

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

SAFETY DATA SHEET

Product: Kerosene

Revision: 03 Date: 08/02/2021 Pages: 1/9

1 - IDENTIFICATION

GHS Product identifier:	Kerosene
Other means of identification:	000757-00
Recommended use of the chemical:	Industrial use.
Restrictions on use:	There are not known restrictions on use of the product.
Supplier's details:	ANJO QUIMICA DO BRASIL LTDA
Address:	Acesso Estadual Rio Maina, nº 1165, Bairro Vila Macarini CEP: 88818-800, Criciúma - SC - BR
Phone number(s):	(48) 34618000 (48) 34618049
Emergency phone number:	CIATox/SC (Centro de Informação e Assistência Toxicológica de Santa Catarina) 08006435252

2 - HAZARD IDENTIFICATION

Classification of the substance or mixture:	Flammable Liquids - Category 3 Skin Corrosion/Irritation - Category 2 Serious eye damage/eye irritation - Category 2B Specific Target Organ Toxicity - Single Exposure - Category 3 - Narcotic Aspiration Hazard - Category 1 Hazardous to the Aquatic Environment - Acute Hazard - Category 2
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):
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H320 Causes eye irritation.
H336 May cause drowsiness or dizziness.
H401 Toxic to aquatic life.

Precautionary statement(s):
PREVENTION:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical, ventilating and lighting equipment.
P242 Use non-sparking tools.

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P243 Take action to prevent static discharges.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection, face protection and hearing protection.

RESPONSE TO EMERGENCY:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or a doctor.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or a doctor, if you feel unwell.
P321 Specific treatment.
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: If skin irritation occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing. And wash it before reuse.
P370 + P378 In case of fire: Use carbon dioxide (CO₂), foam, water mist and powder. to extinguish.

STORAGE:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

DISPOSITION:

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

Other hazards which
do not result in
classification:

It is not expected that product presents specific hazards.

3 - COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE

Common chemical
name: Kerosene.

Common name(s),
synonym(s) of the
substance: Deodorized kerosene.

CAS number: 8008-20-6

Impurities and
stabilizing additives Does not contain components that contribute to the hazard.

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which are
themselves classified
and which contribute
to the classification
of the substance:

4 - FIRST-AID MEASURES

Routes of exposure

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 SDS.
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 SDS.
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 SDS.
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 SDS.
Most important symptoms/effects, acute and delayed:	May be fatal if swallowed and enters airways. Causes skin irritation with redness and dryness. Causes eye irritation with opacity, itching and redness. May cause drowsiness or dizziness, may cause dizziness and nausea.
Indication of immediate medical attention and special treatment needed, if necessary:	Avoid contact with the product 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 product.
Specific hazards arising from the chemical:	The combustion or 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

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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 product. Stay in a safe place, with wind from behind. Use personal protective equipment as described in Section 8.

For emergency service personnel: 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.

Method 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 product 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 SDS.

7 - HANDLING AND STORAGE

Precautions for safe handling

Safe handling of the substance or mixture: Handle in a well ventilated area or with general system of ventilation/local exhaust. Avoid vapors and mists formation. Avoid exposure to the chemical, since the effects may not be felt immediately.

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 prevention of fire and explosion: Keep away from heat, sparks, open flames and hot surfaces. - Do not smoke. Keep container tightly closed. Ground the container vessel and the receiver of the product 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.

Adequate conditions: Store in a well ventilated place, away from sunlight. Keep container closed. Keep away from high temperatures and ignition sources. Keep stored at room temperature not exceeding 35°C (95°F).

Packaging compatibilities: Similar to the original packaging.

Inadequate packaging materials: There are not known unsuitable material of the product.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limit: The values below apply to workplaces.

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ACGIH - TLV - TWA: 200 mg/m³ (P).

P: Application restricted to conditions in which there are negligible aerosol exposures.

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 product. Keep atmospheric concentration of the product's components below the exposition occupational limits indicated. Maintain atmospheric concentrations of the constituents of the product below occupational exposure limits indicated.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection: Safety glasses.

Skin protection: Closed shoes and suitable protective clothing. Appropriate protective gloves.

Respiratory protection: A risk assessment should be performed for proper definition of respiratory protection, in view of the product use conditions.

Thermal hazards: Does not present thermal hazards.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Aspect: Liquid.

Color: Not available.

Odour: Not available.

Melting point/freezing point: -20 °C (-4 °F).

Boiling point or initial boiling point and boiling range: 175 to 325 °C (347 to 617 °F).

Flammability: Flammable.

Lower and upper explosion limit/flammability limit: Upper: 5 % and Lower: 0.7%.

Flash point: 49 °C (120.2 °F) - Closed cup.

Auto-ignition temperature: 210 °C (410 °F).

Decomposition temperature: Not available.

pH: Not available.

Kinematic viscosity: Not available.

Solubility: Water immiscible.

