FLINT HILLS resources®

SAFETY DATA SHEET

1. Identification

Product identifier	**SURE SOL®-100 (UNITED STATES)**
Other means of identification	
SDS number	5052
Synonym(s)	LIGHT AROMATIC SOLVENT NAPHTHA * SS-100 FRONT END * SS-100 BACK END
Recommended use	General Use: Solvent, Fuel Additive
Recommended restrictions	Other uses are not recommended unless an assessment is completed, prior to commencement of that use, which demonstrates that the use will be controlled.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer	Flint Hills Resources Corpus Christi, LLC 2825 Suntide Road Corpus Christi, TX 78409 United States
Supplier	Flint Hills Resources, LP P.O. Box 2917 Wichita, KS 67201-2917 United States
Telephone numbers – 24 hour emergency assistance	
Chemtrec	800-424-9300
Carechem24 (US/Canada)	866-928-0789
Carechem24 (Mexico)	52 555 004 8763
Carechem24 (Brazil)	55 113 711 9144
Carechem24 (UK)	+44 (0) 1235 239 670
Flint Hills Resources Corpus Christi, LLC	361-241-4811
24 Hour Emergency Telephone	800-835-1121
Telephone numbers – general assistance	
8-5 (M-F, CST) Customer Service	800-835-1121
8-5 (M-F, CST) MSDS Assistance	316-828-7988
Email:	msdsrequest@fhr.com

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Skin corrosion/irritation	Category 2
	Carcinogenicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
OSHA defined hazards	Not classified.	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2

Label elements

Signal word Danger

Hazard statement Suspected of causing cancer. Flammable liquid and vapor. Causes skin irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

Prevention Keep away from flames and hot surfaces-No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharges.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/ doctor if you feel unwell.

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting.

Specific treatment (See first aid instructions on this label). In case of fire: Use water spray, dry chemical, carbon dioxide or fire-fighting foam to extinguish. If exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse. Collect spillage.

Storage Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) Static accumulating flammable liquids Classified

Supplemental information

Hazard statement Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. These alone may be insufficient to remove static electricity.

Response Eliminate all ignition sources if safe to do so.

3. Composition/information on ingredients

Components	Common name and synonyms	CAS number	%
LIGHT AROMATIC SOLVENT NAPHTHA		64742-95-6	100 %

Additional components

Chemical name	CAS number	%
TRIMETHYLBENZENE ISOMERS	25551-13-7	25 - 50
1,2,4-TRIMETHYLBENZENE	95-63-6	10 - 25
CUMENE	98-82-8	1 - 3
XYLENE	1330-20-7	1 - 3
CYMENES	25155-15-1	0.5 - 1.5
BENZENE	71-43-2	0 - 0.005

Composition comments Values do not reflect absolute minimums and maximums; these values are typical which may vary from time to time.

This Safety Data Sheet is intended to communicate potential health hazards and potential physical hazards associated with the product(s) covered by this sheet, and is not intended to communicate product specification information. For product specification information, contact your Flint Hills Resources, LP representative.

4. First-aid measures

Inhalation

Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear and give oxygen. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR).

Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

Skin contact

Immediately wash skin with plenty of soap and water after removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

Place contaminated clothing in closed container for storage until laundered or discarded. If clothing is to be laundered, inform person performing operation of contaminant's hazardous properties. Discard contaminated leather goods.

Eye contact

Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. GET IMMEDIATE MEDICAL ATTENTION.

Ingestion

Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty.

Never give anything by mouth to an unconscious person.

Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

Most important symptoms/effects, acute and delayed

INHALATION:
May cause central nervous system depression or effects. Symptoms may include headache, excitation, euphoria, dizziness, incoordination, drowsiness, light-headedness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death, depending on the concentration and duration of exposure.

SKIN:
Contact may cause reddening, itching and inflammation. Skin contact may cause harmful effects in other parts of the body. Prolonged skin contact may defat the skin and cause drying, cracking and/or dermatitis.

