



Asphalt Cut-Back

Material Safety Data Sheet

Peckham Industries, Inc.
20 Haarlem Ave.
White Plains, NY 10603

Revision Date: 9/14/2007

Emergency Overview

Appearance: Black color, semi-solid when cold, viscous fluid when hot

Odor: Asphalt/Petroleum odor

WARNING:

Hot product can cause burns to skin. If burned by hot product, cool affected area immediately with cool water. Do not attempt to remove solidified material from skin. Seek medical attention immediately. Hot asphalt can release toxic hydrogen sulfide gas (H₂S)! Hydrogen sulfide can accumulate in vapor space of tanks and vessels during transfer and storage of this material. Water contact can cause a violent eruption of hot asphalt. Fumes from hot product can cause irritation to the eyes, skin, and respiratory system.

Hazard Rankings

	HMIS	NFPA
Health Hazard	1	1
Fire Hazard	2	2
Flammability	3	3
Reactivity	0	0

Protective Equipment

Minimum Recommended See Section 8 for Details

This recommendation reflects minimum PPE when product is at elevated temperatures.



SECTION 1. PRODUCT IDENTIFICATION

Trade Name: Asphalt Cut-back **Technical Contact:** (914) 949-2000
Medical Emergency: (800) 424-9300

CAS Number: Mixture **CHEMTREC Emergency:** (800) 424-9300
(United States Only)

Synonyms: MC-30, MC-70, MC-250, MC-800, MC-3000, RC-70, RC-250, RC-800.

SECTION 2. COMPOSITION

Component Name(s)	CAS Registry No.	Concentration (%)
Asphalt	8052-42-4	50-75
Distillate	8008-20-6	25-50

SECTION 3. HAZARDS IDENTIFICATION

Major Route(s) of Entry: Inhalation, Skin, Eyes, Ingestion.

Signs and Symptoms of Acute Exposure

Eye Contact: If heated, this material may cause irritation with tearing, redness, or a stinging or burning feeling. Effects may become more serious with prolonged contact.

Skin Contact: May cause irritation with redness, an itching or burning feeling, and swelling of the skin. Skin contact may cause harmful effects in other parts of the body. Effects may become more serious with prolonged contact.

Inhalation: The vapor or fumes from this material may cause respiratory irritation. Symptoms of respiratory irritation may include coughing and difficulty breathing. If this material is heated, fumes may be unpleasant and produce nausea and irritation of the eye and upper respiratory tract. Hydrogen sulfide has a strong rotten-egg odor. However, with continued exposure and at high levels, H₂S may deaden a person's sense of smell. If the rotten egg odor is no longer noticeable, it may not necessarily mean that exposure has stopped. At low levels, hydrogen sulfide causes irritation of the eyes, nose, and throat. Moderate levels can cause headache, dizziness, nausea, and vomiting, as well as coughing and difficulty breathing. Higher levels can cause shock, convulsions, coma, and death. After a serious exposure, symptoms usually begin immediately.

Ingestion: If swallowed at ambient temperatures, no significant adverse health effects are anticipated. If swallowed in large quantities, this material can obstruct the intestine.

Medical Conditions Aggravated By Exposure:

Skin contact may aggravate existing dermatitis.

Other Health Warnings

Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized. Personnel with pre-existing central nervous system disease, skin disorders, or chronic respiratory diseases should avoid exposure to this product.

SECTION 4. FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid.

Eye Contact: Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. If heated material should splash into eyes, flush eyes immediately with fresh water for 15 minutes while holding eyelids open. Get immediate medical attention.

Skin Contact: Remove clothing and shoes if contaminated. To remove the material from skin, apply a waterless hand cleaner, mineral oil, or petroleum jelly. Then wash with soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. If the hot material gets on skin, quickly cool with water. See a doctor for extensive burns. Do not try to peel the solidified material from the skin, or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin.

Inhalation: Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, 100% humidified oxygen should be administered by a qualified individual. Get medical attention if breathing difficulties continue. If exposure to hydrogen sulfide (H₂S) gas is possible during an emergency, wear an approved, positive pressure air-supplying respirator.

