

# SAFETY DATA SHEET

## Medium Curing Cutback MC-70



### 1. Identification of Substance or Mixture and of the Supplier

**Product Name** : Medium Curing Cutback  
**Other Names** : MC-70  
**Recommended Use** : Road Asphalt/Damp-proofing

**Suppliers Details** : **Attock Refinery Limited**  
 P.O. Refinery, Morgah, Rawalpindi, Pakistan  
 Telephone/Fax Number  
 Tel: +92-51-5487041  
 Fax: +91-51-5487041

**Emergency Phone Number** : +92-51-5487041

### 2. Hazard Identification

#### GHS Classification

: Flammable liquid - Category 4;  
 Acute toxicity (Inhalation) - Category 4;  
 Skin irritation - Category 3;  
 Eye irritation - Category 2B;  
 Carcinogenicity - Category 2

#### GHS Label Elements & Precautionary Statements



**Signal Word**  
 Warning

**Hazard statement**

- H226** - Flammable liquid and vapor.
- H304** - May be fatal if swallowed and enters airways.
- H315** - Causes skin irritation.
- H336** - May cause drowsiness or dizziness.
- H340** - May cause genetic defects.
- H350** - May cause cancer.
- H361** - Suspected of damaging fertility or the unborn child.
- H411** - Toxic to aquatic life with long lasting effects.

**Precautionary statement**

- P201** - Obtain special instructions before use.
- P202**- Do not handle until all safety precautions have been read and understood
- P210** - Keep away from extremely high or low temperatures, ignition sources, and incompatible materials. No smoking
- P240** - Ground/bond container and receiving equipment.
- P241** - Use explosion-proof electrical, ventilating, and lighting equipment.
- P242** - Use only non-sparking tools.
- P243** - Take precautionary measures against static discharge.
- P261** - Avoid breathing vapors, mist, or spray.
- P264** - Wash hands, forearms, and other exposed areas thoroughly after handling.
- P271** - Use only outdoors or in a well-ventilated area.
- P273** - Avoid release to the environment.
- P280** - Wear protective gloves, protective clothing, and eye protection.
- P301+P310** - If swallowed: Immediately call a poison center or doctor.
- P303+P361+P353** - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340** - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
- P308+P313** - If exposed or concerned: Get medical advice/attention.
- P312** - Call a poison center or doctor if you feel unwell.
- P321** - Specific treatment (see section 4 on this SDS)
- P331** - Do NOT induce vomiting.
- P332+P313** - If skin irritation occurs: Get medical advice/attention.
- P362** - Take off contaminated clothing and wash it before reuse.
- P370+P378** - In case of fire: Use appropriate media (see section 5) to extinguish.
- P391** - Collect spillage.
- P405** - Store locked up.
- P501** - Dispose of contents/container in accordance with local, regional, national, and international regulations.
- P403+P233+P235** - Store in a well-ventilated place. Keep container tightly closed. Keep cool.

### 3. Composition / Information on Ingredients

**Chemical Identity** : It is manufactured from Vacuum distillation of crude oil. A mixture of asphaltic material and petroleum distillate

**Composition Information**

Name	CAS Number	Percent (%)
Asphalt	8052-42-4	60-80
Petroleum Distillate	8008-20-6	20-40

### 4. First-Aid Measures

**Inhalation** : If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

**Ingestion** : Rinse mouth. DO NOT induce vomiting. Get medical attention immediately. If ingestion of a large amount does occur, call a poison control center immediately.

**Skin** : Immediately place the affected skin under running water for at least 20 minutes - DO NOT DELAY. Prolonged flushing/cooling is necessary. Ice (or “cold packs”) may be used in the event that water is unavailable. Do not attempt to remove the asphalt. Do not place any sheets or towels on top of the asphalt due to the risk of adhesion. Get immediate medical attention.

**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 or advice.

### 5. Fire Fighting Measures

**Hazchem Code** : 2Y  
**Suitable Extinguishing Media** : Foam, Dry powder, Carbon dioxide (CO2)..

**Unsuitable Extinguishing Media** : Do not use water in a jet.

**Hazards from Combustion Products** : Non combustible material. However, under fire conditions this product may emit toxic and/or irritating fumes and gases (smoke). Boil-over of tanks and violent eruptions may occur in the presence of water.

**Specific Hazards during Fire Fighting** : Fire may produce irritating, corrosive and/or toxic gases

**Special protective equipment and precautions for firefighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and facemask.

**Fire-fighting equipment/instructions** : In case of fire and/or explosion do not breathe fumes. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue.

**Specific methods** : In the event of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. Use water spray to cool unopened containers.

**Decomposition Temperature** : Not available

## 6. Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures** : Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them.

**Environmental Precautions** : Prevent further leakage or spillage if safe to do so. Do not contaminate water. No special environmental precautions required. Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground.

**Methods and Materials for Containment and Cleaning up** : Extinguish all flames in the surrounding area.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite,

sand or earth to soak up the product and place into a container for later disposal.

**Small Spills:** Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills in original containers for re-use.

## 7. Handling & Storage

### Safe Handling

: May be ignited by open flame. Keep away from sources of ignition - No smoking. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. All equipment used when handling the product must be grounded. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid contact with skin. Do not get this material on clothing. Wear personal protective equipment. Do not use in areas without adequate ventilation.

### Safe Storage Conditions

: CAUTION The pressure in sealed containers can increase under the influence of heat. Do not handle or store near an open flame, heat or other sources of ignition. Keep away from heat and sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in cool place. Store in a well-ventilated place. Keep container tightly closed. Store in a closed container away from incompatible materials. Keep in an area equipped with sprinklers. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children. Use care in handling/storage.

