

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **BITRON D110 DIESEL FUEL TREATMENT**

Other Names: Environmentally Hazardous Substance, Liquid, N.O.S. (2-Ethylhexyl Nitrate)

Recommended Use: Performance additive for petroleum distillate fuels and organic blends, diesel fuel injection system cleaner

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.

Hazard Category: Harmful. Dangerous to the environment.

Risk Phrases: May be fatal if swallowed and enters airways. Harmful by inhalation, in contact with skin, and if swallowed. Irritating to skin, eyes and respiratory tract. 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. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label. Avoid release to the environment. This material and its container must be disposed of as hazardous waste.

Dangerous Goods Class.: 9

Poisons Schedule: 5

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Ingredient	CAS No.	Proportion % v/v
Distillates(petroleum), hydrotreated light	64742-47-8	30 - 60
2-Butoxyethanol	111-76-2	30 - 60
2-Ethylhexyl Nitrate	27247-96-7	10-30
Proprietary, Non-Hazardous	-	<10
Solvent Naptha (petroleum), heavy aromatic	64742-94-5	<2
Solvent Naptha (petroleum), light aromatic	64742-95-6	<2

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. Seek immediate medical attention.

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:

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

Medical attention and special treatment:

Treat symptomatically. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Hazards from combustion products:

Oxides of carbon. Nitrogen oxides.

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. If safe to do so, remove containers from path of fire. Spray storage vessels with waters to maintain temperature below 100°C.

Suitable Extinguishing Media:

Alcohol resistant foam is the preferred fire fighting medium but, if it is not available, normal protein foam can be used.

Hazchem Code: • 3Z

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 combustible. 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 combustible. This product will fuel a fire in progress.

Incompatible materials:

Natural Rubber, Butyl Rubber, EPDM, Polystyrene

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	Liquid
Colour	Light Brown
Odour	Characteristic
pH	Not Available
Boiling point/range	165°C
Freezing Point (°C)	Not Available
Flash Point (°C)	77°C
Autoignition Temperature	Not Available
Volatile %	>80%
Lower Explosion Limit (Vol%)	1%
Upper Explosion Limit (Vol%)	10%
Vapour Pressure	<1.0
Relative Vapour Density(air=1.0)	>1.0@20 °C
Density (Kg/m3)	0.83@20 °C
Solubility in water	Partially Soluble

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 and reducing agents.
Hazardous decomposition products:	Oxides of carbon. Other organic complexes on incomplete combustion. Oxides of nitrogen.
Hazardous reactions:	Alkalis and heat. Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

Small amounts of liquid aspirated into the lungs during ingestion, or from vomiting, may cause chemical pneumonitis, or pulmonary oedema. Ingesting any amount of this product will result in headaches, nausea, dizziness, and tracheal burning.

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

Repeated over exposure may cause hemolysis of the red blood cells leading to possible liver and kidney damage. Because of its irritating and defatting properties, this material may exacerbate an existing dermatitis (Group 2B).

Other Health Effects Information

Persons with pre-existing skin or respiratory conditions may be sensitive to this product.

Toxicological Information

Oral LD50: Oral: > 2000 mg/kg (rat); Dermal: > 2000 mg/kg (rabbit)

Dermal TCLo: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Toxicity

Fish Toxicity (rainbow trout, goldfish, bluegill):	LC50(96hr): Naphthalene: Rainbow Trout (EC50): 1600 µg/L
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Daphnia Magna EC50 (24 hr):
Blue-green algae (Toxicity threshold 7-8 days):
Green algae (Toxicity threshold 7-8 days):

Naphthalene: EC50: 15000 µg/L
Naphthalene: 14851 µg/L
Naphthalene EC50: 25000 µg/L

Persistence/ degradability

Evaporates to the atmosphere and degrades with exposure to UV light.

Mobility

If product enters soil, it will be highly mobile and may contaminate groundwater

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. 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. (2-Ethylhexyl Nitrate)
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. (2-Ethylhexyl Nitrate)
IMDG EmS Fire: F-A

Issued: 1st July 2011

Revised: 10th September 2012

IMDG EmS Spill: S-F

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. (2-Ethylhexyl Nitrate)

15. REGULATORY INFORMATION

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

Hazard Category: Harmful. Dangerous for the Environment

Risk Phrase(s): May be fatal if swallowed and enters airways. Harmful by inhalation, in contact with skin, and if swallowed. Irritating to skin, eyes and respiratory tract. Repeated exposure may cause skin dryness or cracking. Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.

Safety Phrase(s): Avoid contact with skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label. Avoid release to the environment. This material and its container must be disposed of as hazardous waste.

Poisons Schedule: 5

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.

Issued: 1st July 2011

Revised: 10th September 2012