

SAFETY DATA SHEET

Product: FLUIDO HIDROGENADO 230/260

Revision: 02

Date: 06/13/2024

Pages: 1/8

1 - IDENTIFICATION

GHS Product identifier:	FLUIDO HIDROGENADO 230/260
Other means of identification:	FHI6FG
Recommended use of the chemical:	Manufacture of pharmaceutical products, cleaning products, matchsticks, photographic films, paper, rubbers and cosmetics.
Specific restrictions on use:	There are not known restrictions on use.
Supplier`s details:	<p>Acelen</p> <p>Address: ROD BA 523, KM 4, MATARIPE, CEP: 43900-000 - BA - Brasil.</p> <p>Phone number: (71) 3511-8000 / (11) 5225-8900</p>
Emergency phone number:	EMERGENCIall: 0800 729 2756 / (11) 94759-7282 (Whatsapp) (24h)

2 - HAZARD IDENTIFICATION

Classification of the substance or mixture:	<p>Acute Toxicity - Inhalation - Category 4;</p> <p>Skin Corrosion/Irritation - Category 2;</p> <p>Carcinogenicity - Category 1B;</p> <p>Aspiration Hazard - Category 1;</p> <p>Hazardous to the Aquatic Environment - Acute Hazard - Category 3;</p> <p>Hazardous to the Aquatic Environment - Chronic Hazard - Category 3.</p>
Classification system adopted:	Globally Harmonized System of Classification and Labeling of Chemicals (GHS), United Nations.

GHS label elements, including precautionary statements

Pictograms:



Signal word:	DANGER
Hazard statement(s):	<p>H304 May be fatal if swallowed and enters airways.</p> <p>H315 Causes skin irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H350 May cause cancer.</p> <p>H412 Harmful to aquatic life with long lasting effects.</p>
Precautionary statement(s):	<p>PREVENTION:</p> <p>P203 Obtain, read and follow all safety instructions before use.</p> <p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <p>P264 Wash hands thoroughly after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves, protective clothing, eye protection, face protection and hearing protection.</p> <p>RESPONSE TO EMERGENCY:</p> <p>P301 + P316 IF SWALLOWED: Get emergency medical help immediately.</p> <p>P302 + P352 IF ON SKIN: Wash with plenty of water.</p>

SAFETY DATA SHEET

Product: FLUIDO HIDROGENADO 230/260

Revision: 02

Date: 06/13/2024

Pages: 2/8

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P317 Get medical help.
 P318 IF exposed or concerned, get medical advice.
 P321 Specific treatment.
 P331 Do NOT induce vomiting.
 P332 + P317 If skin irritation occurs: Get medical help.
 P362 + P364 Take off contaminated clothing and wash it before reuse.

STORAGE:

P405 Store locked up.

DISPOSITION:

P501 Dispose of contents and container in accordance with local regulations.

Other hazards which do not result in classification: The product has no other hazards.

3 - COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons with carbon numbers predominantly in the range of C11 to C25.

Common chemical name: Distillates (petroleum), hydrotreated middle.

Common name(s), synonym(s) of the substance: Alkane C13-15; medium distillates treated with hydrogen.

CAS: 64742-46-7

Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance: Does not contain components that contribute to the hazard.

4 - FIRST-AID MEASURES

Description of necessary first-aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim feels unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Bring this document.

Skin: Wash exposed skin with sufficient amount of water to remove the material. Take off and isolate contaminated clothing and shoes. In case of skin irritation: contact a doctor. Bring this document.

Eye: Wash carefully with water for several minutes. In case of use of contact lenses, remove them, if possible. Keep washing. If eyes irritation continues: Contact a doctor. Bring this document.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse the victims mouth with water in abundance. If the victim feels unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Bring this document.

Most important symptoms/effects, acute and delayed: Causes skin irritation with redness, pain and dryness. May be fatal if swallowed and enters airways. Harmful if inhaled.

SAFETY DATA SHEET

Product: FLUIDO HIDROGENADO 230/260

Revision: 02

Date: 06/13/2024

Pages: 3/8

Indication of immediate medical attention and special treatment needed, if necessary:	Avoid contact with the material to help the victim. Keep victim warm and quiet. Symptomatic treatment should comprise mainly supportive measures such as correction of electrolyte disturbances, metabolic, and respiratory support. In case of skin contact do not rub the affected area.
---	--

5 - FIRE-FIGHTING MEASURES

Extinguishing media:	Appropriate: carbon dioxide (CO ₂), foam, water mist and powder. Inappropriate: water directly onto the burning material.
----------------------	--