Ingestion: Do not induce vomiting. Do not give anything to drink. Never give anything by mouth to a person who is not fully conscious. If significant amounts are swallowed or irritation or discomfort occurs, seek medical attention immediately.

Note to Physicians: SKIN: Hot material may cause skin burns. Immerse skin covered with hot material in cool water to limit tissue damage and prevent spread of liquid product. Consider leaving cooled material on skin unless contraindicated by contamination or potential for tattooing. If removal is necessary, mineral oil may be of assistance in minimizing skin loss when removing cool, hardened asphalt.

EYES: Hot material may cause burns to the eyes. Early ophthalmologic evaluation is recommended.

INGESTION: Check for possible bowel obstruction with ingestion of large quantities of material.

SECTION 5. FIRE FIGHTING MEASURES

NFPA Flammability Classification Class III A Combustible Liquid

Flash Point 150°F minimum

Lower Flammable Limit 0.9% **Upper Flammable Limit** 7%

Special Fire Fighting Procedures	Do not enter any enclosed or confined fire space without proper protection equipment. This may include SCBA. Cool tanks and containers exposed to fire with water. Improper use of water and extinguishing media containing water may cause frothing which can spread the fire over a larger area.
Extinguishing Media	Use dry chemical and carbon dioxide. Foam and water are effective, but may cause frothing.
Unusual Fire Fighting Procedures	The flash point displayed above refers to only the petroleum components of this product. When heated above its flash point or when held in storage at elevated temperatures, this material can release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to an ignition source. Studies have shown that relatively low flash point substances, such as hydrogen sulfide and low-boiling hydrocarbons, may accumulate in the vapor space of hot asphalt tanks and bulk transport compartments. As a precaution, keep ignition sources away from vents and openings.

Keep product away from heat, sparks, pilot lights, static electricity, and open flames. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT expose these containers to sources of ignition as they may explode.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Protective Measures	Eliminate all sources of ignition in vicinity of spilled material. If this material is released into a work area, evacuate the area immediately. Persons entering the contaminated area to correct the problem or to determine whether it is safe to resume normal activities must comply with all instructions in the Exposure Controls / Personal Protection section.
Spill Management	Shut off and eliminate all ignition sources. Minimize breathing vapors and skin contact. Ventilate confined spaces. Contain spilled material, allow to cool. Keep product out of sewers and watercourses by diking with sand or earth. Product can then be disposed of as hardened common waste, recycled in Cold Mix Asphalt, or used as base material.
Reporting	Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7. HANDLING AND STORAGE

Handling	Eliminate all sources of ignition. Avoid direct contact with skin. Avoid fumes in confined spaces. Properly dispose of all saturated clothes, gloves, and shoes.
Storage	Product is normally stored and transported at 125°F to 200°F.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

None

Personal Protective Equipment

Use of gloves, boots, and long sleeved shirts and pants is required to avoid contact with skin. Use splash goggles when eye contact may occur. Minimize breathing vapor, mists, or fumes. Use supplied-air respiratory protection in confined or enclosed spaces.



Eye Protection

Use a full-face shield and chemical safety goggles if handling heated material. With product at ambient temperatures, safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Keep a suitable eye wash station immediately available to the work area.

Hand Protection

When handling product at elevated temperatures, use long-cuffed leather or heat-resistant gloves. When product is at ambient temperatures, use gloves constructed of chemical resistant materials such as heavy nitrile rubber if frequent or prolonged contact is expected.

Ventilation

Use local exhaust to capture fumes when handling hot product in confined spaces.

Body Protection

Prevent skin contact when handling heated material. Use insulated, heat-resistant clothing such as a chemical resistant apron or slicker suit. Use a full-body heat-resistant or internally cooled suit when work conditions dictate.

Respiratory Protection

Contaminant air concentrations determine the level of respiratory protection required. Use only NIOSH-approved respiratory equipment within the limits of the protection factors for that equipment. Use supplied air respirators when H₂S concentrations are expected to exceed applicable workplace exposure levels. Do not use air purifying respiratory equipment when considering elevated H₂S concentrations. Respiratory equipment must be selected on the basis of the maximum expected air concentration.

General Comments

Use good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents, or harsh abrasive skin cleaners.

