1 Ipıranga

MATERIAL SAFETY DATA SHEET - MSDS

MSDS N° 055 Date last revised:

IPIRANGA F1 MASTER SINTETICO SN 5W40 508

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14/04/2016

1. IDENTIFICATION

Name of the substance or

mixture (trade name)

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Major recommended uses for Automotive Engine

the substance or mixture

IPIRANGA PRODUTOS DE PETRÓLEO S.A. **Company Name**

Address Rua Monsenhor Manuel Gomes, 140 – São Cristóvão – RJ

Contact Phone 08000 253805

Emergency telephone number 0800 562023

2. HAZARDS IDENTIFICATION

Product classification Chemicals not classified as dangerous according to ABNT NBR 14725-2.

Appropriate labelling elements

GHS Symbol Not required.

Words of warning Not required.

Danger phrases Not required.

Precautionary phrases General

P103 Read the label before use.

Prevention:

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Reply

P370 + P378: In case of fire: Use for extinction (see item 5).

Storage

P403: Store in a well ventilated place.

Elimination

P501: delete the contents/container in accordance with local regulations (see item 13)

Other hazards which do not Has no other dangers.

result in a classification



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3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical This product is a mixture.

Common chemical name or

generic name

Distillates, severely hydrotreated paraffin.

4. FIRST AID MEASURES

Inhalation Remove victim to fresh air. Make sure you have good ventilation, breathing and pulse

pressure. Immediately contact a physician.

Eyes Rinse eyes thoroughly with water for at least 15 minutes. If irritation occurs, consult a

doctor.

Skin As a precaution, wash skin with soap and water. Remove and wash contaminated

clothing.

ingestion If swallowed, dilute drinking large amounts of water. Never give anything by mouth to a

person in shock or unconscious. Do not induce vomiting. Immediately contact a

physician.

Most important symptoms and Dangerous concentrations of mists and / or vapors are unlikely to be encountered

effects, both acute and delayed through treatment, use, or misuse usual or reasonably foreseeable this product.

Note to physician Symptomatic treatment.

5. FIRE FIGHTING MEASURES

Extinguishing material Foam, water spray, CO2, dry powder, sand. Do not apply water jet directly on the product

in flames as it may spread and increase fire intensity.

specific Dangers Normal combustion forms carbon dioxide and water vapor; incomplete combustion can

produce smoke and carbon monoxide.

Protective Measures

firefighting

Team Firefighters: Use self-contained breathing appropriate clothing and equipment for firefighting. Do not enter confined without proper protective equipment (PPE) areas, this should include respirators for protection against hazardous products of combustion or

the lack of oxygen effects.

Isolate the hazard area and prohibiting the entry of persons. In case of fire use water spray to cool containers exposed to fire. Keep safe distance from the flames to avoid

burns by irradiation. Use extinguishing processes that preserve the environment

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6. MEASURES SPILL OR LEAK

Personal precautions, protective equipment and emergency procedures.

the emergency services

For personnel that is not part of Isolate the area within a radius of 100 meters, at least in all directions and away the curious. Use clothing, gloves and eye protection. Do not touch, stay or walk through spilled material. Stay out of low areas and in position to keep the wind from behind.

service

To the staff of the emergency Use impervious protective clothing and chemical resistant. Provide grounding of all equipment to be used in handling the spillage. Eliminate all possible sources of ignition such as open flames, hot elements without insulation, electrical or mechanical sparks, cigarettes, electric circuits, etc. Prevent the use of any action or procedure causing the generation of sparks or flames.

Environmental precautions

Isolate the area of the accident. Prevent the spread of spilled material, avoiding contamination of rivers and springs. Shut off leak, if possible, avoid contact with skin and clothing. Never dispose of spilled material to sewers. Spills should be reported to the manufacturer and / or environmental agencies.

Methods and materials containment and cleaning

for Absorb with inert absorbent material (sand, diatomite, vermiculite). Collect all the material in suitable and properly labeled containers for subsequent treatment and disposal

Waste must be disposed of according to local, state or federal environmental laws.

7. HANDLING AND STORAGE

Precautions for safe handling

No smoking in the workplace.