Specific hazards arising from the chemical:	The combustion of the chemical containers may form toxic and irritant gases such as carbon monoxide and carbon dioxide. Very dangerous when exposed to excessive heat or other sources of ignition such as sparks, open flames or flames of matches and cigarettes, welding operations, pilot lights and electric motors. Can accumulate static charge by flow or agitation. Vapors from heated liquid can be ignited by static discharge. Vapors are heavier than air and tend to accumulate in low or confined areas, such as sewers and basements. Can travel great distances causing retrogression of the flame or new fires both in open environments in as confined ones. Containers may explode if heated.
---	--

Special protective actions for fire-fighters:	Use self-contained breathing apparatus (SCBA) operated in positive pressure mode and complete protective clothing. Containers and tanks involved in the fire should be cooled with water mist.
---	--

6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:	Prevent sparks or flames. Do not smoke. Do not touch damaged containers or spilled material without the use of appropriate clothing. Avoid exposure to the material. Stay in a safe place, with wind from behind. Use personal protective equipment as described in Section 8.
------------------------------	--

For emergency responders:	Wear complete PPE with safety glasses, safety gloves, suitable protective clothing and closed shoes. In case of leakage, where exposure is high, it is recommended to use a suitable respiratory protection mask.
---------------------------	---

Environmental precautions:	Avoid that the spilled material reaches waterways or sewage system.
----------------------------	---

Methods and materials for containment and cleaning up:	Use water mist or vapor suppressing foam to reduce the dispersion of vapors. Use natural barriers or spill containment. Collect spilled material and put it into containers. Adsorb the remaining material with dried sand, vermiculite or any other inert material. Put the adsorbed material in appropriate containers and remove them to a safe place. Use tools that do not cause sparks to collect absorbed material. For final destination, proceed pursuant to Section 13 of this document. Large spill: confine the liquid into a dike away from the spills for later and proper disposition. Water mist can be used to reduce of vapors, but it wont prevent ignition in closed environments.
--	---

7 - HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe handling:	Handle in a ventilated area or with a general local exhaust/ventilation system. Avoid formation of vapors and mists. Handling the material can result in electrostatic charge buildup. All ignition sources must be extinguished from areas during use. Use proper grounding procedures. Use personal protective equipment as described in section 8. Avoid contact with incompatible materials.
--------------------------------	--

General hygiene:	Wash hands and face thoroughly after handling and before eating, drinking, smoking or going to the bathroom. Contaminated clothing should be changed and washed before reuse. Remove clothing and protective equipment contaminated before entering eating areas.
------------------	---

Conditions for safe storage, including any incompatibilities

Technical measures for	Keep away from heat, sparks, open flames and hot surfaces. - Do not smoke. Keep container tightly
------------------------	---

SAFETY DATA SHEET

Product: FLUIDO HIDROGENADO 230/260

Revision: 02

Date: 06/13/2024

Pages: 4/8

prevention of fire and explosion:	closed. Ground the container vessel and the receiver of the material during transfers. Only use anti-sparking tools. Avoid the accumulation of electrostatic charges. Use electrical equipment, ventilation and lighting explosion proof. Use personal protective equipment as described in Section 8.
Conditions for safe storage, including any incompatibilities:	Store in a well ventilated place, away from sunlight. Keep container closed. Keep away from high temperatures and ignition sources. It is not necessary addition of stabilizers and antioxidants to ensure the durability. This material may react dangerously with some incompatible materials as outlined in Section 10. Keep away from incompatible materials.
Packaging compatibilities:	Similar to the original packaging.
Inadequate packaging materials:	There are not known unsuitable material.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limit:	Not established.
Biological limit:	Not established.
Other limits and values:	Not established.
Appropriate engineering controls:	Promote mechanical ventilation and exhaust system to outside. These acts help reducing the exposition to the material.
Individual protection measures, such as personal protective equipment (PPE)	
Eye/face protection:	Wide-view glasses with splash protection.
Skin protection:	Safety shoes and safety clothing to protect the whole body from chemical splashes. Protective gloves against chemicals such as PVC.
Respiratory protection:	Use of respirator with filter against vapors and organic mists is recommended for average exposures above half the TLV-TWA. In cases where exposure exceeds 3 times the TLV-TWA value, use a self-contained, full facepiece, air-supplied respirator (SCBA) operated in positive pressure mode. Follow guidance from the Respiratory Protection Program (PPR), 4th ed. São Paulo: Fundacentro, 2016.
Thermal hazards:	It does not present thermal hazards.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Aspect:	Liquid.
Color:	Colorless.
Odour:	Not available.
Melting point/freezing point:	Not available.
Boiling point or initial boiling point and boiling range:	229 to 298 °C (444.2 to 568.4 °F) at 760 mmHg (101324.72 Pa).
Flammability:	Not available.
Lower and upper explosion	Upper: 6 % and Lower: 1 %.

