



Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: SFEXX-ISO-M
Product Description: Isoparaffinic Hydrocarbon
Intended Use: Solvent
Company Contact : TENOIT CO., LTD.
 Room 4, 5FL., No.109, Sec.6, Mingquan East Road, Taipei, Taiwan
EMERGENCY TELEPHONE NUMBER : TEL (886) 2 8792-2185 8792-2187
 FAX (886) 2 8792-2151

Section 2 - COMPOSITION / INFORMATION ON INGREDIENTS

This material is hazardous according to regulatory guidelines (see MSDS Section 15).
CLASSIFICATION: Aspiration toxicant: Category 1.
Hazard Statements:
Health: H304: May be fatal if swallowed and enters airways.
Precautionary Statements:
Response: P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331: Do NOT induce vomiting.
Storage: P405: Store locked up.
Disposal: P501: Dispose of contents and container in accordance with local regulations.
Contains: DISTILLATES (PETROLEUM), HYDROTREATED LIGHT
Other hazard information:
PHYSICAL / CHEMICAL HAZARDS
 Material can accumulate static charges which may cause an ignition.
HEALTH HAZARDS
 May be irritating to the eyes, nose, throat, and lungs. Repeated exposure may cause skin dryness or cracking.
ENVIRONMENTAL HAZARDS
 No significant hazards.
NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

Section 3 - HAZARDS IDENTIFICATION

This material is considered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).

Hazardous Substance(s) or Complex Substance(s) required for disclosure

Name	CAS#	Concentration*	GHS Hazard Codes
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	64742-47-8	100%	H304

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Section 4 - FIRST AID MEASURES

Inhalation : Remove from further exposure. For those providing assistance, avoid



exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion

Seek immediate medical attention. Do not induce vomiting.

NOTE TO PHYSICIAN

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water.

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Smoke, Fume, Incomplete combustion products, Oxides of carbon.

FLAMMABILITY PROPERTIES

Flash Point [Method]: > 94°C (200°F) [ASTM D-93]

Flammable Limits (Approximate volume % in air): LEL: 0.6 UEL: 4.9

Autoignition Temperature: > 200°C (392°F)

Section 6 - ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required, due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders. For emergency responders: Respiratory



protection: half-face or full-face respirator with filter(s) for organic vapor and, when applicable, H₂S, or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to aromatic hydrocarbons are recommended. Note: gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do so without risk. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do so without risk. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

Section 7 - HANDLING AND STORAGE

HANDLING

Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or earthing procedures. However, bonding and earthing may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

Loading/Unloading Temperature: [Ambient]

Transport Temperature: [Ambient]

Transport Pressure: [Ambient]

Static Accumulator: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator.



<p>if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.</p>					
<p>STORAGE The container choice, for example storage vessel, may effect static accumulation and dissipation. Do not store in open or unlabelled containers. Storage Temperature: [Ambient] Storage Pressure: [Ambient] Suitable Containers/Packing: Tankers; Tank Trucks; Railcars; Barges; Drums Suitable Materials and Coatings (Chemical Compatibility): Neoprene; Epoxies; Epoxy Phenolics; Polyamide; Polyethylene; Polypropylene; Polyester; Teflon; Carbon Steel; Stainless Steel Unsuitable Materials and Coatings: Natural Rubber; Ethylene-propylene-diene monomer (EPDM); Polystyrene; Butyl Rubber</p>					
<p>Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION</p>					
<p>EXPOSURE LIMIT VALUES Exposure limits/standards (Note: Exposure limits are not additive)</p>					
Source	Form	Limit / Standard			NOTE
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	Vapour	RCP - TWA	1200 mg/m ³	152 ppm	Total Hydrocarbons
<p>Biological limits No biological limits allocated. NOTE: Limits/standards shown for guidance only. Follow applicable regulations.</p>					
<p>ENGINEERING CONTROLS The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: Adequate ventilation should be provided so that exposure limits are not exceeded.</p>					
<p>PERSONAL PROTECTION Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage. Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: Half-face filter respirator Type A filter material. For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.</p>					