In places where chemical products are handled should monitor the exposure of workers PPRA Risk Prevention as (Environmental Program)

Handle in accordance with good industrial hygiene and safety practice. Storage facilities and use must be equipped with eyewash facility and a safety shower. The clothing and PPE should always be cleaned and checked before use. Always use for personal hygiene water, soap and cleaning creams. Operating procedures and good industrial hygiene help reduce the risk in handling chemicals.

including any incompatibilities

Conditions for safe storage, Store in a covered, dry and airy. Protect containers from physical damage. Use and store with adequate ventilation.

Incompatible materials: Strong oxidizing materials.

Keep container tightly closed when not in use. Such containers should not be reused for other purposes and must be arranged in appropriate locations.



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Control Parameters TLV/TWA: 5mg/m³ fog (mist).

TLV/STEL: 10mg/m³ fog mist).

Personal protection

respiratory Protection Usually no special respiratory protection is required. Under conditions of frequent use or

heavy exposure, respiratory protection may be necessary.

Hand Protection Use gloves to avoid direct skin contact.

Eye protection / face Industrial standard practice of eye protection should be applied.

Protection for skin Appropriate clothing industries.

9. PHYSICAL AND CHEMICAL

Aspect Liquid

(physical state, shape, color) Color L 3,5

Odor Characteristic

Not available pН

Melting / freezing point Not available

Initial boiling point and boiling Not available

temperature range

Flash Point 220°C

Evaporation rate Not available

Flammability (solid, gas) Not available

Lower Limit / Upper Flammable Not available

or explosive

Not available **Vapor Pressure**

Vapor Density Not available

Relative density 0,8542 g/cm3 @ 20/4°C

Solubility (s) In water: Insoluble. Soluble in organic solvents

Coefficient of Participation - n- Not available

octanol/water

Autoignition temperature Not available



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Not available **Decomposition Temperature**

Viscosity 79.62 cSt @ 40°C

13.59 cSt @ 100°C

Pour point -45°C

TBN 11,9 mg KOH/g

10. STABILITY AND REACTIVITY

reactivity Not available

chemical Stability Stable under normal handling and storage conditions.

Possibility Hazardous Not available of

Reactions

Conditions to avoid Extremely high temperatures

incompatible materials Strong oxidizing materials.

Hazardous Products

Decomposition Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity ORAL TOXICITY (RATS): LD50> 5000 mg / kg Practically nontoxic.

DERMAL TOXICITY (RABBITS): LD50> 5000 mg / kg Practically nontoxic.

Corrosion / irritation to the skin Not rated

Serious eye damage / eye Not rated.

irritation

skin Not rated. Respiratory or

sensitization

Germ cell mutagenicity Not rated.

carcinogenicity Although there is no specific test data based on all oil components, it is not expected that

the mineral base oil show a potent carcinogen based on knowledge of the toxicity of mineral base oils in general. The DMSO extract by IP 346 of the oil is less than 3% (Typical 0.2% with Maximum 0.5%). Consequently, it is not classified as a carcinogen. The base oils of this product are severely hydrotreated throughout dihydro-process.

According to this story refining, will show no evidence of potent carcinogen.

Not rated **Toxicity reproduction**



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Organ toxicity specific target - Not rated

single exposure

Organ toxicity specific target -

repeated exposure

Not rated.

Not rated **Aspiration hazard**

12. ECOLOGICAL INFORMATION

Chronic toxicity to fish, NOEC:> 5000mg / L (7day) - IUCLID Dataset Chronic toxicity to **Ecotoxicity**

aquatic invertebrates NOEC = 552 mg / L (7 days) - IUCLID Dataset ** NOEC: No

observed effect concentration (toxicology).

Persistence / degradability Not available

Bioaccumulative potential Not available

Mobility in soil Not available

Other adverse effects It is not expected that this material presents no environmental problem, except those

related to oil spill.

13. CONSIDERATIONS FOR FINAL DESTINATION

disposal

Recommended methods for Never discharge into drains or the environment. Product residues should be disposed of in accordance with federal, state and local regulations for health and the environment,

and current applicable: ABNT-NBR 10.004/2004 and ABNT-NBR 16725.