SAFETY DATA SHEET

Product: FLUIDO HIDROGENADO 230/260

Revision: 02	Date: 06/13/2024	Pages: 5/8
--------------	------------------	------------

limit/flammability limit:	
Flash point:	> 100 °C (212 °F) - Open cup.
Auto-ignition temperature:	> 200 °C (392 °F).
Decomposition temperature:	Not available.
pH:	Not applicable.
Kinematic viscosity:	2.39 mm ² /s at 40 °C (104 °F).
Solubility(ies):	Immiscible in water (< 100 mg/L (< 100000 mg/m ³) at 20 °C (68 °F)). Soluble in organic solvents.
Partition coefficient n-octanol/water (log value):	log <i>K</i> _{ow} : 7.7 (calculated).
Vapour pressure:	0.02 mmHg (2.66644 Pa) at 25 °C (77 °F).
Relative vapour density:	Not available.
Density and/or relative density:	Absolute density: 0.766 to 0.776 g/cm ³ at 20 °C (68 °F).
Particle characteristics:	Not applicable.
Other information:	Not applicable.

10 - STABILITY AND REACTIVITY

Reactivity:	Reactivity is not to be expected under normal conditions of temperature and pressure.
Chemical stability:	Stable product under normal conditions of temperature and pressure.
Possibility of hazardous reactions:	When heated, it can release irritating and toxic gases. Risk of fire if heated.
Conditions to avoid:	High temperatures. Ignition sources. Contact with incompatible materials.
Incompatible material:	Chlorates, chromic acid, peroxides and strong oxidizing agents.
Hazardous decomposition products:	When burning, it can release irritating and toxic gases such as carbon monoxide and dioxide.

11 - TOXICOLOGICAL INFORMATION

Acute toxicity:	Product not classified as acute toxic by oral and dermal. Harmful if inhaled. LC ₅₀ Dusts and mists (rats, 4h): 4.6 mg/L. LD ₅₀ Oral (rats): > 5000 mg/kg. LD ₅₀ Dermal (rabbits): > 2000 mg/kg.
Skin corrosion/irritation:	Causes skin irritation with redness, pain and dryness.
Serious eye damage/irritation:	It is not expected to cause eye irritation.
Respiratory or skin sensitization:	It is not expected to present respiratory or skin sensitization.

SAFETY DATA SHEET

Product: FLUIDO HIDROGENADO 230/260

Revision: 02	Date: 06/13/2024	Pages: 6/8
Germ cell mutagenicity:	Not classified for germ cell mutagenicity. <i>in vitro</i> and <i>in vivo</i> mutagenicity studies showed negative results.	
Carcinogenicity:	May cause cancer.	
Reproductive toxicity:	Not classified for reproductive toxicity. Reproductive toxicity studies showed negative results.	
STOT - Single exposure:	It is not expected to exhibit specific target organ toxicity by single exposure.	
STOT - Repeated exposure:	It is not expected to exhibit specific target organ toxicity on repeated exposure.	
Aspiration hazard:	May be fatal if swallowed and enters airways.	

12 - ECOLOGICAL INFORMATION

Toxicity:	Harmful to aquatic life with long lasting effects. LC ₅₀ (<i>Oncorhynchus mykiss</i> , 96 h): 21 mg/L; EC ₅₀ (<i>Daphnia magna</i> , 48 h): 210 mg/L; ErC ₅₀ (<i>Pseudokirchneriella subcapitata</i> , 72 h): 22 mg/L.
Persistence and degradability:	It has persistence and is not considered rapidly degradable. Degradation rate: 35% in 28 days.
Bioaccumulative potential:	Presents high bioaccumulative potential in aquatic organisms. BCF: 1516 log K _{ow} : 7.7 (calculated).
Mobility in soil:	Not determined.
Other adverse effects:	The release of large amounts of product can cause undesirable environmental effects, such as the reduction of oxygen availability in aquatic environments due to the formation of an oily layer on the surface, coating and consequent suffocation of animals.

13 - DISPOSAL CONSIDERATIONS

Disposal methods

Must be disposed of as hazardous waste in compliance with local regulations. The treatment and disposal should be evaluated for each specific product.
 Keep the product remains in its original and properly closed containers. Disposal should be performed as established for the product.

14 - TRANSPORT INFORMATION

Road:	UN - United Nations: Model Regulations: • Recommendations on the Transport of Dangerous Goods.
UN number:	Not classified as hazardous for the road transportation.
Environmental hazards:	The product is not considered dangerous for the environment for land transport.
Railway regulations:	COTIF - Convention concerning International Carriage by Rail: • Appendix C: RID - Regulations concerning the International Carriage of Dangerous Goods by Rail.
UN number:	Not classified as dangerous for rail transport.
Environmental hazards:	The product is not considered dangerous for the environment in rail transport.
Sea:	IMO - International Maritime Organization:

In accordance with Globally Harmonized System of Classification and Labelling of Chemicals (GHS)- Chapter 1.5 and Annex 4

