# -Safety Data Sheet-

# Kerosine

## 1. Identification of Substance / Preparation and Company

## Identification of substance/ preparation

**Aviation Kerosine** 

Alternative names: Jet A, Jet A-1, A VTUR

## **Application**

Jet fuel. Do not use for other purpose

# Supplier:

PAC GmbH

P.O. Box: 1241

97912 Lauda- Königshofen

Germany

Tel: (+49) 93 43 640-100 Fax: (+49) 93 43 640-101

# 2. Composition / Information on Ingredients

## **Chemical Description:**

A mixture of kerosine streams

May contain small quantities of proprietary performance additives.

## **Hazardous Components:**

Kerosene – unspezified, Xn, R10 Flammable, R38 Irritation to skin, R65 Harmful: may cause lung damage if swallowed. (>90%)

**Product Identification:** 

Product name

CRM Flash Point ABEL

CRM Flash Point ABEL

**CRM Flash Point ABEL** 

CRM Flash Point TAG

**CRM Flash Point TAG** 

**CRM Flash Point TAG** 

**CRM Freezing Point** 

**CRM Freezing Point** 

**CRM Freezing Point** 

Lot No

1001

1015

1027

1001

1016

1035

1001

1020

1015

Part Number

0100-170-51

0100-170-51

0100-170-51

0100-256-51

0100-256-51

0100-256-51

0100-860-51

0100-860-51

0100-860-52

# 3. Hazards Identification

Flammable

Harmful if swallowed - aspiration hazard

Likely to cause skin irritation.

## 4. First Aid Measures

# **Eyes**

Wash eye thoroughly with copious quantities of water, ensuring eyelids are held open. Obtain medical advice if any pain or redness develops or persists.

## Skin

Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin.

## Ingestion:

If contamination of the mouth occurs. Wash our thoroughly with water. Except as a deliberate act, the ingestion of large amounts of product is unlikely. If it should occur, do not induce vomiting; obtain medical advice.

#### Inhalation

If fumes are inhaled the patient should be removed to fresh air and if recovery is not immediate, medical assistance must be called without delay. If breathing has failed respiration must be assisted, preferably by mouth to mouth method.

## **Medical Advice**

Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, inducation of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.

## 5. Fire Fighting Measures

For major fires call the Fire Service. Ensure an escape path is always available from any fire. There is a danger of flashback if sparks or hot surfaces ignite vapour. Use foam, dry powder or water fog. DO NOT USE water jets. Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus.

## **Combustion Products**

Toxic fumes may be evolved on burning or exposure to heat. See stability and Reactivity, Section 10 of this safety Data Sheet.

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## 6. Accidental Release Measures

Any spillage should be regarded as a potential fire risk. In the event of spillage, remove all sources of ignition and ensure good ventilation. Wear protective clothing. See Exposure Controls/Personal Protection, section 8, of this Safety Data Sheet. Spilled material may make surfaces slippery. Clean up spilled material immediately. Contain and recover spilled material using sand or other suitable inert absorbent material. Recovery of large spillages should be effected by specialist personnel. It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may be reasonably anticipated. Large and uncontained spillages should be smothered with foam to reduce the risk of ignition. The foam blanket should be maintained until the area is declared safe. Protect drains from potential spills to minimise contamination. Do not wash product into drainage system. Vapour is heavier than air and may travel to remote sources of ignition (eg. along drainage system, in basements etc.).

If spillage has occured in a confined space, ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry. In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment. Recover product from the surface. Protect environmentally sensitive areas and water supplies. In the case of spillage at sea approved dispersants may be used where authorised by the appropriate government/regulatory authorities. Regular surveillance on the location of the spillage should be maintained. In the event of spillages contact the appropriate authorities

## 7. Handling and Storage

#### **Storage Conditions**

Store and dispense only in well ventilated areas away from heat and sources of ignition. Store and use only in equipment/containers designed for use with this product. Containers must be properly labeled and kept closed when not in use. Do not remove warning labels from containers. Empty packages may contain some remaining product. Retain hazard warning labels on empty packages as a guide to the safe handling, storage and disposal of empty packaging. Do not enter storage tanks without breathing apparatus unless the tank has been well ventilated and the tank atmosphere has been shown to contain hdrocarbon vapour concentrations of less than 1% of the lower flammability limited and an oxygen concentration of at least 20% volume. Always have sufficient people standing by outside the tank with appropriate breathing apparatus and equipment to effect a quick rescue.