EYES:
May cause slight to mild eye irritation with tearing, redness, or a stinging or burning sensation. May cause temporary swelling of the eyes with blurred vision. Effects may become more serious with repeated or prolonged contact.

INGESTION:
May cause irritation of the mouth, throat and gastrointestinal tract. Symptoms may include salivation, pain, nausea, vomiting and diarrhea.

Aspiration into lungs may cause chemical pneumonia and lung damage.

Exposure may also cause central nervous system symptoms similar to those listed under "Inhalation" (see Inhalation section).

Indication of immediate medical attention and special treatment needed

INGESTION: If ingested this material represents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended.

5. Fire-fighting measures

Suitable extinguishing media

Use water spray, dry chemical, carbon dioxide or fire-fighting foam for Class B fires to extinguish fire.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Combustion may produce COx, reactive hydrocarbons, irritating vapors, and other decomposition products in the case of incomplete combustion.

Extremely flammable. Vapors form flammable or explosive mixtures with air at room temperature. Vapor or gas may spread to distant ignition sources and flash back.

Static accumulator (nonconductive) flammable or combustible material may form ignitable vapor-air mixtures in storage tanks. Bonding and grounding may be insufficient to eliminate the hazard from static accumulation.

Explosion hazard if exposed to extreme heat.

Special protective equipment and precautions for firefighters

Evacuate area and fight fire from a safe distance.

If leak or spill has not ignited, ventilate area and use water spray to disperse gas or vapor, cool adjacent structures, and to protect personnel attempting to stop a leak.

Shut off source of flow, if possible.

Stay away from storage tank ends. Withdraw immediately in case of rising sound from venting safety device or any discoloration of storage tank due to fire. Always stay away from tanks engulfed in flame.

Firefighters must wear NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary people away; isolate hazard area and deny entry. For spills in confined areas, ensure adequate ventilation. For spills outdoors, stay upwind. IF TANK, RAILCAR OR TANK TRUCK IS INVOLVED IN A FIRE, isolate for 800 meters (1/2 mile) in all directions. Evacuate area endangered by release as required. Wear appropriate personal protective equipment. See Exposure Controls/Personal Protection (Section 8).

Methods and materials for containment and cleaning up

Keep unnecessary people away. Isolate area for at least 50 meters (164 feet) in all directions to preserve public safety. For large spills, if downwind consider initial evacuation for at least 300 meters (1000 feet).

Small Spills: Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Large Spills: Dike far ahead of liquid spill for later disposal. Avoid clean up procedures that may result in water pollution.

Do not touch or walk through spilled material. Stop leak when safe to do so.

See Exposure Controls/Personal Protection (Section 8).

Environmental precautions

Prevent entry into water ways, sewers, basements or confined areas. Notify local authorities and National Response Center, if required.

7. Handling and storage

Precautions for safe handling

Electrostatic charge may accumulate and create a hazardous condition when handling this material.

Static accumulator (nonconductive) flammable or combustible material may form ignitable vapor-air mixtures in storage tanks. Bond and ground lines and equipment (tank, transfer lines, pump, floats, etc.) used during transfer to reduce the possibility of static spark-initiated fire or explosion.

Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (such as tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate procedures to mitigate the hazard.

Bonding and grounding may be insufficient to eliminate the hazard from static accumulation. Additional precautions should be considered consistent with the current NFPA 77, Recommended Practice on Static Electricity, the current API Recommended Practice 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents and OSHA Standard 29 CFR 1910.106, Flammable and Combustible Liquids.

Avoid contact with strong oxidizing agents and strong reducing agents. Use non-sparking tools. Do not cut, grind, drill, weld or reuse empty containers unless adequate precautions are taken.

Avoid personal contact with this material. Always observe good personal hygiene measures, such as removing contaminated clothing and protective equipment, washing after handling the material and before entering public areas. Restrict eating, drinking and smoking to designated areas to prevent personal chemical contamination. Routinely wash work clothing and protective equipment to remove contaminants. Do not breathe mist or vapor.

