

1. Identification

Product identifier Medium Curing Cutback Asphalt, MC Asphalt

Other means of identification

SDS number MC2014001

Recommended use Industrial use.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer/Supplier Asphalt & Fuel Supply

Address 4200 E. Skelly Drive, STE 600 Tulsa, OK 74135
United States

Telephone number 918-488-1339

e-mail matt@asphalt-fuelsupply.com

Contact person Matt Roberts

Emergency telephone number 1-800-424-9300 (CHEMTREC) CCN632693

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 4
Health hazards	Acute toxicity, inhalation	Category 4
	Serious eye damage/eye irritation	Category 2B
	Carcinogenicity	Category 1A
	Reproductive toxicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 1 (Adrenal gland, Bone marrow, Kidney, Liver, Lymph node, Stomach, Thymus)
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
OSHA defined hazards	Not classified.	

Label elements



Signal word

Danger

Hazard statement

Combustible liquid. Harmful if inhaled. Causes eye irritation. May cause cancer. Suspected of damaging the unborn child. Causes damage to organs (Adrenal gland, Bone marrow, Kidney, Liver, Lymph node, Stomach, Thymus) through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces. - No smoking. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Response

If exposed or concerned: 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 in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Collect spillage.

Storage

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

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

Hazard(s) not otherwise classified (HNOC)

None known.

3. Composition/information on ingredients**Mixtures**

Chemical name	CAS number	%
Asphalt	8052-42-4	50-85
Distillates (petroleum), Light Hydrocracked	64741-77-1	0-50
Distillates (petroleum), petroleum residues vacuum	68955-27-1	0-45
Distillates (petroleum), heavy naphthenic	64741-53-3	0-15
Light Cycle Oil	64741-59-9	0-15
Light naphthenic distillate (petroleum)	64741-52-2	0-15
Polycyclic Aromatic Hydrocarbons	130498-29-2	1.5
Toluene	108-88-3	0-1
Xylene	1330-20-7	0-1
Ethylbenzene	100-41-4	0-0.5
Hydrogen sulfide	7783-06-4	0-0.3
Benzene	71-43-2	0-0.2
Naphthalene	91-20-3	0-0.2

Composition comments

Dangerous amounts of hydrogen sulfide, a highly toxic gas, may be present, especially in the headspace of containers.
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures**Inhalation**

Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Skin contact

If hot product contacts skin, cool under running water and get medical attention. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. If hot product contacts eye, flush with water for at least 15 minutes and seek medical attention immediately.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.

Most important symptoms/effects, acute and delayed	Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Conjunctivitis. Proteinuria. Defatting of the skin. Rash. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere.
Indication of immediate medical attention and special treatment needed	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Carbon dioxide (CO ₂). Dry chemical powder. Water fog.
Unsuitable extinguishing media	Do not use water jet.
Specific hazards arising from the chemical	Combustible liquid and vapor. By heating and fire, toxic vapors/gases may be formed.
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire-fighting equipment/instructions	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Before entering storage tanks and commencing any operation in a confined area, check the atmosphere for oxygen content, hydrogen sulfide (H ₂ S) and flammability. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use non-sparking tools and explosion-proof equipment. Local authorities should be advised if significant spillages cannot be contained. Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. This material and its container must be disposed of as hazardous waste.
Environmental precautions	Do not release into the environment. Environmental manager should be informed of all releases, as necessary.

7. Handling and storage

Precautions for safe handling	Wear personal protective equipment. Avoid breathing mist or vapor from heated material. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only with adequate ventilation. Hydrogen sulfide (H ₂ S) may be given off when this material is heated. Do not depend on sense of smell for warning. Observe good industrial hygiene practices. Wash thoroughly after handling. When using, do not eat, drink or smoke. Avoid release to the environment.
Conditions for safe storage, including any incompatibilities	Follow rules for combustible liquids. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Before entering storage tanks and commencing any operation in a confined area, check the atmosphere for oxygen content, hydrogen sulfide (H ₂ S) and flammability. Keep away from food, drink and animal feedingstuffs.

