

PRODUCT: SINGER OIL

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Date: 16/01/2007

N.º FDS: SdB 001

Version: 1.0

Cancel and supersedes: All previous versions

1 – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Singer Oil
Internal ID code: 20003-600
Company Name: SINGER DO BRASIL IND. E COM. LTDA
Address: Estrada Municipal João Henrique Schultz, s/nº (Cardeal), Elias Fausto – S.P

2 – COMPOSITION AND INFORMATION ON INGREDIENTS

PREPARATION

Chemical Characteristics: Basic lubricant oil;
Ingredients or impurities that may contribute to hazards: Heavy paraffin hydrocarbon: 65% (p/p);
Naphthenic hydrocarbon: 27% (p/p);
Aromatic hydrocarbon: 8% (p/p);
Sulfur (CAS 7704-34-9): 0.3% (p/p).

3 – HAZARD IDENTIFICATION

MOST IMPORTANT HAZARDS

- Specific hazards: Product with low toxicity.

PRODUCT EFFECTS

Adverse effects to human health: Product with low toxicity.

4 – FIRST AID

Inhalation: Remove victim to well ventilated area. If the victim is not breathing apply artificial breathing procedures. If the victim is breathing albeit with difficulty, administer oxygen at a flow of 10 to 15 liter/minute. Look for medical aid immediately, taking along the product label whenever possible.

Contact with skin: Immediately remove contaminated clothing and footwear. Wash the skin with abundant water for at least 20 minutes, preferably under an emergency shower. Look for medical aid immediately, taking along the product label whenever possible.

Contact with eyes: Wash eyes with abundant water, for at least 20 minutes, keeping the eyelids separated. Preferably use an eye washer. Look for medical aid immediately, taking along the product label whenever possible.

Ingestion: Do not provoke vomit. If the victim is conscious, wash mouth with abundant clean water and make the individual swallow water. Look for medical aid, taking along the product label whenever possible.

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5 – FIRE FIGHTING STEPS

Appropriate extinction methods:	Foam for hydrocarbon, water mist, chemical powder and carbon hydroxide (CO ₂).
Inadequate extinction methods:	In fires involving this product, do not enter a closed space without adequate individual protection equipment, including autonomic air set.
Specific hazards:	Normal combustion produces carbon dioxide (CO ₂), air vapor, sulphur oxide and nitrogen. Incomplete combustion may produce carbon monoxide.
Special methods:	Cool with water mist the recipient exposed to fire. Remove recipients from the fire area, if this is feasible without risk.
Firemen protection:	In closed environments, use rescue equipment with air supply.

6 – STEPS FOR THE CONTROL OF SPILLING OR LEAKAGE

PERSONAL PRECAUTIONS:

- Removal of ignition sources:	Eliminate all the ignition sources, avoid sparks, flashes, and flames and do not smoke inside the hazardous area. Isolate spilling from all ignition sources.
- Powder control	Not applicable (liquid product).
- Prevention of inhalation and contact with skin, mucous membranes and eyes:	Wear boots, waterproof clothes and gloves, safety goggles hermetic for chemicals and adequate breathing protection.

ENVIRONMENTAL PRECAUTIONS:

Stop leakage if this is possible at no risk. Do not direct the spilled material to any public sewage system. Avoid the possibility of pollution of surface water or springs. Restrict the spill to the smallest possible area. Dragging with water should take into account the subsequent treatment of the contaminated water. Avoid this procedure.

CLEANING METHODS:

- Recovery:	Collect the product in an emergency container, duly labeled and well closed. Keep the recovered product for later discard.
- Neutralizing:	Absorb with earth or other absorbent material.
- Discarding:	Do not discard with common garbage. Do not discard in the sewage system or in watercourses. Confine, if possible, for subsequent recovery or discarding. The final discard of this product should be supervised by an specialist and comply with the prevailing environmental legislation.

NOTE:

Contact the local environmental agency in the event of spills or contamination of surface water, springs or soil.

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7 – HANDLING AND STORAGE

HANDLING

Technical steps:

Provide exhausting local ventilation where processes so require. All the system conducting elements that have contact with the product should be earthed for electrical protection. Use non-sparking tools.

- Prevention of workmen exposure:

Use individual protection equipment (IPE) to avoid direct contact with the product.

- Guidelines for safe handling:

Handle complying with the general safety and industrial hygiene regulations.

STORAGE

Technical steps:

The storage area should be provided with waterproof flooring, exempt of combustible materials and with a contention dyke to retain the product in the event of spilling.

Storage Conditions:

- Adequate:

Store at room temperature. Temperatures over 60°C may degrade the product.

- Avoid:

Avoid storing close to strong oxidants and ignition sources.