Occupational Exposure Guidelines

Substance

Applicable Workplace Exposure Levels

Asphalt

ACGIH TLV (United States)

TWA: 0.5 mg/m³ 8 hour (s)

Hydrogen Sulfide

ACGIH TLV (United States)

TWA: 10 ppm 8 hour (s)

STEL: 15 ppm 15 minute (s)

OSHA (United States)

CEIL: 20 ppm 8 hour (s)

STEL: 50 ppm 15 minute (s). Form: *10 minute peak; once per 8 hour shift.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Attention: The data below are typical values and do not constitute a specification.

Appearance: Black color, semi-solid when cold, viscous fluid when hot

pH: NA

Vapor Pressure: <5 @ 20°C

Vapor Density (Air = 1): >5

Boiling Point: >320°F

Solubility: Negligible

Melting Point: NA

Specific Gravity: 0.99000

Viscosity: NA

Odor: Asphalt/Petroleum odor

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable. DO NOT heat this material above 200°F. Avoid contact of hot asphalt with water or light hydrocarbons which may create a violent eruption.

Incompatibility With Other Materials: Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, or calcium hypochlorite. Hot product in contact with water can cause foaming or sudden evolution of steam, which could cause pressure build-up and possibly rupture a tank or a vessel.

Hazardous Decomposition Products: Combustion may produce carbon monoxide, oxides of sulfur, asphyxiants.

Hazardous Polymerization: Hazard polymerization will not occur.

Conditions to Avoid: Keep away from extreme heat, strong acids, and strong oxidizing conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS

The following hazards are based on evaluation of data for similar materials or product components:

Eye Irritation	Acute Dermal Toxicity
Skin Irritation	Acute Oral Toxicity
Skin Sensitization	Acute Inhalation Toxicity

ADDITIONAL TOXICOLOGY INFORMATION

There is concern about the carcinogenicity of chemical compounds found in asphalts.. The International Agency for Research on Cancer (IARC) reviewed the carcinogenic potential of asphalts in 1985 and again in 1987. At that time, they concluded there was inadequate evidence to decide that asphalts were carcinogenic to humans. Overall, findings from health monitoring studies of asphalt workers are not conclusive. However, asphalt fume condensates and certain chemical components of asphalt fume have been shown to cause cancer in mice when repeatedly applied to the skin and allowed to remain on the skin for a prolonged period of time. In addition, asphalt fume condensates have been shown to be weakly positive in Ames mutagenicity tests. Skin contact and breathing of fumes, mists and vapors should be reduced to a minimum.

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY

Spills into waterways may be harmful to benthic organisms and bottom feeders.

ENVIRONMENTAL FATE

This material is not expected to present an environmental problem.

SECTION 13. DISPOSAL CONSIDERATIONS

Follow all applicable regulations when landfilling the materials.

SECTION 14. TRANSPORT INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside the United States.

DOT Shipping Name: ELEVATED TEMPERATURE LIQUID, N.O.S.

DOT Hazard Class: 9 (Miscellaneous)

DOT Identification Number: UN 1999

Placard: 1999

DOT Packing Group: III

Emergency Response Guide No.: 130

SECTION 15. REGULATORY INFORMATION

SARA 311 / 312 CATEGORIES:

1. Immediate (Acute) Health Effects: NO
2. Delayed (Chronic) Health Effects: YES
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NO

CHEMICAL INVENTORIES:

All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory or are exempt.

SECTION 16. ADDITIONAL INFORMATION

Scale For NFPA and HMIS Ratings:

0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:-Personal Protective Equipment Index Recommendation, *-Chronic Effect Indicator. These values are obtained using the guidelines or published evaluations prepared by the National Fire Protections Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	REL/PEL - Recommended/Permissible Exposure Limit
NA - Not Applicable	CAS - Chemical Abstract Service Number
NDA - No Data Available	NE - Not Established

THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED REGARDING ITS CORRECTNESS. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE SUBSTANCE ITSELF. THIS MSDS WAS PREPARED AND IS TO BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS MSDS INFORMATION MAY NOT BE APPLICABLE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR PRODUCTS FOR THEIR PARTICULAR PURPOSE.

THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND DISPOSAL OR THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE, OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.