Conditions for safe storage, including any incompatibilities

Store in closed containers in a cool, isolated, well-ventilated area away from excessive heat and incompatibles. Avoid contact with strong oxidizing agents and strong reducing agents. Empty containers may contain material residue. Do not reuse without adequate precautions.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Additional components	Type	Value
BENZENE (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Additional components	Type	Value
CUMENE (CAS 98-82-8)	TWA	50 ppm
XYLENE (CAS 1330-20-7)	TWA	100 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Additional components	Type	Value
BENZENE (CAS 71-43-2)	TWA	1 ppm

U.S. - Minnesota (MNOSHA)

Additional components	Type	Value
1,2,4-TRIMETHYL BENZENE (CAS 95-63-6)	TWA	25 ppm
TRIMETHYLBENZENE ISOMERS (CAS 25551-13-7)	TWA	25 ppm
CUMENE (CAS 98-82-8)	TWA	50 ppm
BENZENE (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm
XYLENE (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

US. ACGIH Threshold Limit Values

Material	Type	Value	Form
SURE SOL®-100 (UNITED STATES)	Calculated	20 ppm	(reciprocal calculation procedure by U.K. Health and Safety Exec)

Additional components	Type	Value	Form
1,2,4-TRIMETHYL BENZENE (CAS 95-63-6)	TWA	25 ppm	
TRIMETHYLBENZENE ISOMERS (CAS 25551-13-7)	TWA	25 ppm	
CUMENE (CAS 98-82-8)	TWA	50 ppm	
BENZENE (CAS 71-43-2)	STEL	2.5 ppm	Skin
	TWA	0.5 ppm	Skin
XYLENE (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Additional components	Type	Value
1,2,4-TRIMETHYL BENZENE (CAS 95-63-6)	TWA	25 ppm
TRIMETHYLBENZENE ISOMERS (CAS 25551-13-7)	TWA	25 ppm
CUMENE (CAS 98-82-8)	TWA	50 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Additional components	Type	Value
BENZENE (CAS 71-43-2)	STEL	1 ppm
	TWA	0.1 ppm
XYLENE (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Biological limit values

ACGIH Biological Exposure Indices

Additional components	Value	Determinant	Specimen	Sampling Time
BENZENE (CAS 71-43-2)	25 µg/g	S-Phenylmercapt uric acid	Creatinine in urine	*
XYLENE (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines CALCULATED EXPOSURE LIMIT

The occupational exposure limit (OEL) of 20 ppm for this hydrocarbon solvent was calculated by a reciprocal calculation procedure. This procedure follows the ACGIH generic advice for complex mixtures and is recommended by the U.K. Health and Safety Executive for OEL calculations by hydrocarbon solvent manufacturers.

US ACGIH Threshold Limit Values: Skin designation

BENZENE (CAS 71-43-2)	Can be absorbed through the skin.

US OSHA Specifically Regulated Substances: Action level and Reference

BENZENE (CAS 71-43-2)	0.5 PPM

US OSHA Table Z-1: Skin designation

CUMENE (CAS 98-82-8)	Can be absorbed through the skin.

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

1,2,4-TRIMETHYLBENZENE (CAS 95-63-6)	125 MGM3 - 25 PPM
BENZENE (CAS 71-43-2)	1 PPM
CUMENE (CAS 98-82-8)	245 MGM3 - 50 PPM
TRIMETHYLBENZENE ISOMERS (CAS 25551-13-7)	125 MGM3 - 25 PPM
XYLENE (CAS 1330-20-7)	435 MGM3 - 100 PPM

Appropriate engineering controls Consider the following when employing engineering controls and selecting personal protective equipment: potential hazards of the material, applicable exposure limits, job activities, and other substances in the work place. Ventilation and other forms of engineering controls are the preferred means for controlling exposures below occupational exposure limits and guidelines.

Individual protection measures, such as personal protective equipment

Eye/face protection Keep away from eyes. Eye contact can be avoided by using chemical safety glasses, goggles and/or face shield. Have eye washing facilities readily available where eye contact can occur.

