## SAFETY DATA SHEET



**HEAVY FUEL OIL** 

### Section 1. Identification

Product name : HEAVY FUEL OIL
Product description : petroleum hydrocarbons

### Relevant identified uses of the substance or mixture and uses advised against

Identified uses

: Fuel oil

**Uses advised against** 

: This product is not recommended for any industrial, professional or consumer use other

than the identified uses above.

**Supplier** 

: ExxonMobil Product Solutions Company (a division of Exxon Mobil Corporation)

SDS - LOC. 106

22777 Springwoods Village Parkway Spring, TX 77389-1425 USA

24-Hour emergency telephone number

: 1-800-424-9300 / +1 703-741-5970 / +1-703-527-3887 (CHEMTREC)

**Supplier General Contact** 

: (832) 624-8500

**SDS Internet Address** 

: www.sds.exxonmobil.com

### Section 2. Hazards identification

**OSHA/HCS** status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2

GERM CELL MUTAGENICITY - Category 1 CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

### **GHS label elements**

Hazard pictograms







Signal word

: Danger

**Hazard statements** 

: H226 - Flammable liquid and vapor. H315 - Causes skin irritation. H340 - May cause genetic defects.

H350 - May cause cancer.

H361 - Suspected of damaging fertility or the unborn child.

H373 - May cause damage to organs through prolonged or repeated exposure. (blood,

liver, thymus)

### **Precautionary statements**

**Prevention** 

: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood. 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 or lighting equipment.

P242 - Use non-sparking tools.

P243 - Take action to prevent static discharges.

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### Section 2. Hazards identification

P260 - Do not breathe vapor.

P264 - Wash thoroughly after handling.

P280 - Wear protective gloves, protective clothing and eye or face protection.

Response : 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.

P308 + P313 - IF exposed or concerned: Get medical advice or attention. P332 + P313 - 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 water fog, foam, dry chemical or carbon dioxide

(CO2) to extinguish.

Storage : P403 + P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Contains : steam cracked residuum (petroleum); light thermal cracked distillate and styrene

Hazards not otherwise

classified

: None known.

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. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% by weight	Identifiers
steam cracked residuum (petroleum)	≥80	CAS: 64742-90-1
light thermal cracked distillate	≤15	CAS: 64741-82-8
styrene	≥1 - ≤5	CAS: 100-42-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

### Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Continue to rinse for at least 10 minutes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Get medical attention.

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### Section 4. First aid measures

### Ingestion

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

: No known significant effects or critical hazards. Ingestion

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:

> pain or irritation watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

> irritation redness

Ingestion : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** 

: No specific treatment.

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### **Extinguishing media**

Suitable extinguishing

media

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing** 

media

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous combustion** products

: Incomplete combustion products, Oxides of carbon, Smoke, Fume

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## Section 5. Fire-fighting measures

### Special protective actions for fire-fighters

: Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Assure an extended cooling down period to prevent re-ignition. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. No action shall be taken involving any personal risk or without suitable training.

### **Special protective** equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### 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. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

### Personal precautions, protective equipment and emergency procedures

### For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

### **Environmental precautions**

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### Methods and materials for containment and cleaning up

### **Small spill**

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

### Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Material will sink. Remove material, as much as possible, using mechanical equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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.

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## Section 7. Handling and storage

### **Precautions for safe handling**

#### **Protective measures**

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

#### **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 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.

## Loading/Unloading Temperature

: Ambient

Transport Temperature
Transport Pressure

: Ambient: Ambient

# Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Storage Temperature : Ambient : Ambient : Ambient

## Section 8. Exposure controls/personal protection

#### **Control parameters**

### Occupational exposure limits

Ingredient name	Exposure limits
HEAVY FUEL OIL	ExxonMobil (COMPANY) Absorbed through skin.
	TWA: 0.1 mg/m³ (benzene solubles). Form: Mist
steam cracked residuum (petroleum)	ExxonMobil (COMPANY) Absorbed through skin.
	TWA 8 hours: 0.1 mg/m³ (benzene solubles). Form: Total oil mist.
light thermal cracked distillate	ExxonMobil (COMPANY)
	TWA 8 hours: 5 mg/m³. Form: Stable Aerosol
	TWA 8 hours: 200 mg/m³. Form: Vapor
styrene	NIOSH REL (United States, 10/2020)
	TWA 10 hours: 50 ppm.
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## Section 8. Exposure controls/personal protection

TWA 10 hours: 215 mg/m³.

STEL 15 minutes: 100 ppm.

STEL 15 minutes: 425 mg/m³.

OSHA PEL Z2 (United States, 2/2013)

TWA 8 hours: 100 ppm. CEIL: 200 ppm.

AMP 5 minutes: 600 ppm.

CAL OSHA PEL (United States, 5/2018) Absorbed through skin.

STEL 15 minutes: 425 mg/m³. STEL 15 minutes: 100 ppm.

C: 500 ppm.

