

	<h1>JET A-1</h1>			
<p><b>1. IDENTIFICATION</b></p>				
<p>COMMERCIAL NAME: JET A-1                  RECOMMENDED USE: Aviation fuel. Liquid hydrocarbon fuel obtained from the distillation of crude oil, followed by treatment in a desulfurization unit, with a boiling range of 150 to 260°C. Its freezing point (-47 °C) ensures that the fuel remains in liquid state at the altitudes at which the aircraft flies.                  MANUFACTURER: ANCAP                  ADDRESS: Humboldt 3900, Montevideo, Uruguay                  PHONE NUMBER: Customer Service: (+598) 2 1931-2006 Internal Market Sales Management - Commercial Assistance: (+598) 2 1931-3421                  WEB: www.ancap.com.uy                  EMERGENCY PHONE NUMBER: National Fire Department: 911                  Toxicological Information and Advisory Center (CIAT): (+598) 2 1722</p>				
<p><b>2. HAZARDS IDENTIFICATION</b></p>				
<p>PRODUCT CLASSIFICATION:                  Flammable liquids - Category 3                  Aspiration hazard - Category 1                  WARNING WORD: Danger</p>				
<p>HAZARD PICTOGRAMS</p>	<p>HAZARD STATEMENTS</p>			
	<p>H304 - May be fatal if swallowed and enters airways.</p>			
	<p>H226 - Flammable liquid and vapour</p>			
<p>PRECAUTIONARY STATEMENTS                  P210 - Keep away from heat, hot surfaces, sparks, open flames, and other sources of ignition. No smoking.                  P273 - Do not disperse into the environment.</p>				
<p><b>3. COMPOSITION/ INFORMATION ON INGREDIENTS</b></p>				
<p>NAME</p>	<p>CAS N°</p>	<p>% VOL.</p>	<p>CLASSIFICATION</p>	<p>HAZARD STATEMENTS</p>
<p>Aromatic hydrocarbons</p>	<p>Mixture</p>	<p>25.0 max.</p>	<p>Carcinogenicity. Cat. 1B</p>	<p>H350: May cause cancer</p>
<p>Sulphur</p>	<p>7704-34-9</p>	<p>0.3 max. (w)</p>	<p>Skin corrosion/irritation Cat.2</p>	<p>H315: Causes skin irritation</p>

Aliphatic hydrocarbons	Mixture	25.0 max.	Flammable liquids Cat. 3 Aspiration hazard Cat. 1	H226-Flammable liquid and vapor H304-May be fatal if swallowed and enters airways
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**4.FIRST AIDS MEASURES**

IN CASE OF INHALATION: Move the person to a well-ventilated area and keep them at rest in a comfortable position for breathing. Seek medical attention if discomfort persists.

IN CASE OF SKIN CONTACT (OR HAIR): Wash with water and soap. Seek medical attention if irritation persists after washing. Contact with the hot product may cause severe thermal burns.

IN CASE OF EYE CONTACT: Rinse eyes with plenty of water for at least 20 minutes. Remove contact lenses if easy to do. Seek medical attention if irritation develops or persists.

IN CASE OF INGESTION: Rinse your mouth with water. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Seek medical assistance if discomfort persists. Show this safety data sheet to the doctor.

IN CASE OF CLOTHING CONTACT: Remove contaminated clothing and shoes. Wash them before reuse.

**MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE AND DELAYED:**

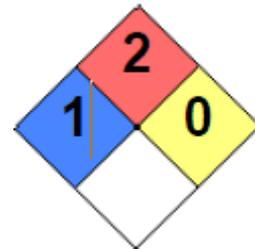
Inhalation: May cause headache, nausea, and vomiting.  
 Skin contact: Irritation, redness.  
 Eye contact: Mild irritation.  
 Ingestion/aspiration: Few or no symptoms expected. Nausea and diarrhea may occur.

**5.FIRE FIGHTING MEASURES**

EXTINGUISHING MEDIA: ABC chemical powder, carbon dioxide, foam. Water as mist or to cool exposed containers.  
 INAPPROPRIATE EXTINGUISHING MEDIA: Direct water jet. You can spread the fire.