Incompatible products and materials:

Strong oxidants (peroxides, oxides, chlorates, chromic acid, etc.)

8 – EXPOSURE CONTROL AND INDIVIDUAL PROTECTION

Engineering control steps:

Handle the product in a well-ventilated place either naturally or mechanically, to maintain vapors concentration below the Tolerance Limit.

Control Parameters

- Occupational exposure limits

Oil Mist: TLV/TWA: 5 mg/m³.

- Limit Value (USA, ACGIH):

TLV/STEL: 10 mg/m³.

Individual Protection Equipment

- Breathing protection:

Under low concentrations, wear respirator with chemical filter for organic vapors. Under high concentrations wear autonomic breathing equipment or fed air assembly.

- Hands protection:

PVC gloves for activities with direct contact with the product.

- Eye protection:

In operations where projections or splashes may occur, the use of safety goggles or facial protection is recommended.

- Skin and body protection:

If necessary, wear waterproof aprons.

Special Precautions:

Keep emergency showers and eye washer available on locations where product is handled. Avoid prolonged or frequent contact with the product.

Hygiene measures:

Clean up clothing and footwear after use. General control methods used in Industrial Hygiene should minimize exposure to the product. Do not eat, drink or smoke while handling chemicals. Separate working clothing from regular clothing.

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9 – PHYSICAL-CHEMICAL PROPERTIES

Aspect

- Physical status: Clear liquid (room temperature)
- Color: Transparent to yellowish.
- Odor: Odorless.

Specific Temperatures

- Distillation range: 276 – 302°C @ 101,325 kPa (760 mmHg).

Blazing point 160°C (open vase).

Self-igniting temperature 232°C.

Density 0,8504 @ 20°C.

Solubility

- In water: Insoluble.
- In organic solvents: Soluble.

Viscosity 9,6 Cst @ 40°C; Method: ASTM – D445.

Combustion point 196°C.

10 – STABILITY AND REACTIVITY

Specific conditions

- Instability: Stable under normal use conditions.
- Incompatible materials / substances: Water, strong oxidants, (peroxides, chlorates, chromic acid, etc.)
- Products with danger of decomposition: Light distilled and coke.

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11 – TOXICOLOGICAL INFORMATION

Acute toxicity

- Contact with skin: Oil mist: DL50 (rabbit) > 5 g/kg (literature).
- Ingestion: Oil mist: DL50 (mouse) > 25 g/kg (literature).

Local effects

- Inhalation: Mild irritation of the breathing system.
- Contact with skin: No significant or prolonged irritation expected.
- Contact with eyes: No significant or prolonged irritation expected.

Chronic Toxicity

- Inhalation: Irritation of the respiratory tract after repeated inhalation of mist.
- Contact with skin: People susceptible to dermatitis may worsen their condition after repeated contact.
- Contact with eyes: Mild irritation on eyes.

Specific effects

- Carcinogenic: According to IARC (International Agency for Research on Cancer), there is evidence of this kind of oil being carcinogenic to experiment animals.

Additional information:

Evaluation of toxic effects was based on data related to similar materials.

12 – ECOLOGICAL INFORMATION

Ecotoxicity

- Effects on aquatic organisms: Care should be taken against the possibility of contamination of springs, used for the production of drinking water, as they should be totally exempt of petroleum derivatives.
- Effects on soil organisms: The product may penetrate the soil and reach the ground water, causing pollution.

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13 – CONSIDERATIONS ON TREATMENT AND DISPOSITION

Methods for treatment and disposition

- Product: Product treatment and disposition should be technically evaluated, on a case by case basis.
- Waste: Discard in facilities authorized by the environmental agencies.
- Used packaging: Discard in facilities authorized by the environmental agencies.

14 – INFORMATION ON TRANSPORTATION

National regulations

Land transportation (MT, Admin. Act 204/1997) Number UN: 3082

Adequate identification name of shipments: SUBSTANCES THAT PRESENT HAZARD TO THE ENVIRONMENT, LIQUID, N.E.

Risk class: 9

Subsidiary risk: -

Risk number: 9.0

Packaging group: -

Special provisions: 179

Exempt quantity: Zero kg

15 – REGULATIONS

LABELING

Data not available.

16 – OTHER INFORMATION

Bibliographical references:

Section 14: Ministry of Transports Regulation for the Land transportation of Hazardous Products (Administrative Act N° 420 dated Feb. 12, 2004) and List of hazardous Products in the Mercosul Area (Decree 1797 dated January 25, 1996).

Note:

All the information and recommendations included in this document were researched and compiled from eligible sources duly qualified to issue them and the limits of application are the same as those of the respective sources. Data in this information card are related to a specific product and may not be valid where this product is used in combination with other products. Any inappropriate use of the product other than that described on the packaging is under the entire responsibility of the user.

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