Hand protection Avoid skin contact with this material. Use chemical resistant gloves when handling this material. Contact the glove manufacturer for specific advice on glove selection regarding permeability and breakthrough times for your use conditions. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Other Dermal exposure to this chemical may add to the overall exposure.

Avoid skin contact with this material. Additional protective clothing may be necessary.

Respiratory protection A NIOSH approved air purifying respirator with an appropriate cartridge or canister, such as an organic vapor cartridge, may be used in circumstances where airborne organic vapor concentrations may exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. See OSHA 29 CFR 1910.134 for more information regarding respiratory protection and Assigned Protection Factors (APFs).

Thermal hazards No special precautions required.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Not applicable

Color	Bright and clear, colorless
Odor	Moderate aromatic
Odor threshold	Not available.
pH	Essentially neutral
Melting point/freezing point	Not available
Initial boiling point and boiling range	> 300 °F (> 148.9 °C)
Flash point	> 107 °F (> 41.67 °C) Tag Closed Cup (ASTM D56)
Evaporation rate	Very slow
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 10 mmHg at 68 °F (20 °C)
Vapor density	3.5
Relative density	0.870 - 0.879 at 60/60 °F (15.6/15.6 °C)
Solubility(ies)	Negligible
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	865.4 °F (463 °C)
Decomposition temperature	Not available.
Viscosity	Not available
Other information	
Chemical family	Hydrocarbon Mixture
Electrostatic properties	
Conductivity	≤50 pS/m
VOC (Weight %)	100 %

10. Stability and reactivity

Reactivity	See statements below.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Not anticipated under normal conditions.
Conditions to avoid	Avoid unventilated areas, heat, open flames, sparks and ungrounded electrical equipment.
Incompatible materials	Incompatible with strong oxidizing agents and strong reducing agents. See precautions under Handling & Storage (Section 7).
Hazardous decomposition products	Not anticipated under normal conditions.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Likely route of exposure
Inhalation	Likely route of exposure
Skin contact	Likely route of exposure
Eye contact	Likely route of exposure

Symptoms related to the physical, chemical and toxicological characteristics

INHALATION:
May cause central nervous system depression or effects. Symptoms may include headache, excitation, euphoria, dizziness, incoordination, drowsiness, light-headedness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death, depending on the concentration and duration of exposure.

SKIN:
Contact may cause reddening, itching and inflammation. Skin contact may cause harmful effects in other parts of the body. Prolonged skin contact may defat the skin and cause drying, cracking and/or dermatitis.

EYES:
May cause slight to mild eye irritation with tearing, redness, or a stinging or burning sensation. May cause temporary swelling of the eyes with blurred vision. Effects may become more serious with repeated or prolonged contact.

INGESTION:
May cause irritation of the mouth, throat and gastrointestinal tract. Symptoms may include salivation, pain, nausea, vomiting and diarrhea.

Aspiration into lungs may cause chemical pneumonia and lung damage.

Exposure may also cause central nervous system symptoms similar to those listed under "Inhalation" (see Inhalation section).

Information on toxicological effects

Acute toxicity Not classified.

Components	Species	Test Results
LIGHT AROMATIC SOLVENT NAPHTHA (CAS 64742-95-6)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Inhalation		
LC50	Rat	> 5.2 mg/l
Oral		
LD50	Rat	> 5000 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Not classified.

Respiratory sensitization Not classified.

Skin sensitization Not classified.

Germ cell mutagenicity Not classified.

Carcinogenicity Suspected of causing cancer. This material has not been tested as a whole, but contains a carcinogenic component(s).

ACGIH Carcinogens

BENZENE (CAS 71-43-2)	A1 Confirmed human carcinogen.
XYLENE (O, M AND P ISOMERS) (CAS 1330-20-7)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

BENZENE (CAS 71-43-2)	1 Carcinogenic to humans.
CUMENE (CAS 98-82-8)	2B Possibly carcinogenic to humans.
XYLENE (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

BENZENE (CAS 71-43-2)	Known To Be Human Carcinogen.
CUMENE (CAS 98-82-8)	Reasonably Anticipated to be a Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

BENZENE (CAS 71-43-2)	Cancer

Reproductive toxicity Not classified.

