

**MATERIAL SAFETY DATA SHEET (MSDS)****CBFS****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**


SUBSTANCE OR PREPARATION TRADE NAME	Carbon Black Feed Stock
CHEMICAL CLASSIFICATION	Hydrocarbon (Mixture)
COMPANY/ UNDERTAKING NAME AND ADDRESS	Haldia Petrochemicals Limited, PO Box No 12, Haldia Plant PO Durgachak, Dist Midnapore West Bengal, India PIN 721 602
TELEPHONE	091-3224-274384 / 274400
EMERGENCY TELEPHONE NUMBER	091-3224-275916

**2. COMPOSITION AND INFORMATION ON INGREDIENTS**

CHEMICAL NAME	% CONTENT BY WEIGHT	CAS NUMBER	EXPOSURE LIMITS IN AIR (ppm)		
			ACGIH TLV-TWA	ACGIH TLV-STEL	IDLH
Naphthalene	2	91-20-3	10	15	
Tetrahydrodicyclopentadiene	3	2845-83-4	NA	NA	
C 11 Aromatics	52	130498-29-2	0.2 mg/m <sup>3</sup>	NA	
Olegomers	43		NA	NA	

**3. HAZARD CLASSIFICATION**

EMERGENCY OVERVIEW		WARNING: Combustible. Long-term exposure to components of this product has caused cancer in laboratory animals and humans.			
POTENTIAL HEALTH HAZARDS					
	EYE	SKIN	INHALATION	INGESTION	OTHERS
ACUTE	Irritation, redness, tearing, blurred vision, occurs when contact with eye	Irritation and skin burning with redness occurs when contact with skin. Prolonged and repeated liquid contact can cause dermatitis.	May cause pulmonary irritation, dizziness, nausea and loss of consciousness.	Toxic if swallowed. May cause burns to mouth, throat and stomach. This product may be harmful or fatal if swallowed.	When hot may cause burns and release toxic gases.
CHRONIC	Prolonged or repeated skin contact can defat the skin and lead to irritation and/or dermatitis. Can be harmful on prolonged and/or repeated skin contact				
NFPA HAZARD SIGNALS	HEALTH 2	FLAMMABILITY 2	REACTIVITY 1	SPECIAL -	
HAZCHEMCODE	2 [Z]				
GHS-Classification	Flammable liquids, Category 3 Skin irritation, Category 2 Germ cell mutagenicity, Category 1B Carcinogenicity, Category 1A Chronic aquatic toxicity, Category 2				
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<b>GHS- labeling</b> Hazard pictograms	
Signal word (GHS-US)	Danger
Hazard statements	H226 Flammable liquid and vapour. H315 Causes skin irritation. H340 May cause genetic defects. H350 May cause cancer. <b>H411 Toxic to aquatic life with long lasting effects.</b>
Precautionary statements	<b>Prevention:</b> P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take precautionary measures against static discharge. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P273 Avoid release to the environment. <b>Response:</b> <b>P332 + P313 If skin irritation occurs: Get medical advice/ attention.</b>

#### 4. FIRST AID MEASURES

SKIN CONTACT	Remove contaminated clothing and immediately wash skin with large amounts of water & soap. Get medical attention if irritation develops.
EYE CONTACT	Immediately flush eyes with lukewarm water for at least 15 minutes. If symptoms or irritation occur, get medical attention.
INHALATION	Move to a well-ventilated area as soon as possible. If not breathing, give artificial respiration. Get medical attention.
INGESTION	If swallowed, do not induce vomiting and do not give liquids. Obtain medical treatment
OTHER INSTRUCTIONS	Do not induce vomiting in case of ingestion

#### 5. FIRE FIGHTING MEASURES

FLASH POINT	>70 °C
AUTO IGNITION TEMP	>400 °C
FLAMMABLE LIMITS IN AIR BY VOL%	Lower: 1.0 & Upper: 6.0
FIRE EXTINGUISHING AGENTS AND SPECIAL PROCEDURES	Water fog, dry chemicals, carbon dioxide, foam & steam.
UNUSUAL FIRE AND EXPLOSION HAZARDS	None
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS	Use PVC or rubber gloves and apron, gumboots, goggles/face shield and overalls. Use breathing apparatus if required

#### 6. ACCIDENTAL RELEASE MEASURES

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PERSONAL PRECAUTIONS	Eliminate all sources of ignition. Use PPE. Carbon off area. Stay upwind
ENVIRONMENTAL PRECAUTIONS	Stop leak if safe to do so. Contain spillage. Absorb in sand or earth for disposal.
METHOD OF CLEANING	Treat as an oil spill. Use water spray to disperse vapours.