TWA 8 hours: 215 mg/m<sup>3</sup>. TWA 8 hours: 50 ppm.

OSHA PEL 1989 (United States, 3/1989)

TWA 8 hours: 50 ppm. TWA 8 hours: 215 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 425 mg/m³.

ACGIH TLV (United States, 1/2024) Ototoxicant.

TWA 8 hours: 10 ppm. STEL 15 minutes: 20 ppm.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

### **Biological exposure indices**

Ingredient name	Exposure indices
styrene	ACGIH BEI (United States, 1/2024)  BEI: 150 mg/g creatinine, mandelic acid plus phenylglyoxylic acid [in urine]. Sampling time: end of shift.  BEI: 20 µg/l, styrene [in urine]. Sampling time: end of shift.

## Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

## **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Individual protection measures**

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

## Skin protection Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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## Section 8. Exposure controls/personal protection

**Body protection** 

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties and safety characteristics

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### **Appearance**

**Physical state** : Liquid. Color : Black

Odor : Petroleum/Solvent Odor threshold : Not available. pH : Not applicable. Melting point/freezing point : Not available. : Not available.

**Boiling point or initial** boiling point and boiling

range

: Closed cup: 60°C (140°F) [Estimated] Flash point

**Evaporation rate** : Not available.

: Flammable liquids - Category 3 **Flammability** 

Lower and upper explosion limit/flammability limit

: Not available.

: Not available. Vapor pressure Relative vapor density : >1 [Air = 1]

**Relative density** >1

Solubility in water : Negligible Partition coefficient: n-: Not applicable.

octanol/water

: Not available. **Auto-ignition temperature Decomposition temperature** : Not available. **Viscosity** : Not available.

**Particle characteristics** 

Median particle size : Not applicable.

**Hygroscopic** : No

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## Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** 

: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** 

: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials

 Reactive or incompatible with the following materials:,oxidizing materials,Strong oxidizers

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **Section 11. Toxicological information**

### Information on toxicological effects

### **Acute toxicity**

**Conclusion/Summary** 

. . . . .

**Inhalation** : Minimally Toxic. No end point data for material. Based on assessment of the

components.

**Dermal** : Minimally Toxic. No end point data for material. Based on assessment of the

components.

Oral : Minimally Toxic. No end point data for material. Based on assessment of the

components.

**Irritation/Corrosion** 

**Conclusion/Summary** 

Skin : Irritating to the skin. No end point data for material. Based on assessment of the

components.

**Eyes**: May cause mild, short-lasting discomfort to eyes. No end point data for material. Based

on assessment of the components.

Respiratory : Negligible hazard at ambient/normal handling temperatures. No end point data for

material. Elevated temperatures or mechanical action may form vapors, mist, or fumes

which may be irritating to the eyes, nose, throat, or lungs.

### Respiratory or skin sensitization

### Conclusion/Summary

Skin : Not expected to be a skin sensitizer. No end point data for material. Based on assessment of the components.

assessment of the components.

**Respiratory**: Not expected to be a respiratory sensitizer. No end point data for material.

**Mutagenicity** 

**Conclusion/Summary**: May cause genetic defects. No end point data for material. Based on assessment of the

components.

**Carcinogenicity** 

**Conclusion/Summary** : May cause cancer. No end point data for material. Based on assessment of the

components.

**Classification** 

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## **Section 11. Toxicological information**

Product/ingredient name	OSHA	IARC	NTP
steam cracked residuum (petroleum)	-	2B	-
light thermal cracked distillate styrene	-	1 2A	- Reasonably anticipated to be a human carcinogen.

#### Reproductive toxicity

**Conclusion/Summary** 

: May damage the unborn child. No end point data for material. Based on assessment of the components.

### Specific target organ toxicity (single exposure)

**Conclusion/Summary** 

: Not expected to cause organ damage from a single exposure. No end point data for material.

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Target organs
HEAVY FUEL OIL	Category 2	blood, liver, thymus

### **Conclusion/Summary**

: May cause damage to organs through prolonged or repeated exposure. No end point data for material. Based on assessment of the components.

### **Aspiration hazard**

**Conclusion/Summary** 

: Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. No end point data for material.

### **Other information**

**Contains** 

: Middle distillates with cracked stocks: Carcinogenic in animal tests. Caused mutations In vitro. Repeated dermal exposures to high concentrations in test animals resulted in reduced litter size and litter weight, and increased fetal resorptions at maternally toxic doses. Dermal exposure to high concentrations resulted in severe skin irritation with weight loss and some mortality. Inhalation exposure to high concentrations resulted in respiratory tract irritation, lung changes/infiltration/accumulation, and reduction in lung function. Styrene: Prolonged or deliberate inhalation of this product may cause nervous system damage. Repeated exposure of pregnant animals to styrene has been reported to cause adverse fetal developmental effects. Styrene oxide, a possible metabolite of styrene, has been shown to be carcinogenic in animals and styrene has been reported to produce chromosomal abnormalities. The current information does not indicate that low level or infrequent exposure to styrene is associated with cancer or other serious diseases in humans.