Specific target organ toxicity - single exposure May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration toxicity

May be fatal if swallowed and enters airways.

Toxicological data

BENZENE: Studies of workers exposed to benzene show clear evidence that overexposure can cause cancer of the blood forming organs (acute myelogenous leukemia) and aplastic anemia, an often fatal disease. Some studies suggest overexposure to benzene may also be associated with other blood disorders including myelodysplastic syndrome. Some studies of workers exposed to benzene have shown an association with increased rates of chromosome aberrations in circulating lymphocytes. One study of women workers exposed to benzene suggested a weak association with irregular menstruation. However, other studies of workers exposed to benzene have not demonstrated clear evidence of an effect on fertility or reproductive outcome in humans. Benzene can cross the placenta and affect the developing fetus. Cases of aplastic anemia have been reported in the offspring of persons severely overexposed to benzene. Animal studies indicate that prolonged, repeated exposure to high levels of benzene vapor can cause bone marrow suppression and cancer in multiple organ systems. Studies in laboratory animals also show evidence of adverse effects on male reproductive organs following high levels of exposure but no significant effects on reproduction have been observed. Embryotoxicity has been reported in studies of laboratory animals but effects were limited to reduced fetal weight and skeletal variations has been classified as a known human carcinogen by OSHA and a Group 1 (carcinogenic to Humans) material by IARC, the International Agency for Research on Cancer.

CUMENE: Overexposure to cumene may cause upper respiratory tract irritation and CNS depression. Studies in laboratory animals indicate evidence of respiratory tract hyperplasia, and adverse effects on the liver, kidney and adrenal glands following high level exposure. The relevance of these findings to humans is not clear at this time. Findings from lifetime inhalation studies in laboratory rodents were as follows: In rats, an increased incidence of renal carcinomas and adenomas, respiratory epithelial adenomas, and interstitial cell adenomas of the testes were observed. In mice, an increased incidence of carcinomas and adenomas of the bronchi and lung, liver neoplasms, hemangiosarcomas of the spleen, and adenomas of the thyroid were observed. IARC has classified cumene as "possibly carcinogenic to humans" (Group 2B) and NTP classified it as “reasonably anticipated to be a human carcinogen”.

XYLENES, ALL ISOMERS: Acute effects of xylene may be increased by the use of alcoholic beverages. Evidence of liver and kidney impairment were reported in workers recovering from a gross overexposure. Prolonged or repeated exposure to xylene was reported to cause impaired neurological function in workers exposed to solvents (including xylene). Studies in rats have shown evidence of impaired hearing following prolonged exposure to high concentrations of paraxylene. Studies in laboratory animals also suggest some changes in reproductive organs following high levels of exposure but no significant effects on reproduction were observed. Developmental toxicity studies in laboratory animals indicate skeletal and visceral malformations, developmental delays, and increased fetal resorptions following extremely high levels of maternal exposure. The relevance of these observations to humans is not clear at this time. In addition, adverse effects on the liver, kidney, bone marrow (changes in blood cell parameters) were observed in laboratory animals following high levels of exposure. The relevance of these observations to humans is not clear at this time.

C9 AROMATIC HYDROCARBONS: A developmental inhalation study in mice resulted in increased implantation losses, reduced fetal weights, delayed ossification and an increased incidence of cleft palate at the highest exposure level (1,500 ppm). This exposure level was extremely toxic to pregnant female mice (44% mortality). Reduced fetal body weights were also observed at 500 ppm. In a multi-generation reproduction inhalation study in rats, reductions in pup weights, pup weight gain, litter size, and pup survival were observed at 1,500 ppm with significant maternal toxicity. Reduced pup weight gain was also observed at 500 ppm. In general, animal studies in three species indicate that fetal effects occur at levels that are maternally toxic as well.