### 7. HANDLING AND STORAGE

HANDLING	Avoid strong oxidizers, open flame or other sources of heat
STORAGE	Keep container closed. Store in combustible liquids storage area

### 8. EXPOSURE CONTROLS-PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROL	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below their occupational exposure limits.		
OTHER CONTROL PARAMETERS	Ensure eyewash station & safety showers are proximal to the work-station location.		
<b>PERSONAL PROTECTION EQUIPMENT</b>			
EYE/ FACE PROTECTION	RESPIRATORY PROTECTION	HAND PROTECTION	BODY PROTECTION
Use of safety glasses.	Use supplied air respirator if TLV is exceeded.	Wear gloves. Wear protective clothing, gloves, and oil impervious footwear when contact is likely	PPE for the body should be selected based on the task being performed and the risk involved. Flame retardant clothing is recommended.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	ODOUR	PHYSICAL STATE	BOILING POINT
Blackish	Pungent, Unpleasant	Liquid	>200°C
MELTING / FREEZING POINT	SPECIFIC GRAVITY (AT 20°C) (WATER=1)	PH	SOLUBILITY IN WATER (AT 30°C)
DNA	0.9-1.0	Not Pertinent	Insoluble
VAPOUR PRESSURE (AT 20°C) IN MM Hg	VAPOUR DENSITY (AIR=1)	OTHER INFORMATIONS	VISCOSITY
DNA	>2.0	CBFS is a mixture of C9 and higher hydrocarbons	DNA

### 10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID	Excessive heat, sources of ignition
MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE	Strong Oxidisers, Source of ignition and excessive heat
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon monoxide, Hydrogen sulphide, aldehydes, aromatic & other hydrocarbons etc.
HAZARDOUS POLYMERIZATION	Not likely to occur

### 11. TOXICOLOGICAL INFORMATION

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ANIMAL TOXICITY DATA	
ORAL: LD50 IN (rat) mg/kg DNA	DERMAL: LD50 (rabbit)µL/kg DNA
IRRITANCY OF PRODUCT	Irritant to skin & eye
REPRODUCTIVE TOXICITY INFORMATION	
REPRODUCTIVE TOXICITY	NA
MUTAGENICITY	Some components were found to be positive in some mutagenicity test while negative in others
EMBRYOTOXICITY	NA
TERATOGENICITY	NA

**12. ECOLOGICAL INFORMATION**

ENVIRONMENTAL STABILITY	Stable under normal condition
EFFECT OF MATERIAL ON PLANTS OR ANIMALS	This product may present a cancer risk to humans if the hygiene and personal protection precautions are not followed.
EFFECT OF CHEMICAL ON AQUATIC LIFE	May be toxic to Aquatic life

**13. DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHODS	Let spillage go to drip pit or oily water sewer. Flush small spillage with plenty of water. Enclosed- controlled incineration is recommended unless directed otherwise by applicable ordinances.
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**14. TRANSPORT INFORMATION**

	PROPER SHIPPING NAME	HAZARD CLASS	IDENTIFICATION NUMBER	PACKING GROUP	LABEL REQUIRED
DOT	Residues (petroleum)	3	UN1993	III	flammable liquid
TDG	Residues (petroleum)	3	UN1993	III	flammable liquid
IMDG	Residues (petroleum)	3	UN1993	III	flammable liquid
ICAO	Residues (petroleum)	3	UN1993	III	flammable liquid

**15. REGULATORY INFORMATION**

INDIAN REGULATION		Manufacture Import & Storage of hazardous chemical rules. Amended as on 2000
INTERNATIONAL REGULATIONS		
EU CLASSIFICATION	Symbol	T Toxic
	RISK PHRASES	R45-63-48/24-52/53. May cause cancer. Possible risk of harm to the unborn child. Toxic: danger of serious damage to health by prolonged exposure in contact with skin. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	SAFETY PHRASES	S43-45-61. Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Avoid release to the environment.
WHMIS CLASSIFICATION		B3, D2B

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U.S Federal Regulation:  
TSCA Status

On toxic substance control inventory

### 16. OTHER INFORMATION

DISCLAIMER	Information contained in this material safety data sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. It is upto the user/distributor to ensure that the information contained in the material safety data sheet is relevant to the product manufactured/ handled or sold by him as the case may be. HPL makes no warranties, expressed or implied, in respect of the adequacy of this document for any particular purpose.
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