



## ISAFLUIDO 434 TO

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## 1. IDENTIFICATION

**Name of the substance or mixture (trade name)** ISAFLUIDO 434 TO

**Internal code product identification**

**Major recommended uses for the substance or mixture** Farm Machinery

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

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

**Contact Phone** 08000 253805

**Emergency telephone number** 0800 562023

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## 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)

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**Other hazards which do not result in a classification** Has no other dangers.

**NFPA 704**

**3. COMPOSITION AND INFORMATION ON INGREDIENTS**

**Chemical** This product is a mixture.

**Common chemical name or generic name** Lubricating oil. This category includes oil mixtures composed mainly of hydrocarbons having carbon chain between 15 and 50 carbon atoms and boiling range 371-538 ° C. The components are trade secret.

**4. FIRST AID MEASURES**

**Inhalation** Remove victim to fresh air and keep at rest. Monitor respiratory function. If the victim is breathing is difficult, give oxygen. If necessary give artificial respiration. Seek medical attention. Take this MSDS.

**Eyes** Wash with running water for at least 15 minutes, keeping eyelids open. Remove contact lenses if applicable. Seek medical attention immediately. Take this MSDS.

**Skin** Remove contaminated clothing and shoes. Wash exposed skin with large amounts of water for at least 15 minutes. Seek medical attention. Take this MSDS.

**ingestion** Wash the victim's mouth with plenty of water. DO NOT INDUCE VOMITING. Seek medical attention. Take this MSDS.

**Most important symptoms and effects, both acute and delayed** Inhalation: Inhalation of product mist may cause irritation to the respiratory tract with coughing, sore throat and shortness of breath. Skin: Contact with skin may cause mild irritation with local redness.

**Note to physician** Avoid contact with this product while helping the victim. Keep the patient at rest and warm. Do not give anything by mouth to an unconscious person. Symptomatic treatment should include, above all, support measures to correct electrolyte, metabolic disorders, and respiratory care.

**5. FIRE FIGHTING MEASURES**



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**Extinguishing material** Chemical, water fog, carbon dioxide. Do not apply water jet directly on the product in flames as it may spread and increase fire intensity.

**specific Dangers** When heated can release hydrogen sulfide.

**Protective Measures Team firefighting** 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.

**For personnel that is not part of the emergency services** 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.

**To the staff of the emergency service** 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 for containment and cleaning** 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.

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## 7. HANDLING AND STORAGE

**Precautions for safe handling** No smoking in the workplace.  
In places where chemical products are handled should be performed as monitoring of worker exposure, as PPRA (Program Prevention of Environmental Risks) of NR-9.

Handle in accordance with good industrial hygiene and safety practices. The facilities for the storage and use shall be equipped with facilities eyewash and safety shower. The clothing and PPE should always be cleaned and checked before use. Always use water for personal hygiene, soap and cleansing creams. Operating procedures and good industrial hygiene help reduce the risk in handling chemicals

**Conditions for safe storage,** Store in a covered, dry and airy. Protect containers from physical damage. Use and



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including any incompatibilities store with adequate ventilation.

Incompatible materials: Strong oxidizing agents such as peroxides, chlorates and nitrates.

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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## 8. EXPOSURE CONTROL AND PERSONAL PROTECTION

**Control Parameters** Occupational exposure limits  
Limit value (US ACGIH) Oil Mist TLV / TWA: 5 mg / m<sup>3</sup>

**Engineering Control Measures** Ensure adequate ventilation, especially in confined areas.

### Personal protection

**respiratory Protection** It is recommended to use respirator with filter for organic mists to average exposures over half the TLV-TWA. Where exposure exceeds 3 times the TLV-TWA value, use respirator standalone type (SCBA) with air supply, the full face mask, operated in positive pressure mode

Follow the guidance of Respiratory Prevention Program (PPR), 3rd ed. London: Fundacentro 2002.

**Hand Protection** PVC protective gloves.

**Eye protection / face** Goggles or face shield splash.

**Protection for skin** Waterproof apron.

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## 9. PHYSICAL AND CHEMICAL

**Aspect** Liquid

**(physical state, shape, color)** Color L1,0

**Odor** Characteristic

**pH** Not available

**Melting / freezing point** Not available

**Initial boiling point and boiling temperature range** Not available

**Flash Point** 220°C

**Evaporation rate** Not available

**Flammability (solid, gas)** Not available

**Lower Limit / Upper Flammable or explosive** Not available



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Vapor Pressure	Not available
Vapor Density	Not available
Relative density	0,878 g/cm <sup>3</sup> a 20/4°C
Solubility (s)	In water: Insoluble. Soluble in organic solvents
Coefficient of Participation - n-octanol/water	Not available
Autoignition temperature	Not available
Decomposition Temperature	Not available
Viscosity	55,24 cSt @ 40°C 9,72 cSt @ 100°C
Pour point	-33°C

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#### 10. STABILITY AND REACTIVITY

reactivity	Not available
chemical Stability	Stable under normal conditions of handling and storage.
Possibility of Hazardous Reactions	Not available
Conditions to avoid	High temperatures and contact with incompatible materials.
incompatible materials	Strong oxidizing agents such as peroxides, chlorates and nitrates.
Hazardous Decomposition Products	Light distillates and coke. When heated can release hydrogen sulfide.

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#### 11. TOXICOLOGICAL INFORMATION

Acute Toxicity	Mist of mineral oil: LD50 (skin, rabbit):> 5000 mg / kg LD50 (oral, rats):> 25,000 mg / kg
Corrosion / irritation to the skin	Not rated
Serious eye damage / eye irritation	Not rated.
Respiratory or skin sensitization	Not rated.



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<b>Germ cell mutagenicity</b>	Mutagenicity: Mutagenicity Index - Ames test: Not Telling.
<b>carcinogenicity</b>	Carcinogenicity: Animal studies reported in the IUCLID database had positive and negative results as to carcinogenicity to the skin dermal. According to IPIECA, test results IP 346 and modified Ames test have a strong correlation with the results of bioassays of epidermal carcinogenicity. Oil products having as a result to IP 346 > 3% (w / w) and mutagenicity index of > 1.0 are considered potentially mutagenic and carcinogenic to the skin. Content of polycyclic aromatic hydrocarbons - IP-346: Not informed.
<b>Toxicity reproduction</b>	Not rated.
<b>Organ toxicity specific target - single exposure</b>	Not rated
<b>Organ toxicity specific target - repeated exposure</b>	Not rated.
<b>Aspiration hazard</b>	Not rated

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## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Em caso de grandes derramamentos o produto pode ser perigoso para o meio ambiente devido à possível formação de níveis de oxigênio dissolvido. CL50 ( <i>Daphnia magna</i> , 48h): > 1000 mg/L
<b>Persistence / degradability</b>	Is not expected rapid degradation and low persistence.
<b>Bioaccumulative potential</b>	Has a low potential to bioaccumulate in aquatic organisms. Log kow: 3.9 to 6.0 BCF: 132 (estimated).
<b>Mobility in soil</b>	Not available
<b>Other adverse effects</b>	Not available

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## 13. CONSIDERATIONS FOR FINAL DESTINATION

<b>Recommended methods for disposal</b>	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.
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## 14. TRANSPORT INFORMATION



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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, signed 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.

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## 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



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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).

\* 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 Maritime 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.