NAPHTHAS: In a large epidemiological study on over 15,000 employees at several petroleum refineries and amongst residents located near these refineries, no increased risk of kidney cancer was observed in association with gasoline exposures (a similar material). In a similar study, no increased risk of kidney cancer was observed among petroleum refinery workers, but there was a slight trend in the incidence of kidney cancers among service station employees, especially after a 30-year latency period.

Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage (so-called "petrol sniffers encephalopathy"), delirium, seizures, and sudden death have been reported from repeated overexposure to some hydrocarbon solvents, naphthas, and gasoline.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
LIGHT AROMATIC SOLVENT NAPHTHA (CAS 64742-95-6)			
Acute			
Algae	EC50	Algae	> 1 mg/l, 96 hr
Crustacea	EC50	Daphnia magna	> 1 mg/l, 48 hr
Fish	LC50	Fish	> 1 mg/l
Chronic			
Crustacea	NOEL	Daphnia magna	0.39 - 2.6 mg/l
Fish	NOEL	Fish	2.6 - 6.4 mg/l

Persistence and degradability Not readily biodegradable. Inherently biodegradable.

Bioaccumulative potential Potential for bioaccumulation.

Mobility in soil May partition into air, soil and water. This material evaporates readily.

Other adverse effects No other adverse effects expected.

13. Disposal considerations

Disposal instructions This material, as supplied, when discarded or disposed of, is a listed hazardous waste according to Federal Regulations 40 CFR 261.33(f). Additionally, pursuant to 40 CFR 261.33(d) and (e), any residue remaining in a container that has held this material and any residue or contaminated soil, water or other debris resulting from the cleanup of a spill of this material is also a listed hazardous waste.

The transportation, storage, treatment and disposal of waste material must be conducted in compliance with federal, state, and local regulations. Under RCRA it is the responsibility of the user of the material to determine, at the time of disposal, whether this material meets RCRA criteria for hazardous waste. For additional handling information and protection of employees, see Section 7 (Handling and Storage) and Section 8 (Exposure Controls/Personal Protection).

Hazardous waste code The proper waste code must be evaluated at the time of disposal and should be determined by the user and waste disposal company.

Waste from residues / unused products Dispose of this material in accordance with all applicable local and national regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with government regulations. Packaging may contain residue that can be hazardous.

14. Transport information

DOT

UN number	UN1268
UN proper shipping name	Petroleum Distillates, n.o.s. (Petroleum Naphtha)
Transport hazard class(es)	Combustible Liquid
Subsidiary class(es)	Not available.
Packing group	III
Special precautions for user	Not available.
Labels required	None
Placards required	Combustible, UN1268
ERG number	128

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This product is being carried under the scope of MARPOL Annex I. This classification covers the transport of oil cargoes and oil fuels.

General information

INTERNATIONAL TRANSPORTATION REQUIREMENTS: Not determined

BILL OF LADING - BULK (U. S. DOT): UN1268, Petroleum Distillates, n.o.s., (Petroleum Naphtha), Combustible Liquid, PG III

BILL OF LADING - NON-BULK (U. S. DOT): Non-regulated by Domestic Ground Transportation

This description may not cover shipping in all cases, please consult 49 CFR 100-185 for specific shipping information or Transport Compliance Specialist (CSO).

Non-bulk shipments of this material are non-regulated for domestic ground transportation when they meet the requirements of 49 CFR 173.150(f).

DOT

15. Regulatory information

International regulations

INVENTORIES:
AUSTRALIA INVENTORY (AICS): 94742-95-6
CANADA INVENTORY (DSL): 94742-95-6
EU INVENTORY (EINECS/ELINCS): 265-199-0
KOREA INVENTORY (ECL): KE-31662
PHILLIPINES INVENTORY (PICCS): 94742-95-6
US INVENTORY (TSCA): 94742-95-6

US federal regulations

All ingredients are on the TSCA inventory, or are not required to be listed on the TSCA inventory.