8. Exposure controls/personal protection

Occupational exposure limits

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

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)

Components	Type	Value	Form
Distillates (petroleum), heavy naphthenic (CAS 64741-53-3)	PEL	5 mg/m ³	Mist.
		435 mg/m ³	
Ethylbenzene (CAS 100-41-4)	PEL	100 ppm	Mist.
		5 mg/m ³	
Light Cycle Oil (CAS 64741-59-9)	PEL	5 mg/m ³	Mist.
		5 mg/m ³	
Light naphthenic distillate (petroleum) (CAS 64741-52-2)	PEL	5 mg/m ³	Mist.
		5 mg/m ³	
Naphthalene (CAS 91-20-3)	PEL	50 mg/m ³	Mist.
		10 ppm	
Xylene (CAS 1330-20-7)	PEL	435 mg/m ³	Mist.
		100 ppm	

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

Components	Type	Value
Benzene (CAS 71-43-2)	Ceiling	25 ppm
	TWA	10 ppm
Hydrogen sulfide (CAS 7783-06-4)	Ceiling	20 ppm
	TWA	20 ppm
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	0.5 mg/m ³	Inhalable fraction.
Benzene (CAS 71-43-2)	STEL	2.5 ppm	Inhalable fraction.
	TWA	0.5 ppm	
Distillates (petroleum), heavy naphthenic (CAS 64741-53-3)	TWA	5 mg/m ³	Inhalable fraction.
		20 ppm	
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm	Inhalable fraction.
		5 ppm	
Hydrogen sulfide (CAS 7783-06-4)	STEL	5 ppm	Inhalable fraction.
	TWA	1 ppm	
Light Cycle Oil (CAS 64741-59-9)	TWA	5 mg/m ³	Inhalable fraction.
		5 mg/m ³	
Light naphthenic distillate (petroleum) (CAS 64741-52-2)	TWA	5 mg/m ³	Inhalable fraction.
		5 mg/m ³	
Naphthalene (CAS 91-20-3)	STEL	15 ppm	Inhalable fraction.
	TWA	10 ppm	
Toluene (CAS 108-88-3)	TWA	20 ppm	Inhalable fraction.
		150 ppm	
Xylene (CAS 1330-20-7)	STEL	150 ppm	Inhalable fraction.
	TWA	100 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	Ceiling	5 mg/m ³	Fume.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Benzene (CAS 71-43-2)	STEL	1 ppm	
	TWA	0.1 ppm	
Distillates (petroleum), heavy naphthenic (CAS 64741-53-3)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3	
	TWA	125 ppm 435 mg/m3	
Hydrogen sulfide (CAS 7783-06-4)	Ceiling	100 ppm	
		15 mg/m3	
Light Cycle Oil (CAS 64741-59-9)	STEL	10 ppm 10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Light naphthenic distillate (petroleum) (CAS 64741-52-2)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Naphthalene (CAS 91-20-3)	STEL	75 mg/m3 15 ppm	
	TWA	50 mg/m3 10 ppm	
Toluene (CAS 108-88-3)	STEL	560 mg/m3 150 ppm	
	TWA	375 mg/m3 100 ppm	
Xylene (CAS 1330-20-7)	STEL	655 mg/m3 150 ppm	
	TWA	435 mg/m3 100 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Benzene (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	0.7 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
Xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

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

Exposure guidelines

US - California OELs: Skin designation

Benzene (CAS 71-43-2) Can be absorbed through the skin.
Toluene (CAS 108-88-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Toluene (CAS 108-88-3) Skin designation applies.

US ACGIH Threshold Limit Values: Skin designation

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

Appropriate engineering controls Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Provide adequate general and local exhaust ventilation. Use explosion-proof ventilation equipment. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.

Skin protection

Hand protection Wear chemical-resistant, impervious gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Other Wear protective clothing appropriate for the risk of exposure.

Respiratory protection In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment. Wear a NIOSH-approved (or equivalent) respirator as needed. Positive-pressure, air-supplied respirator in areas where H₂S vapors may accumulate.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Consult supervisor for special handling instructions. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance	Liquid.
Physical state	Liquid.
Form	Liquid.
Color	Black or dark brown.
Odor	Petroleum odor.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	> 150.0 °F (> 65.6 °C) Cleveland Open Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	0.96 - 1.01
Solubility(ies)	
Solubility (water)	Insoluble in water.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	299 - 600 °F (148.33 - 315.56 °C)
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable under normal temperature conditions and recommended use.

Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Flames and sparks. Ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Sulfur oxides. Nitrogen oxides (NOx). Hydrocarbons. Hydrogen sulfide.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Ingestion may cause irritation and malaise.
Inhalation	Harmful if inhaled.
Skin contact	May cause skin irritation. Prolonged or repeated skin contact may cause drying, cracking, or irritation. Contact with hot product may cause severe burns.
Eye contact	Causes eye irritation. Exposure to hot material may cause thermal burns.

Symptoms related to the physical, chemical and toxicological characteristics

Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Conjunctivitis. Proteinuria. Defatting of the skin. Rash. Be aware that symptoms of chemical pneumonia (shortness of breath) may occur several hours after exposure. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness.