SAFETY DATA SHEET

Product: FLUIDO HIDROGENADO 230/260

Revision: 02	Date: 06/13/2024	Pages: 7/8
--------------	------------------	------------

• IMDG Code - International Maritime Dangerous Goods Code.	
UN number:	Not classified as hazardous for water transportation.
Environmental hazards:	It's not considered a marine pollutant for transportation.
Air:	IATA - International Air Transport Association: • DGR - Dangerous Goods Regulation.
UN number:	Not classified as dangerous for air transport.
Environmental hazards:	The product is not considered dangerous for the environment for air transport.
Special precautions for user:	Not applicable.
Maritime transport in bulk according to IMO instruments:	Consult regulations: • International Maritime Organization: MARPOL: Articles, protocols, annexes, unified interpretations of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, consolidated edition. IMO, London, 2006; • International Maritime Organization: IBC code: International code for the construction and equipment of shipping carrying dangerous chemicals in bulk: With Standards and guidelines relevant to the code. IMO, London, 2007.

15 - REGULATORY INFORMATION

Convention concerning Safety in the use of Chemicals at Work (Convention 170) - International Labour Organization, 1990.

16 - OTHER INFORMATION

This document was prepared based on current knowledge about the proper product handling and under normal conditions of use, in accordance with the application specified on the packaging. Any other use of the product involving their combination with other products, and use various forms of those indicated, are the responsibility of the user. Warns that the handling of any chemical substance requires the prior knowledge of its hazards for the user. In the workplace it is for the user company's product promotes training of its collaborators about the possible risks arising from exposure to the chemical.

Change control:

Version	Manufacture date	Changes
02	12/26/2023	Change in section: 2, 3, 4, 5, 6, 7, 8, 14 and 16.

Abbreviations:

ACGIH - American Conference of Governmental Industrial Hygienists;
 BCF - Bioconcentration factor;
 CAS - Chemical Abstracts Service;
 EC - European Community;
 EC₅₀ - Effective concentration of substance that causes 50 % of the maximum response;
 EEC - European Economic Community;
 ErC₅₀ - Effective concentration that results in a 50% reduction in the growth rate;
 IARC - International Agency for Research on Cancer;
 K_{ow} - Octanol-water partition coefficient;

SAFETY DATA SHEET

Product: FLUIDO HIDROGENADO 230/260

Revision: 02

Date: 06/13/2024

Pages: 8/8

LC₅₀ - Lethal Concentration 50%;

LD₅₀ - Lethal Dose 50%;

NIOSH - National Institute for Occupational Safety and Health;

TLV - Threshold Limit Value;

TWA - Time Weighted Average.

Bibliographic references:

ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIALS HYGIENISTS. TLVs® and BEIs®: Based on the Documentation of the Threshold Limit Values (TLVs®) for Chemical Substances and Physical Agents & Biological Exposure Indices (BEIs®). Cincinnati-USA, 2023.

ECHA - EUROPEAN CHEMICAL AGENCY. Available at: < <http://echa.europa.eu/web/guest> >. Access in: Dec. 2023.

GESTIS - SUBSTANCE DATABASE. Available at: < [http://gestis-en.itrust.de/nxt/gateway.dll/gestis_en/000000.xml?f=templates\\$fn=default.htm\\$3.0](http://gestis-en.itrust.de/nxt/gateway.dll/gestis_en/000000.xml?f=templates$fn=default.htm$3.0) >. Access in: Dec. 2023.

GHS - GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS. 10th rev. ed. New York and Geneva: United Nations, 2023.

HSDB - HAZARDOUS SUBSTANCES DATA BANK. Available at: <http://pubchem.ncbi.nlm.nih.gov/>. Access in: Dec. 2023.

IARC - INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. Available at: <http://monographs.iarc.fr/ENG/Classification/index.php>. Access in: Dec. 2023.

IPCS - INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY - INCHEM. Available at: <http://www.inchem.org/>. Access in: Dec. 2023.

IUCLID - INTERNATIONAL UNIFORM CHEMICAL INFORMATION DATABASE. [S.1.]: European chemical Bureau. Available at: <http://ecb.jrc.ec.europa.eu>. Access in: Dec. 2023.

NIOSH - NATIONAL INSTITUTE OF OCCUPATIONAL AND SAFETY. International Chemical Safety Cards. Available at: <http://www.cdc.gov/niosh/>. Access in: Dec. 2023.

REACH - REGISTRATION, EVALUATION, AUTHORIZATION AND RESTRICTION OF CHEMICALS. Commission Regulation (EC) No 1272/2008 of December 2008 amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals. Available at: < <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF> >. Access in: Dec. 2023.

TOXNET - TOXICOLOGY DATA NETWORKING. ChemIDplus Lite. Available at: <http://chem.sis.nlm.nih.gov/>. Access in: Dec. 2023.