

MATERIAL SAFETY DATA SHEET

PRODUCT: HBE-95-BG Base

REVISION DATE: September 21st 2006

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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER/SUPPLIER: CANUSA-CPS, A DIVISION OF SHAWCOR LTD.
ADDRESS: 25 BETHRIDGE ROAD
CITY, PROVINCE/STATE: TORONTO, ONTARIO
POSTAL CODE: M9W 1M7
EMERGENCY PHONE NUMBER: (613) 996-6666 (CANUTEC)
INFORMATION NUMBER: (416) 743-7111

PRODUCT IDENTITY **HBE-95-BG Base**
 (AS USED ON LABEL AND LIST):
PRODUCT USE: Coating for Pipelines
PRODUCT I.D. NUMBER (PIN): N/A

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS #</u>	<u>%</u>	<u>HAZARD SYMBOLS</u>	<u>RISK PHRASES</u>
EPOXY PHENOL NOVOLAC	28064-14-4	15-40	NONE KNOWN	NONE KNOWN
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	15-40	NONE KNOWN	NONE KNOWN
NEOPENTYL GLYCOL DIGLYCIDYL ETHER	17557-23-2	5-10	Xi	R: 38-43
FORMALDEHYDE POLYMER WITH TOLUENE	25155-81-1	5-10	NONE KNOWN	NONE KNOWN
MICA	12001-26-2	1-5	NONE KNOWN	NONE KNOWN
HYDROPHOBIC SILICA	67762-90-7	1-5	NONE KNOWN	NONE KNOWN
TITANIUM DIOXIDE	13463-67-7	1-5	NONE KNOWN	NONE KNOWN
CARBON BLACK	1333-86-4	0.1-1	NONE KNOWN	NONE KNOWN

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SECTION 3 - HAZARDS IDENTIFICATION

ADVERSE HEALTH EFFECTS:

MAY CAUSE LUNG DAMAGE, SKIN AND RESPIRATORY SENSITIZATION AND DERMATITIS.

ENVIRONMENTAL EFFECTS:

NOT AVAILABLE

PHYSICAL AND CHEMICAL HAZARDS:

INCOMPATIBLE WITH STRONG ACIDS, BASES, OXIDIZERS AND AMINES.

SPECIFIC HAZARDS:

ELEVATED TEMPERATURES

CARCINOGENICITY INFORMATION:

FREE SILICA OR RESPIRABLE SILICA DUST IS LISTED AS A PROBABLE HUMAN CARCINOGEN BY IARC.

SECTION 4 - FIRST-AID MEASURES

EYE CONTACT:

FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.

SKIN CONTACT:

WASH WITH SOAP AND WATER FOR 15 MINUTES; REMOVE CLOTHING. SEEK MEDICAL ATTENTION.

INHALATION:

REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, A TRAINED FIRST AIDER SHOULD PERFORM ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION.

INGESTION:

SEEK IMMEDIATE MEDICAL ATTENTION.

NOTE TO PHYSICIAN:

NOT AVAILABLE

SECTION 5 - FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:

WATER SPRAY, DRY CHEMICAL, FOAM, CARBON DIOXIDE.

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FIRE-FIGHTING HAZARDS:

NOT AVAILABLE

FIRE-FIGHTING PERSONAL PROTECTIVE EQUIPMENT:

USE SELF CONTAINED BREATHING APPARATUS DURING FIREFIGHTING

FIRE-FIGHTING PROCEDURES:

NOT AVAILABLE

THERMAL DECOMPOSITION BY-PRODUCTS:

OXIDES OF NITROGEN & CARBON (CO, CO₂), ALDEHYDES AND ACIDS

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

REMOVE ALL SOURCES OF IGNITION. WEAR APPROPRIATE SAFETY EQUIPMENT.

ENVIRONMENTAL PRECAUTIONS:

PREVENT RUN-OFF FROM REACHING STORM OR SEWER DRAINS.

METHODS FOR CLEANING UP:

SOAK UP SPILLS WITH INERT ABSORBENT MATERIALS AND PLACE IN CLOSED CONTAINERS. DISPOSE OF IN COMPLIANCE WITH ALL FEDERAL, PROVINCIAL AND MUNICIPAL LEGISLATION.

SECTION 7 - HANDLING AND STORAGE

HANDLING REQUIREMENTS:

MAINTAIN GOOD PERSONAL HYGIENE. WASH AFTER USE.

