

MATERIAL SAFETY DATA SHEET

CHIEF OIL ZUNI BIO

Date issued: 24/08/2004

Date revised: 28/08/2008



Directive 91/155/EEC

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY

1.1 Identification of the substance or preparation:

Product name: CHIEF OIL ZUNI BIO

1.2 Use of the substance or preparation:

Hydraulic oil

1.3 Company/undertaking identification:

Ruscoforce NV
Industrieweg 2
BE-3620 Lanaken
Belgium
Phone: +32 - (0)89 - 370.550
Fax: +32 - (0)89 - 370.556
e-Mail: info@ruscoforce.com

1.4 Emergency telephone:

Poisons Centre
Rue Bruynstraat
B -1120 Brussel / Bruxelles
Belgium
Phone: +32 - (0)70 - 245 245

2. HAZARDS IDENTIFICATION

Injurious consequences on health : under normal conditions this product is not harmful.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Components | EC nr | CAS no | Weight % | Symbol | R - phrases |
|--------------------------|-------------|-------------|-------------|--------|----------------|
| dodecylmethacrylate | 205-570-6 | 142-90-5 | 0 ... 0,025 | Xi;N | 36/37/38-50/53 |
| Long-chain alkenyl amine | Proprietary | Proprietary | 0 ... 0,1 | Xn;N | 22-35-50 |
| Alkyl fosfonate | Proprietary | Proprietary | 0 ... 0,05 | Xi;N | 38-41-51/53 |
| Alkyl dithiothiadiazole | Proprietary | Proprietary | 0 ... 0,01 | Xi | 43 |
| Long chain alkyl acid | Proprietary | Proprietary | 0 ... 0,05 | Xi | 38-41 |
| Long chain alkyl ester | Proprietary | Proprietary | 0 ... 0,05 | Xi | 38-41 |
| Alkyl phenol | Proprietary | Proprietary | 0 ... 0,3 | Xi; N | 50/53 |
| alkyl phosphate | Proprietary | Proprietary | 0 ... 0,05 | C | 34 |

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4. FIRST AID MEASURES

Inhalation:

In case of inhalation of fumes, terminate the exposure and go in de fresh air immediately.
Inhalation of fumes, vapours or aërosols can cause slight irritation of the respirations ways.

Ingestion:

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
Do not give water.

Skin contact:

Remove contaminated clothing and wash thoroughly the skin with soap or detergent and water.
Wash thoroughly the skin with water and soap.

Eye contact:

Flush thoroughly with running water during 15 minutes (including under eyelids).

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

CO2 , foam or dry chemicals.

Extinguishing media which must not be used for safety reasons:

Do not use water jet.

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:

Smoke and carbone monoxide may be formed in the event of incomplete combustion.

Special protective equipment for fire-fighters:

Wear an approved autonomous breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Avoid contact with skin and eyes.
Take off immediately all contaminated clothing.

Environmental precautions:

Prevent this product from entering into contact with surface waters

Methods for cleaning up:

To clean the floor and all objects contaminated by this material, use sand, active clay .

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7. HANDLING AND STORAGE

7.1 Handling

A sufficient ventilation must guarantee an exposure which do not exceed the acceptable limit.

Keep away from combustibile material.

Keep away from food, drink and animal feeding stuffs.

Take precautionary measures against static discharges.

7.2 Storage

Keep away from sources of ignition - No smoking.

Store in a closed packing and away from heath sources.

Avoid high temperatures and humidity.

Keep container tightly closed and dry.

7.3 Specific use(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure limit values

Sufficient ventilation should be provided in order to maintain fumesconcentration in the air bellow the occupational exposure limit.

8.2 Exposure controls

8.2.1 Occupational exposure controls

8.2.1.1 Respiratory protection:

Inhalation of vapours or fumes has to be avoided through accurate ventilation and safe working circumstances.

8.2.1.2 Hand protection:

Wear rubber gloves.

8.2.1.3 Eye protection:

Wear safety glasses if eye contact is possible.

8.2.1.4 Skin protection:

Overall, or similar full-body work clothes, gloves and shoes.

