

SAFETY DATA SHEET

RC CUTBACKS

1. PRODUCT AND COMPANY INFORMATION

Product Name: RC-30, RC-70 Asphalt Cutback Synonyms: Rapid Curing Asphalt Company Name: **Midland Asphalt Materials Inc.** Address: 640 Young Street Tonawanda, New York 14151-0388

Phone No. 716-692-0730 Fax No. 716-692-0613

FOR CHEMICAL EMERGENCY, SPILLS, LEAKS, FIRE, EXPOSURE OR ACCIDENT CALL 3E 800-451-8346

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- Black tar like liquid with hydrocarbon solvent odor
- Exposure through inhalation and skin contact requires immediate medical attention.
- Asphalt products will burn in a fire, emitting carbon dioxide, carbon monoxide, sulfur oxides and various hydrocarbons.

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

Label elements Signal word Danger **Hazard statement** Extremely flammable liquid and vapor. Causes skin irritation. May cause genetic defects. May

cause cancer. Suspected of damaging fertility or the unborn child. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

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. Take off contaminated clothing and wash before reuse. 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 swallowed: Immediately call a poison center/doctor. Do not induce vomiting.

Storage Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local/regional/national

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures	CAS Number	Percent
Asphalt	8052-42-4	50 - 60
Chemical name CAS numbe	r %	
Naphtha (petroleum), heavy	64741-41-9	40 - 50
straight-run		
Sulfur	7704-34-9	<1
Xylene	1330-20-7	<1
Toluene	108-88-3	<0.6
Naphthalene	91-20-3	<0.5
Benzene	71-43-2	<0.2
Hydrogen sulfide	7783-06-4	<0.1
Polycyclic Aromatic	130498-29-2	<0.1

Hydrocarbons

Composition comments Dangerous amounts of hydrogen sulfide, a highly toxic gas, may be present, especially in the headspace of containers.

4. FIRST – AID MEASURES

<u>Inhalation</u> – Immediately move individual away from the exposure area and into fresh air. Seek medical attention immediately. If victim is not breathing, begin artificial respiration. If victim's breathing is difficult, administer oxygen.

<u>Skin Contact</u> – Remove contaminated clothing and shoes. Wash immediately with soap and water. Any contact with material should be rinsed from the skin with copious amounts of soap and water. If thermal burns occur seek medical attention immediately. <u>Eye Contact</u> – Immediately move individual away from the exposure area and into fresh air. Flush eyes with copious amounts of water for at least 15 minutes while holding eyelids apart. Seek medical attention immediately. Contact lenses should not be worn while working with this chemical. <u>Continue rinsing</u>. Seek Medical attention.

<u>Ingestion</u> – Do not induce vomiting – aspiration (inhaling fluid) may result. Ingestion of this material is not likely during normal handling operations. If victim becomes drowsy or unconscious, seek medical attention immediately. if spontaneous vomiting occurs, monitor for breathing difficulty. Seek Medical attentions immediately.

<u>Acute and delayed symptoms and effects</u>—Irritation of nose and throat. Irritation of eyes and mucous membranes. Unconsciousness. Corneal damage. Narcosis. Cyanosis(bluetissueconditiosn) <u>Decrease in motor function</u>. Behavioral changes.edema. liver enlargement. Jaundice. Conjunctivitis. Defatting of the skin. Rash.

Indication of immediate medical attention—In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information – If exposed, get medical attention or advice. Ensure medical personnel are aware of materials involved. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. FIRE FIGHTING MEASURES

NFPA Classification Health - 2 Fire - 3 Reactivity - 0 Other - N/A

<u>Flammability Properties</u> – Flash Point: <73°F (<22° C)

Hazardous Combustion Products – May form CO₂, CO and SO₂

Extinguishing media – Extinguishing foam, CO₂, Dry Chemical

<u>Fire Fighting Instructions</u> – Avoid the use of water when fighting a fire involving this product. Wear an approved self-contained breathing apparatus with a full face piece operated with positive pressure and chemical resistant personal protective equipment.

<u>Specific Hazards</u> – May form carbon dioxide, carbon monoxide and sulfur dioxide.

<u>Unusual Fire / Explosion Hazards</u> – Containers of volatile asphalt have the potential to rupture in fires. Vapors from such products may explode if ignited in a confined area.

6. ACCIDENTAL RELEASE MEASURES

<u>Personal precautions</u> – Wear the appropriate personal protective equipment including gloves, boots and tyvek suits. Keep unnecessarily personnel away. Keep out of low areas. Keep upwind. Local authorities should be advised if large spills cannot be contained. See section 8 for personal protections equipment.

Methods and materials for containment and cleaning up. Eliminate all ignition sources. Keep unnecessarily personnel away. Extinguish all fires in the vinvinity Keep combustibles away from the spill area.