Information on toxicological effects

Acute toxicity	Harmful if inhaled. In high concentrations, vapors are narcotic and may cause headache, fatigue, dizziness and nausea. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere. May be fatal if swallowed and enters airways.
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Components	Species	Test Results
Benzene (CAS 71-43-2)		
Acute		
<i>Oral</i>		
LD50	Rat	930 mg/kg
Ethylbenzene (CAS 100-41-4)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	18156 mg/kg
<i>Inhalation</i>		
LC50	Rat	55000 mg/m ³
<i>Oral</i>		
LD50	Rat	3500 mg/kg
Naphthalene (CAS 91-20-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2 g/kg
<i>Oral</i>		
LD50	Rat	490 mg/kg
Toluene (CAS 108-88-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	14.1 ml/kg
<i>Inhalation</i>		
LC50	Rat	8000 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	2.6 g/kg

Components	Species	Test Results
Xylene (CAS 1330-20-7)		
Acute		
<i>Oral</i>		
LD50	Rat	4300 mg/kg
Skin corrosion/irritation	May cause skin irritation. Prolonged or repeated skin contact may cause drying, cracking, or irritation. Skin contact with hot metal can cause burns.	
Serious eye damage/eye irritation	Causes eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	No data available.	
Skin sensitization	No data available.	
Germ cell mutagenicity	No component of this product present at levels greater than or equal to 0.1% is identified as a mutagen by OSHA.	
Carcinogenicity	May cause cancer.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Asphalt (CAS 8052-42-4)	2B Possibly carcinogenic to humans.	
Benzene (CAS 71-43-2)	1 Carcinogenic to humans.	
Distillates (petroleum), Light Hydrocracked (CAS 64741-77-1)	3 Not classifiable as to carcinogenicity to humans.	
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.	
Light Cycle Oil (CAS 64741-59-9)	3 Not classifiable as to carcinogenicity to humans.	
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.	
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.	
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.	
NTP Report on Carcinogens		
Benzene (CAS 71-43-2)	Known To Be Human Carcinogen.	
Distillates (petroleum), heavy naphthenic (CAS 64741-53-3)	Known To Be Human Carcinogen.	
Light naphthenic distillate (petroleum) (CAS 64741-52-2)	Known To Be Human Carcinogen.	
Naphthalene (CAS 91-20-3)	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	Suspected of damaging the unborn child.	
Specific target organ toxicity - single exposure	No data available.	
Specific target organ toxicity - repeated exposure	Causes damage to organs (Adrenal gland, Bone marrow, Kidney, Liver, Lymph node, Stomach, Thymus) through prolonged or repeated exposure.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Chronic effects	May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue) and/or damage. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May cause damage to target organs.	
Further information	Symptoms may be delayed.	

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Benzene (CAS 71-43-2)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna)
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)
Distillates (petroleum), Light Hydrocracked (CAS 64741-77-1)		
Aquatic		
Fish	EC50	Fish

Components	Species	Test Results
Ethylbenzene (CAS 100-41-4)		
Aquatic		
Crustacea	EC50	Daphnia 2.1 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus) 32 - 88 mg/l, 96 hours Fathead minnow (Pimephales promelas) 12.1 mg/l, 96 hours
Hydrogen sulfide (CAS 7783-06-4)		
Aquatic		
Fish	LC50	Bluegill (Lepomis macrochirus) 0.009 mg/l, 96 hours
Naphthalene (CAS 91-20-3)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha) 0.95 - 1.62 mg/l, 96 hours
Toluene (CAS 108-88-3)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha) 6.86 - 8.48 mg/l, 96 hours
Xylene (CAS 1330-20-7)		
Aquatic		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 8 mg/l, 96 Hours

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

Benzene (CAS 71-43-2)	2.13
Ethylbenzene (CAS 100-41-4)	3.15
Toluene (CAS 108-88-3)	2.73
Xylene (CAS 1330-20-7)	3.2

Mobility in soil The product is insoluble in water.

Other adverse effects No data available.

13. Disposal considerations

Disposal instructions Dispose in accordance with all applicable regulations.

Hazardous waste code Not regulated.