## **Section 12. Ecological information**

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

### **Toxicity**

### **Conclusion/Summary**

Acute toxicity : Toxic to aquatic life.

**Chronic toxicity** : Toxic to aquatic life with long lasting effects.

Persistence and degradability

Not determined.

**Bioaccumulative potential** 

Not determined.

**Mobility in soil** 

Not determined.

Other ecological information

Other adverse effects : No known significant effects or critical hazards.

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## Section 13. Disposal considerations

### **Disposal methods**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN1993	UN1993	UN1993	UN1993
UN proper shipping name	Flammable liquids, n. o.s. (styrene)	FLAMMABLE LIQUID, N.O.S. (styrene)	FLAMMABLE LIQUID, N.O.S. (styrene)	Flammable liquid, n.o.s. (styrene)
Transport hazard class(es)	3	3	3	3
Label(s) / Marks	The state of the s	<b>₹</b> 2	(** <u>\tag{\tag{\tag{\tag{\tag{\tag{\tag{</u>	
Packing group	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information
DOT Classification

: This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids, that are marine pollutants, are not regulated as hazardous materials in package sizes less than the product reportable quantity, unless transported by vessel. This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. Reportable quantity 40983.6 lbs / 18606.6 kg [4468.5 gal / 16915.1 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

Limited quantity Yes.

<u>Packaging instruction</u> Exceptions: 150. Non-bulk: 203. Bulk: 242. <u>Quantity limitation</u> Passenger aircraft/rail: 60 L. Cargo aircraft: 220 L.

Special provisions B1, B52, IB3, T4, TP1, TP29

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## Section 14. Transport information

**TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous

> Goods Regulations: 2.18-2.19 (Class 3), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.

**Explosive Limit and Limited Quantity Index** 5 Passenger Carrying Road or Rail Index 60

Special provisions 16, 150

**IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

> Emergency schedules F-E, \_S-E Special provisions 223, 274, 955

Flash point 60 °C C.C.

**IATA** : The environmentally hazardous substance mark may appear if required by other

transportation regulations.

Quantity limitation Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger

Aircraft: 10 L. Packaging instructions: Y344.

**Special provisions** A3

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according : Not applicable.

to IMO instruments

## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Water Act (CWA) 307: toluene; ethyl benzene

Clean Water Act (CWA) 311: styrene; toluene; xylenes; ethyl benzene

### TSCA 12(b) - Chemical export notification

Not applicable.

Clean Air Act Section 112 : Listed

(b) Hazardous Air **Pollutants (HAPs)** 

**Clean Air Act Section 602** : Not listed

Class I Substances

Clean Air Act Section 602

**Class II Substances** 

: Not listed

**DEA List I Chemicals** 

(Precursor Chemicals)

: Not listed

**DEA List II Chemicals** 

: Not listed

(Essential Chemicals)

### **SARA 302/304**

### **Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312** 

Classification : FLAMMABLE LIQUIDS - Category 3

SKIN IRRITATION - Category 2

GERM CELL MUTAGENICITY - Category 1 **CARCINOGENICITY - Category 1B** TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

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HEAVY FUEL OIL

## Section 15. Regulatory information

### **SARA 313**

	Product name	CAS number	%
Form R - Reporting requirements	styrene	100-42-5	≥1 - ≤5
Supplier notification	styrene	100-42-5	≥1 - ≤5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

**Massachusetts** : The following components are listed: STYRENE **New York** : The following components are listed: Styrene

**New Jersey** : The following components are listed: STYRENE MONOMER; TOLUENE

**Pennsylvania** : The following components are listed: BENZENE, ETHENYL-

Illinois : None of the components are listed.

### California Prop. 65

**WARNING**: Cancer - www.P65Warnings.ca.gov.

### **Inventory list**

**Australia inventory (AIIC)** : All components are listed or exempted. Canada inventory (DSL-NDSL) : All components are listed or exempted. China inventory (IECSC) : All components are listed or exempted.

Japan inventory (CSCL) : Not determined. Japan inventory (Industrial Safety and : Not determined.

**New Zealand Inventory of Chemicals** 

(NZIoC)

: Not determined. **Philippines inventory (PICCS)** 

Korea inventory (KECI) : All components are listed or exempted.

**Taiwan Chemical Substances Inventory** : Not determined.

(TCSI)

**United States inventory (TSCA 8b)** All components are active or exempted.

## Section 16. Other information

### **Hazardous Material Information System (U.S.A.)**



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

: Not determined.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

### **Section 16. Other information**



### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 GERM CELL MUTAGENICITY - Category 1 CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

### **History**

Date of issue/Date of

revision

: 10 September 2024

**Date of previous issue** 

: 26 February 2024

Version

1.01

Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

References

: Not available.

Indicates information that has changed from previously issued version.

Product code : 1263656

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