<p>Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:</p> <p>No protection is ordinarily required under normal conditions of use.</p>	
<p>Eye Protection: If contact is likely, safety glasses with side shields are recommended.</p>	
<p>Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:</p> <p>If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.</p>	
<p>Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.</p>	
<p>ENVIRONMENTAL CONTROLS See Sections 6, 7, 12, 13.</p>	
<p>Section 9 - PHYSICAL AND CHEMICAL PROPERTIES</p>	
<p>Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.</p>	
<p>GENERAL INFORMATION</p>	
Physical State: Liquid	Form: Clear Color: Colorless
Odor: Odorless	Odor Threshold: N/D
<p>IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION</p>	
Relative Density (at 15.6°C): 0.791	pH: N/A
Density(at 15°C): 788 Kg/m ³ (6.58 lbs/gal, 0.79 Kg/m ³)	
Flash Point [Method]: > 94°C (200°F) [ASTM D-93]	
Flammable Limits (Approximate volume % in air): LEL: 0.6 UEL: 4.9	
Autoignition Temperature: > 200°C(392°F)	
Boiling Point / Range: 218°C (424°F) - 257°C (495°F)	
Vapor Density (Air = 1): 6.5 at 101 kPa [Calculated]	
Vapor Pressure: 0.012 kPa (0.09 mm Hg) at 20°C 0.044 kPa (0.33 mm Hg) at 38°C 0.137 kPa (1.03 mm Hg) at 55°C	
Evaporation Rate (n-butyl acetate = 1): < 0.01	
Log Pow (n-Octanol/Water Partition Coefficient): N/D	
Solubility in Water: Negligible	
Viscosity: 2.57 cSt (2.57 mm ² /sec) at 40°C 3.57 cSt (3.57 mm ² /sec) at 25°C	
Freezing Point: -77°C (-107°F)	
Melting Point: N/D	



Decomposition Temperature: N/D	
Oxidizing Properties: See Hazards Identification Section.	
OTHER INFORMATION	
Pour Point: -57°C(-71°F) Molecular Weight: 188[Calculated]	
Hygroscopic: No Coefficient of Thermal Expansion: 0.00074 V/V°C	
Section 10 - STABILITY AND REACTIVITY	
STABILITY: Material is stable under normal conditions.	
CONDITIONS TO AVOID: Avoid heat, sparks, open flames and other ignition sources.	
MATERIALS TO AVOID: Strong oxidizers	
HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.	
POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.	
Section 11 - TOXICOLOGICAL INFORMATION	
ACUTE TOXICITY	
<u>Route of Exposure</u>	<u>Conclusion / Remarks</u>
Inhalation	
Toxicity: Data available.	Minimally Toxic. Based on test data for structurally similar materials.
Irritation: Data available.	Negligible hazard at ambient/normal handling temperatures. Based on test data for structurally similar materials.
Ingestion	
Toxicity: LD50 > 10000 ml/kg	Minimally Toxic. Based on test data for structurally similar material.
Skin	
Toxicity: LD50 > 3160 mg/kg	Minimally Toxic. Based on test data for structurally similar material.
Irritation: Data available.	May dry the skin leading to discomfort and dermatitis. Based on test data for structurally similar material.
Eye	
Irritation: Data available.	May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar material.
OTHER HEALTH EFFECTS FROM SHORT AND LONG TERM EXPOSURE	
Anticipated health effects from sub-chronic, chronic, respiratory or skin sensitization, mutagenicity, reproductive toxicity, carcinogenicity, target organ toxicity (single exposure or repeated exposure), aspiration toxicity and other effects based on human experience and/or experimental data.	
For the product itself:	
Vapour/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anaesthesia, drowsiness, unconsciousness and other central nervous system effects including death.	



Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Additional information is available by request.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC

3 = IARC 1

5 = IARC 2B

2 = NTP SUS

4 = IARC 2A

6 = OSHA CARC

Section 12 - ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material—Not expected to be harmful to aquatic organisms.

Material—Not expected to demonstrate chronic toxicity to aquatic organisms.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Material -- Expected to be readily biodegradable

Hydrolysis:

Material -- Transformation due to hydrolysis not expected to be significant.

Photolysis:

Material -- Transformation due to photolysis not expected to be significant.

Atmospheric Oxidation:

Material -- Expected to degrade rapidly in air

OTHER ECOLOGICAL INFORMATION

VOC (EPA Method 24): 6.401 lbs/gal

Section 13 - DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

NATIONAL CATALOGUE OF HAZARDOUS WASTES

HW42—Organic Solvents Wastes

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

Empty Container Warning

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE,



SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.
Section 14 - TRANSPORT INFORMATION
China List of Dangerous Goods (GB 12268 - 2005) :Not Regulated for Land Transport CN Number:Not applicable. INTERNATIONAL CLASSIFICATION FOR TRANSPORT SEA (IMDG):Not Regulated for Sea Transport according to IMDG-Code Marine Pollutant: No MARPOL 73/78 Convention - Annex II Product Name: NOXIOUS LIQUID, N.F., (9) N.O.S., (ISOPAR M, contains iso-and cycloalkanes (C12+)) Ship type: 3 Pollution category: Z AIR (IATA): Not Regulated for Air Transport
Section 15 - REGULATORY INFORMATION
This material is considered hazardous according to The General Rule for Classification and Hazard Communication of Chemicals (GB 13690-2009). REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS The General Rules for preparation of precautionary label for Chemicals (GB 15258-2009): Regulated Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste: See Disposal Considerations section. Complies with the following national/regional chemical inventory requirements: AICS, IECSC, DSL, ENCS, KECI, PICCS, TSCA
Section 16- OTHER INFORMATION
N/D = Not determined, N/A = Not applicable

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