**SPECIAL MEASURES THAT FIRE FIGHTING TEAMS MUST TAKE IN CASE OF FIRE:**

Before attempting to rescue victims, isolate the area from all potential ignition sources, including disconnecting the electrical supply.  
 This substance may float on water and reignite the fire.  
 Prevent water used to extinguish the fire from contaminating surface waters or riverbeds.



NFPA 704: Hazardous materials identification for emergency response.

HEALTH	1	In an emergency, it may cause irritation by itself or through its combustion gases.
FLAMMABILITY	2	Material that needs to be moderately heated or exposed to relatively high room temperatures for ignition to occur.

REACTIVITY	0	Stable material, even when exposed to fire, does not react with water.
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**6.ACCIDENTAL RELEASE MEASURES**

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURE**

FOR PERSONNEL NOT INVOLVED IN EMERGENCY SERVICES:  
 Stay upwind of the area. Do not smoke and eliminate all ignition sources if safe to do so. Avoid all contact with the product.

FOR EMERGENCY SERVICES PERSONNEL:  
 Before attempting to rescue victims, isolate the area from all potential ignition sources, including disconnecting the electrical supply. Ensure proper ventilation and verify that there is a safe, breathable atmosphere before entering confined spaces. Soak contaminated clothing with water before removing it to avoid the risk of sparks from static electricity. Minimize the number of people in the risk area.

PROTECTION MEASURES:  
 A half-face or full-face respirator with an organic vapor filter can be used, and when necessary, a self-contained breathing apparatus (SCBA) should be used based on the extent of the spill and the predictable exposure level.  
 Wear chemical protection if personal contact risk exists. Waterproof gloves. Safety footwear. Eye protection in case of splash risk.

SPILL MANAGEMENT:  
 Spills make surfaces slippery. Stop leaks if possible. Check for explosive limits. Avoid the product entering sewers, rivers, streams, or other bodies of water. Ventilate sewers and basements when there is no risk to personnel or the public. Spills on land: If necessary, contain the product with dry earth, sand, or similar non-combustible materials. Large spills may be carefully covered with foam, if available, to limit the formation of vapor clouds. Transfer the collected product and other contaminated materials to suitable containers for recycling or safe disposal. Spills on water: contain the product with floating barriers or other mechanical means.

**7. HANDLING AND STORAGE**

HANDLING: Avoid release into the environment. Avoid flames, DO NOT create sparks, and DO NOT smoke. Use only in well-ventilated areas. Do not eat, drink, or smoke while using.  
 STORAGE: Store away from incompatible materials. Store in well-ventilated areas and protect from direct sunlight.

**8.EXPOSURE CONTROLS / PERSONAL PROTECTION**

LIMIT FOR 8 HOURS OF CONTINUOUS EXPOSURE: 200 mg/m<sup>3</sup> (ACGIH)  
 SKIN PROTECTION: PVC protective gloves, safety shoes, and appropriate protective clothing.  
 EYE PROTECTION: Use safety goggles or face shield in operations with splash risk.  
 NORMAL RESPIRATORY PROTECTION: Under normal working conditions, no protection is required unless the permissible concentration limits are exceeded in the workplace.  
 EMERGENCY RESPIRATORY PROTECTION: In case of fire, use a respirator with an organic vapor filter in ventilated areas and self-contained breathing apparatus (SCBA) in enclosed or poorly ventilated areas.  
 HYGIENIC MEASURES: Wash hands after handling and before eating, drinking, or smoking. Change contaminated clothing at the end of the work shift.

**9.PHYSICAL AND CHEMICAL PROPERTIES**

a. Appearance (physical state, color, etc.): Clear, shiny, colorless liquid  
 b. Odor: Characteristic (hydrocarbon-like)  
 c. Odour threshold: No data  
 d. pH: No data  
 e. Melting point: No data  
 Freezing point: -47°C (maximum)  
 f. Initial boiling point: No data  
 Boiling range: No data  
 g. Flash point: Above 38°C  
 h. Evaporation rate: No data  
 i. Flammability (solid/gas): No data  
 j. Upper flammability or explosive limit: No data  
 Lower flammability or explosive limit: No data  
 k. Vapor pressure: No data  
 l. Vapor density: Above 1 (air = 1)  
 m. Density: 0.775 to 0.880 (water = 1)  
 n. Solubility: Insoluble  
 o. Partition coefficient n-octanol/water: No data  
 p. Autoignition temperature: Above 220°C  
 q. Decomposition temperature: No data  
 r. Kinematic viscosity: Max. 8000 cSt at -20°C  
 s. Other properties:  
 Electrical conductivity: 50 to 600 pS/m