#### **Handling Precautions**

Avoid, as far as reasonably practicable, inhalation of vapour, mists or fumes generated during use. Avoid contact with skin and observe good personal hygiene. Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate. Do not siphon product by mouth. Whilst using do not eat, drink or smoke. Wash hands thoroughly after contact. Take all necessary precautions against accidental spillage into soil or water.

### **Fire Prevention**

Light hydrocarbon vapours can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapour in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use. Empty containers represent a fire hazard as they may contain some remaining flammable product and vapour. Never cut, weld, solder or braze empty containers.

# 8. Exposure Controls / Personal Protection

## **Exposure Limits**

There is no appropriate occupational exposure limit for this material. If vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level.

# **Protective Clothing**

Wear face visor or goggles in circumstances where eye contact can accidentally occur. If skin contact is likely, wear impervious protective clothing and/or gloves. Protective clothing should be regularly inspected and maintained; overalls should be dry-cleaned, laundered and preferably starched after use.

## **Respiratory Protection**

If operations are such that exposure to vapour, mist or fume may be anticipated, then suitable approved respiratory equipment should be worn. The use of respiratory equipment must be strictly in accordance with the manufacturers instructions and any statutory requirements governing its selection and use.

### 9. Physical and Chemical Properties

#### **Physical State:**

Physical state: Liquid

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# Kerosine

Color: colourless---→ yellow

Odour: kerosine-like

Boiling point/range ASTM D 86 ℃ 156 - 258 Density @ 15°C **ASTM D 1298** kg/m<sup>3</sup> 804 Flash point (PMC) ASTM D 93 °C >38 Kinematic viscosity @ 20 ℃ ASTM D 445 mm<sup>2</sup>/s >3,5

#### 10. Stability / Reactivity

Stable at ambient temperatures. Hazardous polymerisation reactions will not occur

## **Conditions to Avoid**

Sources of ignition

#### **Materials to Avoid**

Avoid contact with strong oxidizing agents.

#### **Hazardous Decomposition Products**

Thermal decomposition products will vary with conditions. Incomplete combustion will generate smoke, carbon dioxide and hazardous gases, including carbon monoxide.

## 11. Toxicological Information

Unlikely to cause more than transient stinging or redness if accidental eye contact occurs. May be irritating to eyes at high concentrations of vapour, mists or fumes.

Likely to cause skin irritation

#### Ingestion

Unlikely to cuse harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea. Will injure the lungs if aspiration occurs, eg. during vomiting.

May cause irritation to eyes, nose and throat due to exposure to vapour, mists or fumes.

# 12. Ecological information

#### Mobility:

Spillages may penetrate the soil causing ground water contamination.

## Persistence and degradability

This product is inherently biodegradable

# **Bioaccumulative potential**

There is no evidence to suggest bioaccumulation will occur.

#### **Aquatic toxicity**

Toxic to aquatic organisms. May cause long term effects in the aquatic environment Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired. German WGK Classification: 2

# 13. Disposal Considerations

Dispose of via an authorised person/licensed waste disposal contractor in accordance with local regulations. Dispose of product and container carefully and responsibly. Do not dispose of near ponds. Ditches, down drains or onto soil. Empty packages may contain some remaining product. Hazard warning labels are a guide to the safe handling of empty packaging and should not be removed.

## 14. Transport Information

ADR/RID: Kerosene, Flammable Liquid, Class 3, Item 31 ©, Hazard Identification No 30 UN: KEROSENE, Flammable liquid, Class 3, Packing Group III, UN Number 1223 IATA/ICAO: Kerosene, flammable liquid, Class 3, Packing Group III IMO: KEROSENE, Flammable liquid, Class 3.3, Packing Group III EMERGENCY ACTION CODE: Flammable liquid, 3[Y]

## 15. Regulatory Information

# **EC Category of Danger**

Flammable Harmful Irritant

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## **EU Labeling**

Symbol: St. Andrew's Cross. Indication of danger: HARMFUL, Contains: Kerosine – unspecified

### Risk (R) Phrases:

S24 Avoid contact with skinS23 Do not breathe vapour

S43 In case of fire, use foam/dry powder/CO2. Never use water jets.

S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

S61 Avoid release into the environment. Refer to special instructions/Safety data sheets.

#### 16. Other Information

## Compiled by:

Product Steward ship Group BP Oil Technology Centre Chertsey Road Sunbury-on-Thames middlesex, TW16 7LN

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### **Sheet Revisions**

Date:

07/04/97 – sections revised 2, 12, 15 12/11/99 – sections revised 2, 10, 15

#### Source of material and present safety data sheet

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