Small spills: use a noncombustible material like vermiculate, sand or earth to soak up the product and place in container for later disposal. Cover with plastic sheet to prevent spreading. Collect spillage. Following product recovery. Flush area with water. Prevent product from entering drains. Do not allow material to contaminate ground water. Clean surface to thoroughly remove residual contamination. Wipe up with absorbent cloth. Large Spills: use a noncombustible material like vermiculate, sand or earth to soak up the product and place in container for later disposal. This material and its container must be disposed of as hazardous waste.

<u>Environmental precautions</u> – Prevent runoff from entering sewers, streams and other bodies of water. Spent materials should be placed in compatible containers. Residual product may be absorbed with sand, clay, earth, floor absorbent or other absorbent material and place in appropriate containers. Dispose of material in accordance with all local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment.

These alone may be insufficient to remove static electricity.

Use non-sparking tools. Do not cut, grind, drill, weld, or reuse containers unless adequate precautions are taken against these hazards. Do not use excessive temperatures. Do not eat, drink or smoke in areas of use for storage. Empty containers may contain flammable, combustible or explosive vapor residue.

Wear personal protective equipment. Do not breathe gas/fumes/vapor/spray. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. When using, do not eat, drink or smoke.

Conditions for safe storage,

including any incompatibilities

Flammable liquid storage. Do not handle or store near an open flame or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

Store in tightly closed containers in a dry, isolated, well ventilated area away from sources of ignition and incompatibilities. Avoid extreme temperatures in storage.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

<u>Engineering measures</u> – Provide sufficient general and/or local exhaust ventilation to maintain exposure below the TLV(s).

<u>Respirators</u> – A NIOSH/MSHA approved air purifying respirator with an appropriate cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use 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. Avoid working with this material in closed areas with improper ventilation.

<u>Eye/Face Protection</u> – Safety glasses/goggles. A face shield is recommended for transfer operations or when splashing can occur. Eye washing facilities are to be readily available where splashing can occur. Do not wear contact lenses when handling this material.

<u>Skin Protection</u> – Use appropriate chemical resistant gloves when handling at room temperature. Long sleeved cotton shirt and full length cotton pants.

<u>General Hygiene Considerations</u> – Use good personal hygiene when handling asphalt products. Never wipe eyes or skin with PPE that has been exposed.

Other Protective Equipment – None recommended.

Occupational Exposure Limits – Hazardous Ingredients

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** Naphthalene (CAS 91-20-3) PEL 50 mg/m3 10 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 Ceiling 20 ppm 7783-06-4) 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/m3 Inhalable fraction. Benzene (CAS 71-43-2) STEL 2.5 ppm TWA 0.5 ppm Hydrogen sulfide (CAS STEL 5 ppm 7783-06-4) TWA 1 ppm Naphthalene (CAS 91-20-3) STEL 15 ppm TWA 10 ppm Toluene (CAS 108-88-3) TWA 20 ppm **US. NIOSH: Pocket Guide to Chemical Hazards Components Type Value Form** Asphalt (CAS 8052-42-4) Ceiling 5 mg/m3 Fume. Benzene (CAS 71-43-2) STEL 1 ppm TWA 0.1 ppm Hydrogen sulfide (CAS Ceiling 15 mg/m3 7783-06-4) 10 ppm 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

Biological limit values ACGIH Biological Exposure Indices Components Value Determinant Specimen Sampling Time

25 µg/g S-Phenylmerca pturic acid Creatinine in urine Benzene (CAS 71-43-2) * 0.3 mg/g o-Cresol, with hydrolysis Creatinine in urine Toluene (CAS 108-88-3) * 0.03 mg/l Toluene Urine *

ACGIH Biological Exposure Indices Components Value Determinant Specimen Sampling Time

0.02 mg/l Toluene Blood *

* - 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.

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

Appropriate engineering

controls

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

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 Avoid exposure - obtain special instructions before use. Wear protective gloves. Protective gloves.

Other Wear chemical-resistant, impervious gloves. Flame retardant protective clothing is recommended. **Respiratory protection** Wear a NIOSH-approved (or equivalent) respirator as needed.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene

considerations

Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Dark brown to black liquid.
Physical state Liquid.
Form Viscous liquid at ambient temperatures.
Color Brown/black.
Odor Strong petroleum.
Odor threshold Not available.

pH Not available. **Melting point/freezing point** > 134.96 °F (> 57.2 °C) Initial boiling point and boiling range 700 - 1100.1 °F (371.11 - 593.39 °C) **Flash point** < 55.4 °F (< 13.0 °C) Closed Cup **Evaporation rate** Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits Flammability limit - lower (%) > 0.9 Flammability limit - upper (%) < 7 Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available. Vapor pressure Not available. **Vapor density** > 1.6 (Air = 1) Relative density 0.93 - 0.97 (Water=1) **RC Cutback Asphalt** Prepared by 3E Company 914099 Version #: 02 Revison date: 05-May-2014 Print date: 05-May-2014 5 / 11 Solubility(ies) Solubility (water) Not available. **Partition coefficient** (n-octanol/water) Not available. Auto-ignition temperature 399.99 - 700 °F (204.44 - 371.11 °C) Decomposition temperature Not available. Viscosity Not available.

