ASPHALT BLENDING STOCKS: STRAIGHT RUN RESIDUE

ASR

CAUTIONARY RESPONSE INFORMATION

Common Synonyms
Carpeting medium
Petroleum pitch
Petroleum residue
Residual asphalt
Road binder
Seal-coating material

Oily liquid (generally heated) Black Tar odor

May float or sink in water. Rubbery solid is produced when cooled.

Avoid contact with liquid.
Stop discharge if possible.
Call fire department.
Isolate and remove discharged material.
Notify local health and pollution control agencies.

Fire

Combustible.
Extinguish with water, dry chemical, foam or carbon dioxide.
Cool exposed containers with water.

Exposure

CALL FOR MEDICAL AID.

LIQUID
Will burn skin and eyes.
Flush affected areas with plenty of water.
IF IN EYES, hold eyelids open and flush with plenty of water.
IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.
DO NOT INDUCE VOMITING.

Water Pollution

Effect of low concentrations on aquatic life is unknown.
FOULING TO SHORELINE.
May be dangerous if it enters water intakes.
Notify local health and pollution control officials.
Notify operators of nearby water intakes.

1. CORRECTIVE RESPONSE ACTIONS

Stop discharge
Contain
Collection Systems: Skim; Dredge
Clean shore line
Salvage waterfowl

2. CHEMICAL DESIGNATIONS

2.1 CG Compatibility Group: 33; Miscellaneous Hydrocarbon Mixtures
2.2 Formula: Not pertinent
2.3 IMO/UN Designation: 3.2/1999; 3.3/1999
2.4 DOT ID No.: 1999
2.5 CAS Registry No.: Currently not available
2.6 NAERG Guide No.: 130
2.7 Standard Industrial Trade Classification: 33540

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: Protective clothing; eye and face protection
3.2 Symptoms Following Exposure: Inhalation may cause moderate irritation of nose and throat. Skin contact may cause dermatitis.
3.3 Treatment of Exposure: Severe burns may result from contact with hot asphalt. If molten asphalt strikes the exposed skin, cool the skin immediately by quenching with cold water. A burn should be covered with a sterile dressing, and the patient should be taken immediately to a hospital.
3.4 TLV-TWA: Not listed.
3.5 TLV-STEL: Not listed.
3.6 TLV-Ceiling: Not listed.
3.7 Toxicity by Ingestion: Grade 1; LD_{50} 5 to 15 g/kg
3.8 Toxicity by Inhalation: Currently not available.
3.9 Chronic Toxicity: None observed
3.10 Vapor (Gas) Irritant Characteristics: Vapors cause a slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary.
3.11 Liquid or Solid Characteristics: Causes smarting of the skin and first-degree burns on short exposure; may cause secondary burns on long exposure.
3.12 Odor Threshold: Currently not available
3.13 IDLH Value: Not listed.
3.14 OSHA PEL-TWA: Not listed.
3.15 OSHA PEL-STEL: Not listed.
3.16 OSHA PEL-Ceiling: Not listed.
3.17 EPA AEGL: Not listed

4. FIRE HAZARDS

4.1 Flash Point: 400-600°FO.C.
4.2 Flammable Limits in Air: Not pertinent
4.3 Fire Extinguishing Agents: Water, foam, carbon dioxide or dry chemical
4.4 Fire Extinguishing Agents Not to Be Used: Water or foam may cause frothing.
4.5 Special Hazards of Combustion Products: Not pertinent
4.6 Behavior in Fire: Not pertinent
4.7 Auto Ignition Temperature: 450-700°F
4.8 Electrical Hazards: Not pertinent
4.9 Burning Rate: Currently not available
4.10 Adiabatic Flame Temperature: Currently not available
4.11 Stoichometric Air to Fuel Ratio: Currently not available
4.12 Flame Temperature: Currently not available
4.13 Combustion Molar Ratio (Reactant to Product): Currently not available
4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed

5. CHEMICAL REACTIVITY

5.1 Reactivity with Water: No reaction
5.2 Reactivity with Common Materials: No reaction
5.3 Stability During Transport: Stable
5.4 Neutralizing Agents for Acids and Caustics: Not pertinent
5.5 Polymerization: Not pertinent
5.6 Inhibitor of Polymerization: Not pertinent

6. WATER POLLUTION

6.1 Aquatic Toxicity: Currently not available
6.2 Waterfowl Toxicity: Currently not available
6.3 Biological Oxygen Demand (BOD): Currently not available
6.4 Food Chain Concentration Potential: Currently not available
6.5 GESAMP Hazard Profile: Not listed

7. SHIPPING INFORMATION

7.1 Grades of Purity: Currently not available
7.2 Storage Temperature: Elevated
7.3 Inert Atmosphere: No requirement
7.4 Venting: Open (flame arrester)
7.5 IMO Pollution Category: Currently not available
7.6 Ship Type: Currently not available
7.7 Barge Hull Type: Currently not available

8. HAZARD CLASSIFICATIONS

8.1 49 CFR Category: Flammable liquid
8.2 49 CFR Class: 3
8.3 49 CFR Package Group: II
8.4 Marine Pollutant: No
8.5 NFPA Hazard Classification:

Category	Classification
Health Hazard (Blue).....	0
Flammability (Red).....	1
Instability (Yellow).....	0

8.6 EPA Reportable Quantity: Not listed
8.7 EPA Pollution Category: Not listed
8.8 RCRA Waste Number: Not listed
8.9 EPA FWPCA List: Not listed

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical State at 15° C and 1 atm: Solid
9.2 Molecular Weight: Not pertinent
9.3 Boiling Point at 1 atm: Not pertinent
9.4 Freezing Point: 80 to 225°F = 26 to 107°C = 299 to 380°K
9.5 Critical Temperature: Not pertinent
9.6 Critical Pressure: Not pertinent
9.7 Specific Gravity: Currently not available
9.8 Liquid Surface Tension: Currently not available
9.9 Liquid Water Interfacial Tension: Currently not available
9.10 Vapor (Gas) Specific Gravity: Not pertinent
9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent
9.12 Latent Heat of Vaporization: Not pertinent
9.13 Heat of Combustion: Currently not available
9.14 Heat of Decomposition: Not pertinent
9.15 Heat of Solution: Currently not available
9.16 Heat of Polymerization: Currently not available
9.17 Heat of Fusion: Currently not available
9.18 Limiting Value: Currently not available
9.19 Reid Vapor Pressure: Varies

NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
250	68.660	85	0.451	175	0.970	220	93.250
252	68.660	90	0.451	180	0.970	230	85.889
254	68.660	95	0.451	185	0.970	240	79.299
256	68.660	100	0.451	190	0.970	250	73.379
258	68.660	105	0.451	195	0.970	260	68.049
260	68.660	110	0.451	200	0.970	270	63.240
262	68.660	115	0.451	205	0.970	280	58.880
264	68.660	120	0.451	210	0.970	290	54.930
266	68.660	125	0.451	215	0.970	300	51.340
268	68.660	130	0.451	220	0.970	310	48.060
270	68.660	135	0.451	225	0.970	320	45.080
272	68.660	140	0.451	230	0.970	330	42.340
274	68.660	145	0.451	235	0.970	340	39.840
276	68.660	150	0.451	240	0.970	350	37.540
278	68.660			245	0.970	360	35.420
280	68.660			250	0.970	370	33.470
282	68.660			255	0.970	380	31.670
284	68.660			260	0.970	390	30.000

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
	I N S O L U B L E	210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380	0.018 0.026 0.037 0.053 0.074 0.103 0.142 0.193 0.262 0.352 0.470 0.622 0.817 1.067 1.384 1.783 2.284 2.909		N O T P E R T I N E N T		N O T P E R T I N E N T