ENOC LUBRICANTS

Version No. 1
Revision Date
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Material Safety Data Sheet

Product Name **ENOC VULCAN** 330

Product Code **200 0**22

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY

Product Name	ENOC VULCAN 330
Viscosity	SAE 30
Application	DIESEL ENGINE OIL
Company Identification	**ENOC International Sales LLC** **ENOC Complex, Sheikh Rashid Road,** **P.O. Box: 6442, Dubai**

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2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPOSITION: **Blended with mineral base oil BS 150 & SN 500 CAS 64742-65-0 at 95% with additive concentrate at 5 %.**

Chemical nature: **Petroleum derived severely refined mineral base product in which polycyclic aromatic hydrocarbons (PCA or PAH) content measured by IP 346 is above 3%.**

Substance contributing to hazards: **None to our knowledge in normal use.**

Impurities contributing to hazards: **None to our knowledge.**

3. HAZARDS IDENTIFICATION

According to experience the product is considered to be harmless to health if handled correctly.

4. FIRST AID MEASURES

General Information	Remove contaminated clothing immediately, to be disposed of or washed before reuse.
Inhalation	If inhaled, provide fresh air, warmth, rest and medical advice if necessary.
Skin Contact	Clean areas of skin affected with soap and copious water. If necessary seek medical advice.
Eye Contact	In case of contact with eyes, rinse immediately with plenty of water until irritation subsides.
Ingestion	Allow the patient to vomit on his own accord. Give copious water to drink and seek medical help if necessary.

5. FIRE FIGHTING MEASURES

Extinguishing Media To suit local surroundings (eg water spray, carbon dioxide foam, chemical powder).

Special Exposure Hazard Decomposition products released in a fire should be considered as probably harmful if inhaled (see Stability and Reactivity section)

Protective Equipment Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Methods for Cleaning Up Remove all sources of ignition. Take up with absorbent material, eg sand, sawdust and dispose of as prescribed. Do not allow to get into waste water or waterways; if this occurs, inform the relevant authority at once.

7. HANDLING & STORAGE

Advice on Safe Handling Handle in accordance with good hygiene and safety practice. Avoid prolonged temperatures > 65°C and heat sources of > 110°C.

Advice on Protection against Fire & Explosion Keep away from sources of ignition – NO SMOKING!

Storage Conditions Ensure adequate ventilation of storage area. Keep container tightly closed, cool (< 75°C) and dry.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Controls Monitoring of the workplace should be considered in accordance with EH40 (or equivalent) Controls.
LTEL (8 hour TWA): 5 mg/m^3 (EH40, 1998)
STEL (15 min): 10 mg/m^3 (EH40, 1998)
OES data for oil mist, mineral
In addition the Reciprocal Calculation Procedure (RCP) for hydrocarbons should be considered (EH40, 1998)

Engineering Controls Ensure adequate ventilation of working area eg Local Exhaust Ventilation.

Personal Protection Observe normal safety standards for handling chemicals. Avoid inhalation of vapour. Avoid contact with skin and eyes. Wear personal protective equipment appropriate for the task eg gloves, safety goggles, respirators (eg if ventilation is inadequate), appropriate overalls.

9. PHYSICAL & CHEMICAL PROPERTIES

Specific Gravity	Approx. 0.89 (ASTM D1298 at 15°C)
Auto-ignition Temperature	N/A
Vapour Pressure	N/A
Toxicity	N/A
Relative Density	N/A
Boiling Point	N/A
Pour Point	-12°C (ASTM D97)
Flammability	N/A
Flash Point	ASTM D92: 232°C (open cup)
Viscosity	At 100°C: approx. 11.90 mm^2/s (ASTM D445)
Viscosity	At 40°C: approx. 109.4mm^2/s
KOH content	11.2 mg/g (TBN ASTM 2896)
pH	N/A
Solubility	In water: negligible
Description	Brown liquid with petroleum like odour.

10. STABILITY & REACTIVITY

Stability	N/A
Thermal Decomposition	Not determined
Conditions To Avoid	N/A
Material To Avoid	N/A
Hazardous Reactions	The product does not undergo hazardous polymerisation.
Hazardous Decomposition Products	Oxides of carbon, aldehydes, ketones, and small amounts of hydrogen sulphide. Following combustion, oxides of nitrogen, and sulphur will be released.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	No acute toxicological data are available. LD_{50} rat (oral): N/A LD_{50} rat (i.v.): N/A
Dermal Compatibility	N/A
Mucous Membrane Compatibility	N/A

12. ECOLOGICAL INFORMATION

Ecotoxicology Ecotoxicological data are not available.

Further Ecological Information N/A

Further Information The product must not enter ground or waste water. If this occurs, inform the local authority at once.
Calcium content: approx. 0.33% by mass (atomic absorption)

13. DISPOSAL CONSIDERATIONS

Advice on Disposal In accordance with national and local authority regulations, eg special waste or incineration after consultation with the operators.

Contaminated Packaging Treat emptied containers in the same way as the product, or if possible wash out thoroughly and recycle.

14. TRANSPORT INFORMATION

Transportation Measures Not determined

15. REGULATORY INFORMATION

Classification & Labelling Product is not classified in accordance with the Chemical (Hazard Information and Packaging for Supply Regulations (CHIP 97).

Risk Phrases N/A

Safety Phrases N/A

16. OTHER INFORMATION

Date of Issue 20/10/2005

General Summary

N/A

This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirements. It should not be construed as guaranteeing specific properties.