10. STABILITY AND REACTIVITY

Reactivity Not available.

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. Do not pressurize, cut,

weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. TOXICOLOGY INFORMATION

Information on likely routes of exposure

Ingestion May be fatal if swallowed and enters airways.

Inhalation In high concentrations, mists/vapors may irritate throat and respiratory system and cause coughing. May cause drowsiness or dizziness.

Skin contact May cause skin irritation. Frequent or prolonged contact may defat and dry the skin, leading to

discomfort and dermatitis.

Eye contact May cause eye irritation.

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. Cyanosis (blue tissue condition, nails, lips, and/or skin). Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash.

Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Components Species Test Results

Benzene (CAS 71-43-2) LD50 Rat *Oral* Acute 930 mg/kg

Hydrogen sulfide (CAS 7783-06-4) LC50 Rat *Inhalation*

Acute

> 0.38 mg/l, 960 Minutes Naphthalene (CAS 91-20-3) LD50 Rabbit

Dermal

Acute

> 2 g/kg LD50 Rat *Oral* 490 mg/kg Toluene (CAS 108-88-3) LC50 Rat

Inhalation

Acute 8000 mg/l, 4 Hours

Components Species Test Results

LD50 Rat *Oral* 2.6 g/kg **Skin corrosion/irritation** Causes skin irritation. **Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Respiratory sensitization Based on available data, the classification criteria are not met.

Skin sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicity In in-vitro experiments, neither benzene, toluene nor xylene changed the number of

sister-chromatid exchanges (SCEs) or the number of chromosomal aberrations in human lymphocytes. However, toluene and xylene caused a significant cell growth inhibition which was not observed with benzene in the same concentrations. In in-vivo experiments, toluene changed the number of sister-chromatid exchanges (SCEs) in human lymphocytes. Toluene may cause heritable genetic damage.

Carcinogenicity May cause cancer.

Occupational exposure to straight-run asphalts and their emissions during road paving: 2B Possibly carcinogenic to humans.

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.

Naphthalene (CAS 91-20-3) 2B Possibly carcinogenic to humans.

Toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Benzene (CAS 71-43-2) 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 Benzene, xylene and toluene have demonstrated animal effects of reproductive toxicity. Animal

studies of benzene have shown testicular effects, alterations in reproductive cycles, chromosomal aberrations and embryo/fetotoxicity. May damage fertility or the unborn child. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Avoid exposure to women during early pregnancy. Avoid contact during pregnancy/while nursing.

Specific target organ toxicity -

single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity -

repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Contains polycyclic aromatic compounds which have been shown to cause anemia, disorders of

the liver, bone marrow and lymphoid tissues in rats following dermal application.

Further information Symptoms may be delayed.

12. ECOLOGICAL INFORMATION

Ecotoxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. **Components Species Test Results**

Benzene (CAS 71-43-2)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) 8.76 - 15.6 mg/l, 48 Hours Fish LC50 Rainbow trout,donaldson trout 5.9 mg/l, 96 hours (Oncorhynchus mykiss) Hydrogen sulfide (CAS 7783-06-4)

Aquatic

Fish LC50 Lake whitefish (Coregonus clupeaformis) 0.002 mg/l, 96 hours Naphthalene (CAS 91-20-3)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) 1.09 - 3.4 mg/l, 48 hours RC Cutback Asphalt Prepared by 3E Company 914099 Version #: 02 Revison date: 05-May-2014 Print date: 05-May-2014 7 / 11 **Components Species Test Results** 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) 7.45 - 8.78 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 Toluene (CAS 108-88-3) 2.73 Mobility in soil Not available. Other adverse:Not available.

13. **DISPOSAL CONSIDERATIONS**

This material is not specifically listed as a hazardous waste in federal regulations. However it could be considered hazardous as toxic, corrosive, ignitable, or reactive characteristic waste according to federal or state regulations because of the presence of benzene in the material. Dispose of in accordance with local, state, and federal regulations at an approved disposal facility.

Disposal instructions Dispose in accordance with all applicable regulations. This material and its container must be

disposed of as hazardous waste. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

Hazardous waste code D001: Waste Flammable material with a flash point <140 °F **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

Waste from residues / unused

products

Dispose of in accordance with local regulations. **Contaminated packaging** Offer rinsed packaging material to local recycling facilities.

