N Av
Vapour Pressure (20 °C): N Av
Flash Point (°C): >61
Flammability Limits (%): N Av
Pour Point/Range (°C): N Av
Boiling Point/Range (°C): N Av
pH: N Av
Viscosity: N Av
Total VOC (g/Litre): N Av

(Typical values only - consult specification sheet)
N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents.

Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

Hazardous reactions: No known hazardous reactions.

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:

Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

Skin contact: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns. A skin

sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract. May cause lung damage if swallowed. Small amounts of liquid aspirated into the respiratory system during ingestion or vomiting may cause bronchopneumonia or pulmonary oedema.

Eye contact: A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury.

Acute toxicity

Inhalation: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >20 mg/L

Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Ingestion: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as a Category 1B Hazard (irreversible effects to skin).

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as a Category 1A Hazard (skin sensitiser).

Aspiration hazard: This material has been classified as Aspiration Hazard – Category 1

Specific target organ toxicity (single exposure): This material has been classified as a Category 3 Hazard. Exposure via inhalation may result in depression of the central nervous system.

Chronic Toxicity

Mutagenicity: This material has been classified as a Category 2 Hazard.

Carcinogenicity: This material has been classified as a Category 1B Hazard.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as a Category 2 Hazard.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as a Category Acute 3 Hazard. Acute toxicity estimate (based on ingredients): 10 - 100 mg/L

Long-term aquatic hazard: This material has been classified as a Category Chronic 2 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): 1 - 10 mg/L, where the substance is not rapidly degradable and/or BCF \geq 500 and/or log $K_{ow} \geq$ 4.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL 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: 3267
Dangerous Goods Class: 8
Packing Group: III
Hazchem Code: 2X
Emergency Response Guide No: 37

Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2); [MBO])

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.

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.



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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: 3267
Dangerous Goods Class: 8
Packing Group: III

Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2); [MBO])

15. REGULATORY INFORMATION

This material/constituent(s) is covered by the following requirements:

- The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth).
- All components of this product are listed on or exempt from the Australian Inventory of Industrial Chemicals (AIIC).
- All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC).

HSNO Group Standard: HSR002494 - Additives, Process Chemicals and Raw Materials (Corrosive, Combustible, Toxic [6.7]) Group Standard

16. OTHER INFORMATION

Reason for issue: Revised

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.