US RCRA Hazardous Waste U List: Reference

Benzene (CAS 71-43-2)	U019
Hydrogen sulfide (CAS 7783-06-4)	U135
Naphthalene (CAS 91-20-3)	U165
Toluene (CAS 108-88-3)	U220
Xylene (CAS 1330-20-7)	U239

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN1999
UN proper shipping name	Tars, liquid including road oils and cut back bitumens
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions B1, B13, IB3, T1, TP3
Packaging exceptions 150
Packaging non bulk 203
Packaging bulk 242

IATA

UN number UN1999
UN proper shipping name Tars, liquid including road asphalt and oils, bitumen and cut backs
Transport hazard class(es)
 Class 3
 Subsidiary risk -
Packing group III
Environmental hazards Yes
ERG Code 3L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN1999
UN proper shipping name TARs, LIQUID including road oils, and cutback bitumens
Transport hazard class(es)
 Class 3
 Subsidiary risk -
Packing group III
Environmental hazards
 Marine pollutant Yes
EmS F-E, S-E

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. However, this product is a liquid and if transported in bulk covered under MARPOL 73/78, Annex I.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

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

CERCLA Hazardous Substance List (40 CFR 302.4)

Asphalt (CAS 8052-42-4) LISTED
Benzene (CAS 71-43-2) LISTED
Ethylbenzene (CAS 100-41-4) LISTED
Hydrogen sulfide (CAS 7783-06-4) LISTED
Naphthalene (CAS 91-20-3) LISTED
Toluene (CAS 108-88-3) LISTED
Xylene (CAS 1330-20-7) LISTED

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Polycyclic Aromatic Hydrocarbons	130498-29-2	1.5
Toluene	108-88-3	0-1
Xylene	1330-20-7	0-1
Ethylbenzene	100-41-4	0-0.5
Benzene	71-43-2	0-0.2
Naphthalene	91-20-3	0-0.2

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Benzene (CAS 71-43-2)
 Ethylbenzene (CAS 100-41-4)
 Naphthalene (CAS 91-20-3)
 Toluene (CAS 108-88-3)
 Xylene (CAS 1330-20-7)

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

Hydrogen sulfide (CAS 7783-06-4)

Safe Drinking Water Act (SDWA) Not regulated.**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Toluene (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3) 35 % weight/volumn

DEA Exempt Chemical Mixtures Code Number

Toluene (CAS 108-88-3) 594

US state regulations

WARNING: This product contains chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Asphalt (CAS 8052-42-4)
 Benzene (CAS 71-43-2)
 Distillates (petroleum), heavy naphthenic (CAS 64741-53-3)
 Ethylbenzene (CAS 100-41-4)
 Hydrogen sulfide (CAS 7783-06-4)
 Light Cycle Oil (CAS 64741-59-9)
 Light naphthenic distillate (petroleum) (CAS 64741-52-2)
 Naphthalene (CAS 91-20-3)
 Toluene (CAS 108-88-3)
 Xylene (CAS 1330-20-7)

US. New Jersey Worker and Community Right-to-Know Act

Asphalt (CAS 8052-42-4)
 Benzene (CAS 71-43-2)
 Ethylbenzene (CAS 100-41-4)
 Hydrogen sulfide (CAS 7783-06-4)
 Light Cycle Oil (CAS 64741-59-9)
 Naphthalene (CAS 91-20-3)
 Toluene (CAS 108-88-3)
 Xylene (CAS 1330-20-7)

US. Pennsylvania Worker and Community Right-to-Know Law

Asphalt (CAS 8052-42-4)
 Benzene (CAS 71-43-2)
 Distillates (petroleum), heavy naphthenic (CAS 64741-53-3)
 Ethylbenzene (CAS 100-41-4)
 Hydrogen sulfide (CAS 7783-06-4)
 Light naphthenic distillate (petroleum) (CAS 64741-52-2)
 Naphthalene (CAS 91-20-3)

Toluene (CAS 108-88-3)

Xylene (CAS 1330-20-7)

US. Rhode Island RTK

Benzene (CAS 71-43-2)

Ethylbenzene (CAS 100-41-4)

Hydrogen sulfide (CAS 7783-06-4)

Naphthalene (CAS 91-20-3)

Toluene (CAS 108-88-3)

Xylene (CAS 1330-20-7)

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Asphalt (CAS 8052-42-4)

Benzene (CAS 71-43-2)

Ethylbenzene (CAS 100-41-4)

Naphthalene (CAS 91-20-3)

Toluene (CAS 108-88-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

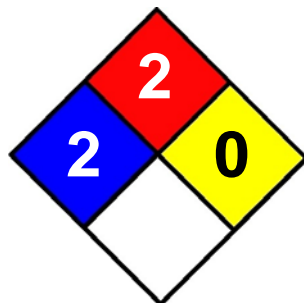
Issue date 14-May-2014

Revision date -

Version # 01

Further information NFPA Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings



Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.