14. TRANSPORT INFORMATION

DOT

UN number UN1999 **UN proper shipping name** Asphalt, cutback Class 3 Transport hazard class(es) Subsidiary risk -Packing group III Marine pollutant Yes **Environmental hazards Special precautions for user** Read safety instructions, SDS and emergency procedures before handling. Special provisions 149, B13, IB2, T3, TP3, TP29 Packaging exceptions 173, 150 Packaging non bulk 173, 202 Packaging bulk 176, 242 ΙΑΤΑ **UN number UN1999 UN proper shipping name** Asphalt, cutback Class 3 Transport hazard class(es)

Subsidiary risk -Label(s) 3 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 RC Cutback

15. REGULATORY INFORMATION

US REGULATIONS.

ACGIH	See Section 8
CAA Section 212	N/A
CERCLA	.Benzene (RQ – 10 pounds)
IARC	.Benzene (Group 1)
NTP	Benzene
OSHA	.Benzene (Table Z-2 Air Contaminate)
SARA Title III	Benzene
TSCA	All known components of this product are listed and comply

State Regulations:

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15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. 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 Hydrogen sulfide (CAS 7783-06-4) LISTED Naphthalene (CAS 91-20-3) LISTED Toluene (CAS 108-88-3) LISTED Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delaved Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No SARA 302 Extremely hazardous substance Chemical name CAS number Reportable quantity Threshold Planning Quantity Hydrogen sulfide 7783-06-4 100 500 lbs SARA 311/312 Hazardous chemical Yes SARA 313 (TRI reporting) Chemical name CAS number % by wt. Naphthalene 91-20-3 < 0.5 Benzene 71-43-2 < 0.2 Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Benzene (CAS 71-43-2) Naphthalene (CAS 91-20-3) Polycyclic Aromatic Hydrocarbons (CAS 130498-29-2) Toluene (CAS 108-88-3) RC Cutback Asphalt Prepared by 3E Company 914099 Version #: 02 Revison date: 05-May-2014 Print date: 05-May-2014 9 / 11 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 chemicals 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) Hydrogen sulfide (CAS 7783-06-4) Naphthalene (CAS 91-20-3) Toluene (CAS 108-88-3) US. New Jersey Worker and Community Right-to-Know Act Asphalt (CAS 8052-42-4) Benzene (CAS 71-43-2) Hydrogen sulfide (CAS 7783-06-4) Naphthalene (CAS 91-20-3) Polycyclic Aromatic Hydrocarbons (CAS 130498-29-2) Toluene (CAS 108-88-3) US. Pennsylvania Worker and Community Right-to-Know Law Asphalt (CAS 8052-42-4) Benzene (CAS 71-43-2) Hydrogen sulfide (CAS 7783-06-4) Naphthalene (CAS 91-20-3)

Polycyclic Aromatic Hydrocarbons (CAS 130498-29-2) Toluene (CAS 108-88-3) **US. Rhode Island RTK** Benzene (CAS 71-43-2) Hvdrogen sulfide (CAS 7783-06-4) Naphthalene (CAS 91-20-3) Toluene (CAS 108-88-3) **US.** California Proposition 65 US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance Asphalt (CAS 8052-42-4) Benzene (CAS 71-43-2) Naphthalene (CAS 91-20-3) Toluene (CAS 108-88-3) **International Inventories** Country(s) or region Inventory name On inventory (yes/no)* Australia Australian Inventory of Chemical Substances (AICS) Yes Canada Domestic Substances List (DSL) Yes Canada Non-Domestic Substances List (NDSL) No China Inventory of Existing Chemical Substances in China (IECSC) Yes European Inventory of Existing Commercial Chemical Substances (EINECS) Europe Yes Europe European List of Notified Chemical Substances (ELINCS) No Japan Inventory of Existing and New Chemical Substances (ENCS) No Korea Existing Chemicals List (ECL) Yes New Zealand New Zealand Inventory Yes Philippine Inventory of Chemicals and Chemical Substances (PICCS) **Philippines Yes** RC Cutback Asphalt Prepared by 3E Company 914099 Version #: 02 Revison date: 05-May-2014 Print date: 05-May-2014 10 / 11 Country(s) or region Inventory name On inventory (yes/no)* *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 countrv(s).

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

16. OTHER INFORMATION

REVISON NUMBER REVISION DATE

Draft

5/28/15

To the best of our knowledge, the information contained herein is accurate. However, neither Midland Asphalt Materials Inc. nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The possibility exists that the EU will not recognize this MSDS due to the fact that several components of the MSDS are reflective of ANSI Z 400.1-1998. Although ILO (International Labor Organization) has adopted ANSI Z.1-1998, ultimate disposition lies with the competent authority.