Used packaging: His willingness to comply with all applicable health and environmental

regulations, obeying the same criteria applicable to products.

14. TRANSPORT INFORMATION

RTPP - Res 420/04 ANTT | IMDG / DPC / ANTAQ | ICAO-TI / IATA-DGFT / ANAC

Product not framed in the resolution into effect on transport of dangerous goods

Other transport information: Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and the measures to take in case of an accident or emergency. Before transporting product containers ensure that they are firmly secured. In each fractional transport container should be properly identified, carrying the labeling required by DOT.

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15. REGULATORY INFORMATION

Ordinance No. 229, 2011/MTE (amending Norm "NR 26" which comes Signaling Security).

Decree 2.657/1998 - promulgates the Convention No. 170 of the ILO concerning the safe use of chemicals at work, igned at Geneva on 25 July 1990.

Decree No. 2657 of 1998 (ratified in Brazil Convention No. 170 of the ILO).

Environmental Crimes Law 9.605/1998.

Law 8.098/1990 Code of Consumer Protection.

Regulatory requirements are subject to change and may differ from one region to another, it is the user's responsibility to ensure that their activities comply with local, federal, state and municipal.

CONTROLLED PRODUCT: Not applicable.

16. OTHER INFORMATION

Prepared by Via Brazil consultancy in transportation of dangerous goods

"This material safety data sheet for chemical products has been developed in accordance with the guidelines of the NBR 14725 issued by ABNT-Brazilian Association of technical standards. The information contained in this MSDS represents current data and accurately reflect our best knowledge about the appropriate handling of this product under normal conditions and according to the recommendations given on the packaging and in the technical literature. Considering the variety of factors that may affect processing and application, the information contained in this fact sheet does not disclaim liability processors to run their own tests and experiments. Any other use of the product involves the combined use with another product, or that use case other than indicated, is the sole responsibility of the user."

REFERENCES:

[ABNT NBR 14725-2] - Danger Rating System - GHS

[RESOLUTION No. 420/04 ANTT] Agency National Transportation - Supplementary Instructions Approves the Regulation of Land Transportation of Dangerous Goods.

[HSNO] NEW ZEALAND. HSNO Chemical Classification and Information Database (CCID)

[ECHA] European Union. ECHA European Chemical Agency

TERRESTRIAL (RAILWAYS, ROADS): National Land Transport Agency (ANTT);

WATERWAYS (SEA, river, lake): International Maritime Dangerous Goods Code - Code (IMDG Code); Standard -5 Directorate of Ports and Coasts of the Navy Department (CPD): National Agency for Waterway Transportation (ANTAQ);

AIR: International Civil Aviation Organization - Technical Instructions (ICAO -TI). International Air Transport Association - Dangerous Goods Regulations (IATA - DGFT); National Civil Aviation Agency (ANAC).



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* Abbreviations:

NA: Not Applicable.

NA: Not available.

OSHA: Administration of Occupational Safety and Health.

LD50: lethal dose for 50% of the infected population.

LC50: Lethal concentration for 50 % of the infected population.

CAS: Chemical Abstracts Service.

TLV - TWA: is the weighted average concentration allowed for a journey of 8 hours of work.

TLV - STEL: is the exposure limit short - term maximum allowable concentration for continuous exposure of 15 minutes

ACGIH is an organization of personnel from government agencies or educational institutions engaged in programs of occupational health and safety.

ACGIH: develops and publishes exposure limits for hundreds of chemical substances and physical agents.

PEL: maximum allowable concentration of contaminants in air, to which most workers may be repeatedly exposed 8 hours daily, 40 hours a week during the work period (30 years), no adverse health effects.

OSHA: U.S. federal agency with authority to regulatory and compliance provisions in the area of safety and health for industries and businesses in the USA.

IMDG: International Maritine Code for Dangerous Goods - international code for the transport of hazardous materials by sea.

PNEC: Predicted No Effect Concentration.

ILO - International Labour Organization.

MTE - Ministry of Labour and Employment.