8.2.2 Environmental exposure controls

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Appearance: liquid
Odour: petroleum hydrocarbon odour

9.2 Important health, safety and environmental information

pH: Not applicable
Boiling point / boiling range: Not applicable
Flash point: > 200°C (ASTM D93)
Flammability (solid, gas): Not applicable
Explosive properties:

Oxidizing properties: Not applicable
Vapour pressure: Not applicable
Relative density: Density : approx 0.900
Solubility: - watersolubility: insoluble in water
Solubility: - fatsolubility (solvent-oil): insoluble in water
Partition coefficient (n-octanol/water): Not applicable

9.3 Other information

Miscibility: Mixes with similar oils.
Conductivity: Not applicable
Melting point / melting range: Not applicable
Gas group: Not applicable
Auto-ignition temperature: > 300°C
Other data: Viscosity : 46 cSt at 40°C

10. STABILITY AND REACTIVITY

- 10.1 Conditions to avoid:** Keep away from heat sources, open flames and other sources of ignition.
- 10.2 Materials to avoid:** Avoid contact with strong oxidants.
- 10.3 Hazardous decomposition products:** Incomplete burning can cause formation of dangerous gasses like CO, CO₂, different KWS, aldehyde and also soot.

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11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Inhalation of dust or smoke may cause irritation of the respiratory tract.

Low odour of acute/systematic toxicity.

Prolonged and repeated contact can degrease the skin and cause dermatitis at the end.

Slight irritation possible.

CHRONIC TOXICITY

Unknown

Unknown

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

Aquatic organisms, Algea IC50 (72 h): Unknown

Aquatic organisms, Daphnia magna EC50 (48h): Unknown

Aquatic organisms, Fish LC50 (96h): Unknown

Plants and terrestrial animals: Unknown

Soil organisms: Unknown

Impact on sewage treatment plants: Unknown

12.2 Mobility:

Known or predicted distribution to environmental compartments:

Low range of mobility in the soil. Some components can penetrate the soil and cause pollution of the ground water.

Surface tension: Not applicable

Absorption/adsorption: Not applicable

12.3 Persistence and degradability:

Easily biodegradable.

12.4 Bioaccumulative potential:

Baseoil components are probably not dangerous for waterorganisms. Some additifs may be dangerous for the aquatic environment.

12.5 Other adverse effects:

Ozone depletion potential: Not applicable

Photochemical ozone creation potential: Not applicable

Global warming potential: Not applicable

13. DISPOSAL CONSIDERATIONS

Waste disposal methods must comply with national and local disposal or discharge laws.

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14. TRANSPORT INFORMATION

UN - number: PRODUCT IS NOT CLASSIFIED

Proper shipping name:

IMDG

Class:

Other applicable information:

Marine pollutant:

ADR

Class:

Other applicable information:

RID

Class:

Other applicable information:

ICAO/IATA

Class:

Other applicable information:

15. REGULATORY INFORMATION

This Safety Data Sheet has been established in accordance with E. C. Directive nr. 91/155/ECC

Danger symbol:

Risk - sentences:

Safety - sentences:

Please refer to any other national regulations that may be applicable for this product.

Other regulatory information:

No R or S senses applicable

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16. OTHER INFORMATION

Training advice:

Recommended restrictions on use:

Further information (written references and/or technical contact point):

FULL TEXT OF RISK PHRASES APPEARING IN SECTION 2

R 22 : Harmful if swallowed

R 34 : causes burns

R 35 : Causes severe burns.

R 36/37/38 : Irritating to eyes, respiratory system and skin.

R 41 : Risk of serious eye damage.

R 43 : May cause sensitisation by skin contact.

R50-53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Source of key data used to compile the data sheet:

Information added, deleted or revised:

These data are based upon our knowledge at this moment. It is however no guarantee for product properties and do not have a contractual agreement.

The buyer assumes all risk in connection with the use and handling of the material.

The seller assumes no responsibility or liability in connection with the information supplied in this sheet or for any damage or injury caused by the material; reasonable safety procedures should be followed.

The seller assumes no responsibility for injury or damage caused by use of the material, even if reasonable safety procedures are followed.

The information contained in this sheet is developed from what is believed to be accurate and reliable sources but the seller makes no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein.