TOTAL FINA ELF

Safety Data Sheet

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PRODUCT LABELS

LABELLING (standard or EU) Not applicable TRANSPORT LABELLING: Not applicable

1. Product and company identification

Commercial name: MULTIS EP 1

Product application: Extreme-pressure grease

Company name: TOTALFINAELF LUBRIFIANTS

Address: 16, rue de la République 92800 PUTEAUX

FRANCE

Emergency number of the company: 33 (1)41.35.40.00

Fax: 33 (1)41.35.84.71

See local particulars at end of sheet

Emergency phone numbers : - Centre anti-poisons : ORFILA (FRANCE): 33 (0) 1.45.42.59.59

2. Composition / information on ingredients

PREPARATION

Chemical nature: Petroleum-derived severely refined mineral-base product

in which the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP

346, is less than 3%

Subtances contributing to hazards: Zinc alkyl di-thiophosphate (Xi; R 41) ... max. 2.0 %

3. Hazard identification

- Adverse human health effects: Under normal conditions of use, the product holds no danger of intoxication

- Environmental effects : Don't rejet this product into the environment

- physical and chemical hazards : No specific risk of fire or explosion under normal contitions of use

4. First-aid measures

IN CASE OF SERIOUS MANIFESTATIONS, CALL IN A DOCTOR OR EMERGENCY MEDICAL CARE

Route of exposure:

- Inhalation : Inhalation of heavy concentrations of vapour, fumes or spray, may cause mild irritation of

the throat.

Transport the person into fresh air, keep warm and allow to rest

- Contact with the skin: Immediately remove all soiled or stained clothing

Wash the affected area immediately and repeatedly with soap and water.

If the skin is exposed to high-pressure spray, the product may enter the human organism.

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In all such cases the affected person must be taken to hospital, even if no sign of injury can

be detected

- Contact with the eyes: Keep eyes open and rinse immediately and repeatedly with water for at least 15 minutes

Possible risk of vomiting and diarrhoea

Do not induce vomiting to avoid the risk of aspiration into the respiratory tract

Give nothing to drink

5. Fire-fighting measures

Flash point: See heading 9

Fire extinguishers:

- Ingestion:

- suitable : Foam, carbon dioxide (CO2), powder

- not suitable : do not use water jets (stick jets) for extinguishing fire since they could help to spread the

flames.

Specific hazards: Incomplete combustion and thermolysis produce toxic gases such as CO, CO2, various

hydrocarbons, aldehydes, chlorinated or other compounds, and soot. These are highly

dangerous if inhaled

Firefighter protection: An insulated breathing apparatus must be worn in confined premises with heavy

concentrations of fumes and gases

6. Accidental release measures

See also heading 8 and 13 After spillage / leakage

- on soil Surfaces on which the product has been spilled may become slippery

Avoid discharge of the material in a stream or a sewer or cause ground contamination.

recovery by physical means

Contain and collect the spilled product with sand or any other inert material.

In the event of a major spill, inform the competent authorities if the situation cannot be

brought under control rapidly and efficiently

- on water If the material has been discharged into a stream or a sewer, inform the authorities of the

possible presence of floating materials

7. Handling and storage

HANDLING

- Technical measures :

. prevention of user exposure Provide adequate ventilation in case of the potential formation of vapour, fumes, mist or

spray

Take all measures to reduce the risk of exposure, in particular to used or waste product

Keep away from flammable material; keep away from food and beverages

. Prevention of fire and explosion Empty containers may contain flammable or explosive vapours

There is a fire hazard associated with rags, paper or any other material used to remove spills

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which become soaked with product

Avoid accumulate of these: they are to be disposed off safely after use

- Precautions : Avoid static electricity build up with connection to earth.

Set up machinery and equipment so as to avoid the risk of accidental spills or splashes onto

hot machine parts and electrical contacts (on joint failure, for example)

- Safe handling advice: Avoid contact with strong oxidizing agents

Use only hydrocarbon-resistant containers, joints, pipes etc...

STORAGE

- Technical measures: Make the necessary arrangements and take all measures to prevent water and ground

pollution

- Storage conditions :

. Suitable Store at room temperature, protected against contact with water and moisture, and away

from any source of ignition

Keep containers closed when not in use

Do not store exposed to the elements

- Incompatible products : Dangerous reaction with strong oxidizing agents

- Packaging materials :

. To be avoided

. Recommended Use only hydrocarbon-resistant containers, joints, pipes, etc.

Keep in original container if possible

Otherwise, transfer all indications on the regulatory label to the new container

8. Exposure controls / personal protection

Engineering measures: Use the product in well-ventilated premises

When working on enclosed place (tanks, reservoirs...), make sure that atmosphere is not

sufocating and/or wear recommend eqipment

Personal protective equipment

- Hand protection: Impermeable hydrocarbon-proof gloves

recommended material: nitrile, neoprene

- Eye protection: Goggles, in case of splashing

- Skin and body different hand protection:

As required, wear a face mask, hydrocarbon-proof clothing, and safety boots (when handling

arums)

Don't wear ring, watch or similar thing which will be able to hold the product and may give

rise to some skin diseases

Industrial hygiene Avoid prolonged and repeated contact with the skin, especially with used or waste product

Immediately remove all soiled or stained clothing.

If the product comes into contact with the skin, wash the affected area immediately and

repeatedly with soap and water

Use no abrasives, solvents or petroleum spirit

Do not use cloths stained with the product to dry hands

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Dont put the product-soaked rags in the pockets of working clothes

Do not eat, drink or smoke while handling the product

9. Physical and chemical properties

Appearance:

- Physical state: Pasty
- Colour: Brown
Odour: Characteristic

- Drop point: >= à 180 °C (ISO 2176)

Flash point: Not applicable

Auto-ignition temperature: > 250°C (ASTM E 659)

This temperature may be significantly lower under particular conditions (oxidation on high

surface areas)

Explosion limits: Not applicable

Density: About 900 kg/m3 at 15°C

Solubility:

- in water: Insoluble and immiscible

- in organic solvents: Soluble in many common solvents

10. Stability and reactivity

Stability: The product is stable under normal temperatures of storage, handling and use

Dangerous reactions: Not dangerous reaction known under normal conditions of use, to refer to the technical

notice

- Conditions to avoid: Heat, sparks, ignition points, flames, static electricity.

- Materials to avoid: Avoid contact with strong oxidizing

Dangerous decomposition products: Incomplete combustion and thermolysis produce more or less toxic gases such as CO, CO2,

various hydrocarbons, aldehydes and soot

11. Toxicological information

ACUTE TOXICITY/LOCAL EFFECTS

- Inhalation: Risk is improbable under normal conditions of use

Inhalation of important concentration of vapour or aerosols may cause irritation of the

upper respiratory tract.

- Contact with the skin: Risk is improbable under normal conditions of use

If the skin is exposed to high-pressure spray, the product may enter the human organism. In all such cases the affected person must be taken to hospital, even if no sign of injury can

be detected

- Ingestion: In case of ingestion of small quantities, no important effect observed. in case of ingestion

of larger amounts: abdominal pain, diarrhoea, ...

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SENSITIZATION To our knowledge, the product dont induce sensitization

CHRONIC TOXICITY OR LONG-TERM TOXICITY

- Contact with the skin: Characteristic skin affections (oil blisters) may develop following prolonged and repeated

exposure through contact with stained clothing

- Carcinogenecity: this product is not regarded as carcinogenic.

12. Ecological information

Mobility:

- Air: there is a slow loss by evaporation.

- Ground: Given its physical and chemical characteristics, the product has not soil mobility.

- Water: The product is insoluble; it spreads on the surface of the water

Persistence and degradability: Experimental data on the finished product are not available

However, the "mineral oil" portion of the virgin product is intrinsically biodegradable.

Particular ingredients may not be biodegradable

Ecotoxicity: The virgin product is considered to present no danger for land-growing organisms.

It is considered to present a little danger for aquatic life.

no information available for used product

13. Disposal considerations

Waste disposal: Dispose in a safe manner in accordance with local/national regulations

If need be, collection by an authorized waste contractor and regeneration or incineration in

an approved installation

Used packaging disposal : Conform to the regulation in effect

14. Transport information

UN Number: unregulated

Road (ADR) / Rail (RID) / River (ADNR)

Marine (IMO-IMDG)

Not restricted for transport.

Not restricted for transport.

Not restricted for transport.

15. Regulatory information

EUROPEAN REGULATIONS

- EC labelling

- Symbol(s) None
- R Phrase(s) None
- S Phrase(s) None

16. Other information

This data sheet conforms to standards defined by directive 93/112/EEC

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Date of current version: 09/08/2001 Supersedes previous Safety Data Sheet of: 09/12/1998

Emergency phone numbers: +44.(0)171 635 91 91 / Nantional Poisons Information Service LONDON

+44 1222 70 99 01 / Welsh National Poisons Unit CARDIFF

+44 131 536 23 00 / Scottish Poisons Information Bureau EDINBURGH

+44 1 232 24 05 03 / Regional drug and poisons Information Service BELFAST

+353 1 837 99 64 / Poisons Information Centre DUBLIN

"This Safety Data Sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of ou knowledge at the date indicated hereabove.

It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.

The information given herein in no way dispenses the user from knowing and applying all provisions regulating his or her activity. The user bears sole liability for the precautions required when using the product.

The regulatory texts indicated herein are intended to aid the user to fulfill his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned."

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