STORAGE REQUIREMENTS:

COOL DRY ENVIRONMENT

INCOMPATIBLE MATERIALS:

STRONG ACIDS, BASES, OXIDIZERS AND AMINES

VENTILATION:

ADEQUATE GENERAL VENTILATION IS RECOMMENDED

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SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

ADEQUATE GENERAL VENTILATION IS RECOMMENDED

PERSONAL PROTECTIVE EQUIPMENT (PPE):

GLOVES/TYPE: CHEMICAL RESISTANT GLOVES WHEN HANDLING MATERIAL.
 RESPIRATORY/TYPE: WEAR A NIOSH APPROVED ORGANIC RESPIRATOR DURING APPLICATION AND HANDLING WHERE VAPOUR/MIST IS ENCOUNTERED IN THE BREATHING ZONE. AFTER APPLICATION AND DRYING, WEAR A DUST RESPIRATOR FOR ANY SANDING, GRINDING TYPE ACTIVITIES.
 EYE/TYPE: SPLASH PROOF CHEMICAL SAFETY GOGGLES
 FOOTWEAR: IMPERVIOUS BOOTS
 CLOTHING: CHEMICAL RESISTANT APRON. COVER EXPOSED SKIN.

INGREDIENT EXPOSURE DATA:

<u>INGREDIENT</u>	<u>CAS #</u>	<u>LD₅₀ (species and route)</u>	<u>LC₅₀ (species and route)</u>	<u>OSHA (PEL) TWA</u>	<u>ACGIH (TLV) TWA</u>
EPOXY PHENOL NOVOLAC	28064-14-4	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	NOT AVAILABLE	NOT AVAILABLE	250 mppcf 10 mg/m ³	0.1 mg/m ³
NEOPENTYL GLYCOL DIGLYCIDYL ETHER	17557-23-2	Rabbit, Skin: 2150 mg/kg	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
FORMALDEHYDE POLYMER WITH TOLUENE	25155-81-1	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
MICA	12001-26-2	NOT AVAILABLE	NOT AVAILABLE	20 mppcf	INHALABLE: 3 mg/m ³
HYDROPHOBIC SILICA	67762-90-7	Rat, Oral: 1000 mg/kg	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
TITANIUM DIOXIDE	13463-67-7	NOT AVAILABLE	NOT AVAILABLE	TOTAL DUST: 15 mg/m ³	10 mg/m ³
CARBON BLACK	1333-86-4	Rat, Oral: 8 g/kg	NOT AVAILABLE	3.5 mg/m ³	3.5 mg/m ³

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DATA:

PHYSICAL STATE:	LIQUID
FORM:	VISCOUS LIQUID
COLOUR:	GREY
ODOUR:	FAINT OILY ODOUR
ODOUR THRESHOLD (PPM):	NOT AVAILABLE
BOILING POINT:	>300°C (572°F)
FREEZING POINT:	LESS THAN -5°C
MELTING POINT:	NOT AVAILABLE
EVAPORATION RATE:	NOT AVAILABLE
VAPOUR PRESSURE (mmHg):	NEGLIGIBLE
VAPOUR DENSITY (AIR = 1):	NOT AVAILABLE
pH:	NOT AVAILABLE
SPECIFIC GRAVITY (WATER = 1):	1.485
COEFFICIENT OF WATER/OIL DISTRIBUTION:	NOT AVAILABLE
SOLUBILITY IN WATER:	SLIGHTLY

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID:

ELEVATED TEMPERATURES

MATERIALS TO AVOID:

STRONG ACIDS, BASES, OXIDIZERS AND AMINES

STABILITY AND REACTIVITY DATA:

STABILITY:	UNSTABLE: _____	STABLE: _____
HAZARDOUS POLYMERIZATION:	WILL OCCUR: _____	WILL NOT OCCUR: <u> X </u>

FLAMMABILITY DATA:

DECOMPOSITION TEMPERATURE:	NOT AVAILABLE
FLASHPOINT:	> 93.3°C (212°F) SETA
AUTOIGNITION TEMPERATURE:	NOT AVAILABLE

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:

OXIDES OF NITROGEN & CARBON (CO, CO₂), ALDEHYDES AND ACIDS

EXPLOSION DATA:

STATIC DISCHARGE:	NOT AVAILABLE
MECHANICAL IMPACT:	NOT AVAILABLE
LOWER EXPLOSIVE LIMIT, LEL (%):	NOT AVAILABLE
UPPER EXPLOSIVE LIMIT, UEL (%):	NOT AVAILABLE

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SECTION 11 - TOXICOLOGY INFORMATION

EFFECTS FROM EYE CONTACT:

CAUSES EYE IRRITATION.

EFFECTS FROM SKIN CONTACT:

MAY CAUSE SKIN BURNS OR ALLERGIC SKIN REACTIONS.

EFFECTS FROM INHALATION:

MAY CAUSE NOSE AND THROAT IRRITATION. MAY CAUSE LUNG INJURY &/OR BURNS

EFFECTS FROM INGESTION:

HARMFUL IF SWALLOWED.