Consult OSHA's Benzene standard 29 CFR 1910.1028 for provisions on air monitoring, employee training, medical monitoring, etc.

A release of this material, as supplied, may be exempt from reporting under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA - 40 CFR 302) by the petroleum exclusion. Releases may be reportable to the National Response Center (800-424-8802) under the Clean Water Act, 33 U.S.C. 1321(b)(3) and (5).

This material contains toxic chemical(s) in excess of the applicable de minimis concentration that are subject to the annual toxic chemical release reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313 (40 CFR 372). This information must be included in all SDSs that are copied and distributed for this material.

This material contains up to 100% volatile organic compounds (VOCs) per 40 CFR Part 51.100.

Check local, regional or state/provincial regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Failure to comply may result in substantial civil and criminal penalties.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

1,2,4-TRIMETHYLBENZENE (CAS 95-63-6)	1.0 %
BENZENE (CAS 71-43-2)	0.1 %
CUMENE (CAS 98-82-8)	1.0 %
XYLENE (CAS 1330-20-7)	1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

1,2,4-TRIMETHYLBENZENE (CAS 95-63-6)	Listed.
BENZENE (CAS 71-43-2)	Listed.
CUMENE (CAS 98-82-8)	Listed.
XYLENE (CAS 1330-20-7)	Listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

BENZENE (CAS 71-43-2)	LISTED
CUMENE (CAS 98-82-8)	LISTED
XYLENE (CAS 1330-20-7)	LISTED

US CERCLA Hazardous Substances: Reportable quantity

BENZENE (CAS 71-43-2)	10 LBS
CUMENE (CAS 98-82-8)	5000 LBS
XYLENE (CAS 1330-20-7)	100 LBS

US EPCRA (SARA Title III) Section 304 - Extremely Hazardous Spill: Reportable quantity

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

BENZENE (CAS 71-43-2)	Cancer Central nervous system Blood Aspiration Skin Eye respiratory tract irritation Flammability

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

BENZENE (CAS 71-43-2)
CUMENE (CAS 98-82-8)
XYLENE (CAS 1330-20-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations

This material, as sold, meets the requirements of the Model Toxics Legislation of the Coalition of Northeastern Governors (CONEG). Any alteration of this material may affect its compliance with this law.

US. California Proposition 65

WARNING: This product contains one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Proposition 65, CAL. HSC. §25249.5.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

BENZENE (CAS 71-43-2)	Listed: February 27, 1987
CUMENE (CAS 98-82-8)	Listed: April 6, 2010

US - California Proposition 65 - CRT: Listed date/Developmental toxin

BENZENE (CAS 71-43-2)	Listed: December 26, 1997

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

BENZENE (CAS 71-43-2)	Listed: December 26, 1997

16. Other information, including date of preparation or last revision

Issue date 06-10-2015

Version # 03

Further information Not available.

HMIS® ratings

Health: 2*
Flammability: 2
Physical hazard: 0
* Indicates chronic health hazard

NFPA ratings

Health: 1
Flammability: 2
Instability: 0

Disclaimer	THIS SDS HAS BEEN PREPARED TO COMPLY WITH FEDERAL REGULATIONS THAT ARE INTENDED TO QUICKLY PROVIDE USEFUL INFORMATION TO THE USER(S) OF THIS MATERIAL OR PRODUCT - IT IS NOT INTENDED TO SERVE AS A COMPREHENSIVE DISCUSSION OF ALL POSSIBLE RISKS OF HAZARDS, BUT RATHER PROVIDES INFORMATION GENERALLY ACCEPTED IN THE SCIENTIFIC COMMUNITY AS RELEVANT REGARDING THE POTENTIAL HAZARDS OF THIS PRODUCT. ADEQUATE TRAINING, INSTRUCTION, WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS. USERS SHOULD REVIEW THE INFORMATION IN THE SDS, AND SATISFY THEMSELVES AS TO ITS SUITABILITY AND COMPLETENESS, INCLUDING ENSURING THAT THIS IS THE MOST CURRENT SDS.
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