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Partition coefficient n-octanol/water (log value):	log K_{ow} : 3.3 to 6.
Vapour pressure:	0.48 mmHg at 20 °C.
Relative vapour density:	4.5 (air = 1).
Density and/or relative density:	0.8 to 1.
Particle characteristics:	Not applicable.
Other information:	Not applicable.

10 - STABILITY AND REACTIVITY

Reactivity:	Reacts with strong oxidizing agents.
Stability:	Product is stable under normal conditions of temperature and pressure.
Possibility of hazardous reactions:	No dangerous reactions known to the product.
Conditions to avoid:	Elevated temperatures. Sources of ignition. Contact with incompatible materials.
Incompatible material:	Strong Oxidizing agents.
Hazardous decomposition products:	There are not known hazardous decomposition products.

11 - TOXICOLOGICAL INFORMATION

Acute toxicity:	Product not classified as acute toxic by dermic and inhalation. LD ₅₀ (Dermic, rats): >2000 mg/kg. LC ₅₀ (Inhalation of vapors, rats, 4h): >5.2 mg/L.
Skin corrosion/irritation:	Causes skin irritation with redness and dryness.
Serious eye damage/irritation:	Causes eye irritation with opacity, itching and redness.
Respiratory or skin sensitization:	It is not expected that the product presents respiratory or skin sensitization.
Germ cell mutagenicity:	It is not expected that the product presents germ cell mutagenicity.
Carcinogenicity:	It is not expected that the product presents carcinogenicity.
Reproductive toxicity:	It is not expected that the product presents reproductive toxicity.
STOT - Single exposure:	May cause drowsiness or dizziness, may cause dizziness and nausea.
STOT - Repeated exposure:	It is not expected that the product presents specific target organ toxicity by repeated exposure.

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Aspiration Hazard: May be fatal if swallowed and enters airways.

12 - ECOLOGICAL INFORMATION

Toxicity:	Toxic to aquatic life. EC ₅₀ (<i>Daphnia magna</i> , 48h): 1.4 mg/L.
Persistence and degradability:	Due to the lack of data, it is expected that the product presents persistence and it is not considered readily biodegradable.
Bioaccumulative potential:	Presents low bioaccumulative potencial in aquatic organisms. BCF: 70 log <i>K</i> _{ow} : 3.3 to 6.
Mobility in soil:	Not determined.
Other adverse effects:	There are not known other environmental effects for this product.

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:	1223
Proper shipping name:	KEROSENE
Primary risk class or division:	3
Subsidiary risk class or division:	NA
Packing group:	III
Railway regulations:	COTIF - Convention concerning International Carriage by Rail: • Appendix C: RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
UN Number:	1223
Sea:	IMO - International Maritime Organization: • IMDG Code - International Maritime Dangerous Goods Code.
UN Number:	1223
Proper shipping name:	KEROSENE
Primary risk class or division:	3

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Subsidiary risk class or division:	NA	
Packing group:	III	
EmS:	F-E,S-E	
Environmental hazards:	The product is considered a marine pollutant.	
Air:	IATA - International Air Transport Association: • DGR - Dangerous Goods Regulation.	
UN Number:	1223	
Proper shipping name:	KEROSENE	
Primary risk class or division:	3	
Subsidiary risk class or division:	NA	
Packing group:	III	
Special precautions for user:	Not applicable	

15 - REGULATORY INFORMATION

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

16 - OTHER INFORMATION

This SDS 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 materials, 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.

Elaborated May 2018.

Change Control:

Version	Elaboration	Changes
03	05/21/2018	Change in section: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16.

Abbreviations:

ACGIH - American Conference of Governmental Industrial Hygienists;
BCF - Bioconcentration factor;

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CAS - Chemical Abstracts Service;
EC₅₀ - Effective Concentration 50%;
IARC - International Agency for Research on Cancer;
K_{ow} - Octanol/Water partition coefficient;
LC₅₀ - Lethal Concentration 50%;
LD₅₀ - Lethal Dose 50%;
NIOSH - National Institute for Occupational Safety and Health;
TLV - Threshold Limit Value;
TWA - Time Weighted Average;
UN - United Nations.

Bibliographic references:

GHS - GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS. 8th rev. ed.
New York: United Nations, 2019.

ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL 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, 2020.

ECHA - EUROPEAN CHEMICAL AGENCY. Available at: < <http://echa.europa.eu/web/guest> >. Access in: May. 2018.

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: May. 2018.

HSDB - HAZARDOUS SUBSTANCES DATA BANK. Available at: <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>. Access in: May. 2018.

IARC - INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. Available at:
<http://monographs.iarc.fr/ENG/Classification/index.php>. Access in: May. 2018.

IPCS - INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY - INCHEM. Available at: <http://www.inchem.org/>.
Access in: May. 2018.

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

NIOSH - NATIONAL INSTITUTE OF OCCUPATIONAL AND SAFETY. International Chemical Safety Cards.
Available at: <http://www.cdc.gov/niosh/>. Access in: May. 2018.

TOXNET - TOXICOLOGY DATA NETWORKING. ChemIDplus Lite. Available at: <http://chem.sis.nlm.nih.gov/>.
Access in: May. 2018.