#### **10. STABILITY AND REACTIVITY**

REACTIVITY: This substance is non-reactive under normal conditions.  
 CHEMICAL STABILITY: Stable under normal use and storage conditions.  
 POSSIBILITY OF HAZARDOUS REACTIONS: None expected. Polymerization will not occur.  
 CONDITIONS TO AVOID: High temperatures, sparks, and open flames.  
 INCOMPATIBLE MATERIALS: Strong oxidizers.  
 HAZARDOUS DECOMPOSITION PRODUCTS: Combustion products: carbon monoxide, sulfur oxides.

#### **11. TOXICOLOGICAL INFORMATION**

ACUTE TOXICITY: Hydrocarbon vapors affect the central nervous system, potentially causing dizziness, nausea, and headaches. Aspiration into the lungs because of ingestion or vomiting is very dangerous and leads to the rapid development of pulmonary edema, which can be fatal.  
 CHRONIC TOXICITY: Chronic effects from repeated exposures include irritation of the respiratory tract, dermatitis, muscle weakness, anemia, and alterations in blood lymphocytes.  
 CARCINOGENICITY: Animal carcinogen, limited evidence in humans (IARC Class A3).

#### **12. ECOLOGICAL INFORMATION**

ECOTOXICITY: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Spills form a film on the water surface, preventing oxygen transfer.  
 PERSISTENCE AND DEGRADABILITY: The material floats on water and has high potential for physical contamination. It has a BOD (Biochemical Oxygen Demand) of 53% over 5 days. When released into the environment, the more volatile components evaporate and photo-oxidize.  
 BIOACCUMULATION POTENTIAL: No bioaccumulation or food chain impact issues.  
 OTHER ADVERSE EFFECTS: Liquid hydrocarbons are soil and water pollutants. Volatile hydrocarbons and their combustion products are atmospheric pollutants, constituting greenhouse gases.

**13.DISPOSAL CONSIDERATIONS**

Dispose the waste according to local and state regulations in place.

**14.TRANSPORT INFORMATION**

According to the Agreement for the Facilitation of Dangerous Goods Transport in MERCOSUR:

MAIN HAZARD: Flammable liquid

RISK NUMBER: 30

UN NUMBER: 1863

PACKING GROUP: III

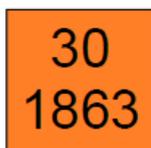
According to the International Maritime Organization (IMO) Code (IMDG Code), 1996 Edition:

TRANSPORT DESIGNATION: Aviation Turbine Fuel

IMDG CLASS: 3.3

RISK NUMBER: 30

UN NUMBER: 1863

**15.REGULATORY INFORMATION**

The product waste is covered by the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (ratified by Law 16.221 on 22/10/91), as hazardous waste of Category 9.

**16. OTHER INFORMATION**

SAFETY DATA SHEET PREPARATION:

According to the GHS guidelines (10th Revision, 2023), Decree 307/009: Regulations for the protection of workers' safety and health against risks related to chemical agents during work.

BIBLIOGRAPHY:

The hazard identification of the product is based on data from ECHA (<https://echa.europa.eu/>).

ABBREVIATIONS:

A.C.G.I.H: American Conference of Governmental Industrial Hygienists

ANCAP: National Administration of Fuels, Alcohol, and Portland

ASTM: American Society of Testing Materials

CAS N°: Chemical Abstract Service Number

CIAT: Toxicological Information and Advisory Center

ECHA: European Chemicals Agency

MERCOSUR: Southern Common Market

NFPA: National Fire Protection Association

OSHA: Occupational Safety and Health Administration

PVC: Polyvinyl Chloride

SGA: Globally Harmonized System

The information provided in this Safety Data Sheet is believed to be accurate as of the date of publication. However, no warranty, express or implied, is made regarding its accuracy or completeness.

Handling conditions, storage, use and disposal of the product must be defined by the user, in consideration of the present information and others that the user may obtain by other ways.