### Recommended Material

: For containers or container linings, use stainless steel.

### Unsuitable Materials

: For containers or container linings avoid PVC, polyethylene or high density polyethylene.

## 8. Exposure Control / Personnel Protection

### Occupational Exposure Limit Values

Component	CAS No	Value Type (Form of Exposure)	Control Parameters / Permissible Concentration	Basis
Asphalt	8052-42-4	Ceiling	5 mg/m <sup>3</sup> (Fume)	NIOSH
Kerosene	8008-20-6	TWA	100 mg/m <sup>3</sup>	NIOSH

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

<b>Biological Limit Values</b>	: No biological limit available
<b>Appropriate Engineering Controls</b>	: Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.
<b>Respiratory Protection</b>	: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
<b>Eye Protection</b>	: Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations
<b>Hand Protection</b>	: Wear gloves of impervious material. Heat resistant gloves recommended. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken.
<b>Body Protection</b>	: Suitable protective work wear, e.g. Cotton overall/ dangries.
<b>General hygiene considerations</b>	: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical & Chemical Properties

<b>Physical State</b>	: Liquid
Appearance	: Brown to black in color
Color	: Brown – black
Odor	: Aromatic Mild Petroleum Odor
Viscosity	: 70 -140 cSt
IBP & BP rang	: 160 – 288 °C
Flash Point	: >66 °C
Relative density	: 0.95- 1.00

## 10. Stability & Reactivity

<b>Chemical Stability</b>	: Stable under normal conditions of storage and handling
<b>Conditions to Avoid</b>	Heating above the maximum recommended storage and handling temperature, will cause degradation and evolution of flammable vapours.
<b>Incompatible Products</b>	: Strong oxidizing agents

**Hazardous Decomposition Products** : Upon decomposition, this product emits oxides of sulfur, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

## **11. Toxicological Information**

<b>Toxicology Information</b>	<p>: <b>Acute Toxicity – Oral</b> LD50 :( Rat) : &gt;5000 mg/kg</p> <p><b>Acute Toxicity – Inhalation</b> Not considered to be an inhalation hazard under normal conditions of use. Avoid vapours from heated materials to prevent exposure to potentially toxic/irritating fumes.</p> <p><b>Acute Toxicity – Dermal</b> LD50 :( Rat) : &gt;5000 mg/kg</p>
<b>Ingestion</b>	: Ingestion is unlikely. However, Ingestion of this product may irritate the gastric tract causing nausea and vomiting.
<b>Inhalation</b>	: Inhalation of product vapors may cause irritation of the nose, throat and respiratory system.
<b>Skin</b>	<p>: Irritating to skin. Signs/symptoms may include localized redness, swelling, and itching. Hot liquid product may cause serious thermal burns on direct contact. Asphalt fumes can increase susceptibility to sunburn.</p> <p>Contact may cause irritation to the skin and mucous membranes upon prolonged and / or repeated skin contact. Prolonged or repeated contact to petroleum oil with skin may cause de-fatting of skin leading to redness, itching, inflammation, cracking, dermatitis (rash).</p>
<b>Eye</b>	: May be an eye irritant
<b>Respiratory Sensitization</b>	: Not expected to be a respiratory sensitizer
<b>Skin Sensitization</b>	: Not expected to be a skin sensitizer
<b>Germ cell Mutagenicity</b>	: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic
<b>Carcinogenicity</b>	: May cause cancer, Occupational exposure to straight-run asphalts and their emissions during road paving: 2B Possibly carcinogenic to humans.
<b>Reproductive Toxicity</b>	: Suspected of damaging fertility or the unborn child. Animal studies

of benzene have shown testicular effects, alterations in reproductive cycles, chromosomal aberrations and embryo toxicity. 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.

**Aspiration Respiratory Organs Hazard** : May be fatal if swallowed and enters airways.

## **12. Ecological Information**

**Toxicity** : This material is not expected to be harmful to aquatic organisms. The ecotoxicity hazard is based on an evaluation of data for the components or a similar material. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

**Acute Toxicity** : Poorly soluble mixture. May cause physical fouling of aquatic organisms.  
Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l(to aquatic organisms)(LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract).

**Mobility** : Adsorbs to soil and has low mobility. In water will either float or sink, showing little tendency to disperse, the product will adsorb to the sediment.

**Persistence/degradability** : Expected to be not inherently biodegradable.

**Bioaccumulative Potential** : Has the potential to bioaccumulate. In practice, the very low water solubilities and high molecular weights of these substances are such that their bioavailability to aquatic organisms is limited and therefore bioaccumulation is unlikely.

**Other Adverse Effects** : Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

## **13. Disposal Considerations**

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. Recycle and reuse product, if possible. The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user. This product and its container must be disposed of as hazardous waste.

Do NOT dump into any sewers, on the ground or into any body of water. The container for this product can present explosion or fire hazards, even when emptied. Do not cut, puncture, or weld on or near this container. Do not reuse empty containers. Dispose of or recycle empty containers through an approved waste management facility. Store product for disposal as described under Storage in Section 7 of this safety data sheet.



## **14. Transport Information**

**Hazard Class**

Not Applicable

**U.N. Number**

1999

**Packaging Group**

III

**Proper Shipping Name**

Tars, liquid

## **15. Regulatory Information**

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations.

## **16. Other Information including Information on Preparation and revision of the SDS**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process.