TOXICOLOGICAL DATA:

EFFECTS OF ACUTE EXPOSURE:	SEE ABOVE
EFFECTS OF CHRONIC EXPOSURE:	MAY CAUSE LUNG DAMAGE, SKIN AND RESPIRATORY SENSITIZATION AND DERMATITIS. REPEATED INHALATION OF CONCENTRATED FREE SILICA DUST MAY CAUSE DELAYED LUNG INJURY (SILICOSIS).
IRRITANCY OF MATERIAL:	SEE ACUTE EFFECTS
SENSITIZING CAPABILITY:	YES
CARCINOGENICITY OF MATERIAL:	FREE SILICA OR RESPIRABLE SILICA DUST IS LISTED AS A PROBABLE HUMAN CARCINOGEN BY IARC.
REPRODUCTIVE TOXICITY:	NOT AVAILABLE
TERATOGENICITY:	NOT AVAILABLE
MUTAGENICITY:	NOT AVAILABLE
SYNERGISTIC MATERIALS:	NOT AVAILABLE

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

NOT AVAILABLE

OTHER EFFECTS AND INFORMATION:

NOT AVAILABLE

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SECTION 13 - DISPOSAL CONSIDERATIONS

PRODUCT AS SOLD:

DISPOSE OF IN COMPLIANCE WITH ALL FEDERAL, PROVINCIAL AND MUNICIPAL LEGISLATION.

PRODUCT PACKAGING:

DISPOSE OF IN COMPLIANCE WITH ALL FEDERAL, PROVINCIAL AND MUNICIPAL LEGISLATION.

SPECIAL INSTRUCTIONS:

NOT AVAILABLE

SECTION 14 - TRANSPORT INFORMATION

SHIPPING INFORMATION:

SHIPPING NAME:	NOT REGULATED AS A HAZARDOUS MATERIAL
PIN/UN NUMBER:	NOT REGULATED AS A HAZARDOUS MATERIAL
PACKING GROUP:	NOT REGULATED AS A HAZARDOUS MATERIAL
TDG REGULATED:	NOT REGULATED AS A HAZARDOUS MATERIAL
DOT REGULATED:	NOT REGULATED AS A HAZARDOUS MATERIAL
IATA REGULATED:	NOT REGULATED AS A HAZARDOUS MATERIAL
IMDG REGULATED:	NOT REGULATED AS A HAZARDOUS MATERIAL

SPECIAL SHIPPING INSTRUCTIONS:

NOT AVAILABLE

SECTION 15 - REGULATORY INFORMATION

NOTE:

THE REGULATORY INFORMATION PROVIDED IS NOT INTENDED TO BE COMPREHENSIVE. OTHER LOCAL, STATE, PROVINCIAL, FEDERAL, INTERNATIONAL OR COUNTRY SPECIFIC REGULATIONS MAY APPLY TO THIS MATERIAL. THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

GENERAL MATERIAL INFORMATION:

WHMIS CLASSIFICATION: D2A

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COMPONENT ANALYSIS – LIST STATUS:

<u>INGREDIENT</u>	<u>CAS #</u>	<u>CANADA WHMIS IDL</u>	<u>US CERCLA PRIORITY LIST</u>
EPOXY PHENOL NOVOLAC	28064-14-4	NO	NO
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	YES	NO
NEOPENTYL GLYCOL DIGLYCIDYL ETHER	17557-23-2	NO	NO
FORMALDEHYDE POLYMER WITH TOLUENE	25155-81-1	NO	NO
MICA	12001-26-2	YES	NO
HYDROPHOBIC SILICA	67762-90-7	NO	NO
TITANIUM DIOXIDE	13463-67-7	NO	NO
CARBON BLACK	1333-86-4	YES	NO

COMPONENT ANALYSIS – INVENTORY STATUS:

<u>INGREDIENT</u>	<u>CAS #</u>	<u>CANADA- DSL</u>	<u>US- TSCA</u>	<u>EU- EINECS</u>	<u>AUSTRALIA -AICS</u>
EPOXY PHENOL NOVOLAC	28064-14-4	YES	YES	NO	YES
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	YES	YES	YES 238-878-4	YES
NEOPENTYL GLYCOL DIGLYCIDYL ETHER	17557-23-2	YES	YES	YES 241-536-7	YES
FORMALDEHYDE POLYMER WITH TOLUENE	25155-81-1	YES	YES	NO	YES
MICA	12001-26-2	YES	NO	NO	YES
HYDROPHOBIC SILICA	67762-90-7	YES	YES	NO	YES

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TITANIUM DIOXIDE	13463-67-7	YES	YES	YES 236-675-5	YES
CARBON BLACK	1333-86-4	YES	YES	YES 215-609-9	YES

SECTION 16 - OTHER INFORMATION

PREPARED BY: SHAWCOR LTD.
TELEPHONE NUMBER: (416) 743-7111
DATE PREPARED: September 21st 2006

ADDITIONAL INFORMATION: NONE

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