



MATERIAL SAFETY DATA SHEET

Safety Department

Review:2.5

September 13, 2006

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1) MATERIAL IDENTIFICATION:

Safra Product Name	Aliphatic Solvent
Product Trade Name	Safranorm™
Chemical Symbol	Mixture of Aliphatic Petroleum Hydrocarbons with max. 20% aromatic content
Molecular weight	~ 140
ID # & CAS	ID # UN 1300 & CAS # 64742-48-9
Manufacturer:	Safra Company in its Yanbu Refinery
Address:	P.O.Box: 30063, Yanbu Al Sinaiyah, Kingdom of Saudi Arabia
Country of Origin & Production	Kingdom of Saudi Arabia

2) PHYSICAL & CHEMICAL PROPERTIES:

a- PHYSICAL PROPERTIES

Boiling Range	150 to 200 °C
Specific Gravity(H ₂ O = 1)	0.77 to 0.79 at 15 °C
Vapor Density(AIR = 1)	3.9
Solubility in Water	Insoluble
Evaporation rate (Butyl Acetate = 1)	Not Defined
Appearance & Odor	Clear water white., Liquid characteristic odor.
Colour	+30 Min.
Flash Point	40 °C Min. ASTM D56

b- CHEMICAL PROPERTIES

Aromatic Content	Max. 20 % vol.
Sulfur Content	Max. 5 ppm wt.

3) COMPOSITION DATA:

Ingredients	Mixture of Aliphatic Hydrocarbons with max. 15 % aromatic content
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4) HEALTH HAZARDS:

TLV	100 ppm Max.
Effect of single over exposure Swallowing	Low order of toxicity, very small amounts aspirated into lung during ingestion or vomiting, may cause severe lung congestion resulting in labored breathing.
Skin Absorption	None currently known.
Inhalation	Irritating to the respiratory tract. In high concentration may cause central nervous system effects leading to drowsiness, dizziness and marcosis.
Skin Contact	Frequent or prolonged may irritate and cause dermatitis.
Eye Contact	Irritation but does not injure eye tissue.
Effect of repeated over exposure	No evidence of adverse effects from available information.



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5) FIRE FIGHTING MEASURES:

Extinguishing Media	Use foam, dry chemical powder, Carbon dioxide.
Special Fire Fighting	Use self contained breathing apparatus and protective clothing. Avoid spreading, burning liquid with water which should be used for cooling containers as water spray.
Unusual Fire and Explosion Hazard	Moderately explosive when exposed to flame or chemically reacted. Vapor form this product, may travel or be moved by air currents and be ignited by pilot lights, other flames, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from handling point.
Small Fire	Dry chemical powder, CO2 & water supply.
Large Fire	Water spray, fog or foam. Move containers or drums from fire area if you can do it without risk. Cool containers that are exposed to flames with water from the sides until / and after fire is out.
Extinguishing Media	Use foam, dry chemical powder or water spray.
Special Fire Fighting	Do not spray water directly into storage containers due to danger of boil over.

6) EMERGENCY AND FIRST AID MEASURES UPON EXPOSURE TO THE MATERIAL:

Swallowing	Do not induce vomiting. Keep patient at rest. Seek immediate medical attention.
Inhalation	Move victim to fresh air, call emergency medical care. If not breathing give artificial respiration. If breathing is difficult give oxygen.
Skin Contact	Remove contaminated clothing and wash affected area with soap and water. Seek Medical advise.
Eye contact	Immediately flush eyes with running water for at least 15 minutes. Get medical care without delay.

7) STABILITY & REACTIVITY DATA:

Stability	Stable
Hazardous Combustion or Decomposition products	Burning may produce carbon monoxide and/or carbon dioxide. When heated it emits irritating fumes, can react vigorously with oxidizing materials.
Hazardous polymerization Condition to avoid	Will not occur. Heat, Sparks, build up of static charge.

8) ACCIDENTAL RELEASE/SPILL/LEAK MEASURES:

Steps to be taken if the material is released or spilled :

1. Notify safety personnel of leaks or spills.
2. Eliminate all sources of ignition until area is determined to be free from explosion hazard.
3. Provide adequate ventilation & instruct personnel to use protection against liquid contact and vapor or mist inhalation.
4. Contain spill by diking
5. Small spills could be washed away to the API separator or may be contained by using absorbents. Large spill after diking should be recovered by pumping (Use explosion proof pump).
6. Stop leak if you can without risk.
7. Use water spray to reduce vapors.



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9) DISPOSAL CONSIDERATION:

Disposal Method Incinerate in a special furnace or if the quantity is small expose for weathering, abide to local regulations. Other disposal method is burial in approved land fill.

10) EXPOSURE CONTROLS/ PERSONAL PROTECTION EQUIPMENT FOR DEALING WITH THE MATERIAL:

Respiratory Protection Use gas mask for respiratory protection.
Ventilation Provide adequate ventilation where operating conditions may create excessive vapors or mists. This product should be confined within closed containers in which case general (mechanical) ventilation should be sufficient. Use explosion proof equipments. Special local ventilation is recommended at points where vapors can be expected to escape to the work place air.

Hand/body protection PVC or neoprene gloves/Impermeable apron
Eye Protection Chemical splash goggles. An eye wash fountain and washing facilities to be readily available near handling areas.

11) HANDLING & STORAGE:

Handling Use non sparking tools and explosion proof electrical equipments; Prevent static electric spark by grounding transfer equipment; Avoid breathing vapors; Use with adequate ventilation; Don't get in eyes or skin or clothing, wash thoroughly after handling; Call safety for any problem.

Storage Store in closed containers in a cool, dry and well ventilated area away from source of open flame, heat, strong oxidizing agents and ignitions; Label all containers and sample bottles.

12) TOXICOLOGICAL INFORMATION:

Carcinogenicity It has not been identified as a carcinogen by NTP, IARC or OSHA.
Skin Absorption None currently known.

13) ECOLOGICAL INFORMATION:

Not established

14) TRANSPORT INFORMATION:

Package Type Packed in 200 liters drums every 4 drums on a pallet transported by road trailer trucks. Also transported by road tankers.

Hazard Class or Division 3
ID # & CAS ID # UN 1300 & CAS # 64742-48-9
Label & Placard Flammable Liquid & Flammable



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15) REGULATORY INFORMATION

Respiratory Protection	Not required for regular handling in open area.
Ventilation	This product should be confined within closed containers in which case general (mechanical) ventilation should be sufficient. Special local ventilation is recommended at points where vapors can be expected to escape to the work place air.
Hand/body protection	PVC or neoprene gloves/Impermeable apron
Eye Protection	Eye bath and safety shower. Safety glasses with side shield. Chemical splash goggles.
Type of Application	Used as raw material in paints industry.

SPECIAL PRECAUTION

Keep away from heat, sparks and flame. Avoid breathing vapors. Use with adequate ventilation. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling.

