

MATERIAL SAFETY DATA SHEET

PRODUCT: HBE – HT Brush Cure

September 21st 2006

MANUFACTURER/SUPPLIER: CANUSA-CPS, A DIVISION OF SHAWCOR LTD.
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SECTION 1 – PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTITY (AS USED ON LABEL AND LIST):

HBE – HT Brush Cure

PRODUCT USE: Curing Agent for HBE-HT Brush Grade Base Coating for Pipelines
WHMIS STATUS: D2A, D2B, E
(PIN): UN 2735

SECTION 2 – HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<u>HAZARDOUS INGREDIENTS</u>	<u>CAS #</u>	<u>%</u>	<u>EXPOSURE LIMITS</u>
Aminoethylpiperazine	140-31-8	10-30	LD _{50(oral)} :2140mg/Kg Rat LD _{50(dermal)} : 880mg/Kg Rabbit
Bisphenol A Epoxy	80-05-7	10-30	LD _{50(oral)} :2230mg/Kg Rat LD _{50(dermal)} :3000mg/Kg Rabbit
Nonylphenol	25154-52-3	5-10	LD _{50(oral)} :1231mg/Kg Mouse LD _{50(dermal)} :2140mg/Kg Rabbit
Dimethylbenzylamine	103-83-3	0.1-1	LD _{50(oral)} : 265mg/Kg Rat LD _{50(dermal)} :1660mg/Kg Rabbit
Benzyl Alcohol	100-51-6	30-60	LD _{50(oral)} :1230mg/Kg Rat LD _{50(dermal)} :2000mg/Kg Rabbit
Liquid Epoxy Resin	25155-81-1	10-30	N/A

SECTION 3 – PHYSICAL DATA

PHYSICAL STATE: MODERATELY VISCOUS LIQUID
ODOUR AND APPEARANCE: AMMONICAL ODOUR, AMBER COLOUR
ODOUR THRESHOLD (PPM): N/A
VAPOUR PRESSURE (mmHg): <1.0 @ 20°C (68°F)
VAPOUR DENSITY (AIR = 1): N/A

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EVAPORATION RATE: N/A
BOILING POINT: N/A
FREEZING POINT: <-20°C
MELTING POINT: N/A
pH: ALKALINE
SPECIFIC GRAVITY (WATER = 1): 1.04 @ 25°C (77°F)
COEFFICIENT OF WATER/
OIL DISTRIBUTION: N/A
SOLUBILITY IN WATER: SLIGHT

SECTION 4 - FIRE OR EXPLOSION HAZARD

FLASHPOINT (METHOD USED): > 93.3°C (200°F) PMCC
AUTOIGNITION TEMPERATURE: N/A
FLAMMABLE LIMITS: N/A LEL ___ UEL
EXTINGUISHING MEDIA: WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE, FOAM. USE SELF CONTAINED BREATHING APPARATUS DURING FIREFIGHTING.
EXPLOSION DATA
SENSITIVITY TO STATIC DISCHARGE: NOT EXPECTED, BUT PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE SHOULD BE OBSERVED.
SENSITIVITY TO MECHANICAL IMPACT: N/A

SECTION 5 - REACTIVITY DATA

STABILITY: UNSTABLE ___ STABLE X
CONDITIONS TO AVOID: IN NON-EMERGENCY CONDITIONS.
INCOMPATIBILITY (MATERIALS TO AVOID): STRONG ACIDS, OXIDIZERS (PERCHLORATES, NITRATES)
HAZARDOUS DECOMPOSITION OR COMBUSTION BYPRODUCTS: THERMAL DECOMPOSITION MAY CAUSE THE RELEASE OF TOXIC, IRRITATING AND FLAMMABLE PRODUCTS, OXIDES OF NITROGEN, CARBON (CO,CO₂),CARBOXYLIC ACIDS, ALDEHYDES.
REACTIVITY UNDER WHAT CONDITIONS CONTACT WITH INCOMPATIBLE SUBSTANCES

SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTES OF ENTRY: SKIN & EYE CONTACT, INHALATION

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SKIN CONTACT:	CAUSES CHEMICAL BURNS. SEVERE IRRITANT. MAY CAUSE ALLERGIC SKIN REACTION
SKIN ABSORPTION:	CORROSIVE TO THE SKIN. SEVERE IRRITATION.
EYE CONTACT:	SEVERE IRRITANT. BURNS OF EYES MAY CAUSE BLINDNESS. CORROSIVE TO THE EYES.
INHALATION:	SEVERE RESPIRATORY TRACT IRRITANT, MAY SEVERELY DAMAGE CONTACTED TISSUE AND PRODUCE SCARRING.
INGESTION:	HEADACHES, NAUSEA, VOMITING. MAY CAUSE BLEEDING OF THE GASTROINTESTINAL TRACT.
EFFECTS OF ACUTE EXPOSURE:	SEE ABOVE
EFFECTS OF CHRONIC EXPOSURE:	ADVERSE EYE, SKIN AND RESPIRATORY EFFECTS. SENSITIZATION MAY OCCUR WITH PROLONGED SKIN CONTACT.
IRRITANCY OF MATERIAL:	SKIN ABSORPTION.
SENSITIZING CAPABILITY:	YES
CARCINOGENICITY OF MATERIAL:	NONE KNOWN
REPRODUCTIVE EFFECTS:	NONE KNOWN
TERATOGENICITY:	NONE KNOWN
MUTAGENICITY:	NONE KNOWN
SYNERGISTIC MATERIALS:	N/A

SECTION 7 – PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT

GLOVES/TYPE:	CHEMICAL RESISTANT GLOVES WHEN HANDLING MATERIAL.
RESPIRATORY/TYPE:	WEAR AN APPROVED 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.
ENGINEERING CONTROLS:	ADEQUATE GENERAL VENTILATION IS RECOMMENDED
LEAKS/SPILLS:	REMOVE ALL SOURCES OF IGNITION. WEAR APPROPRIATE SAFETY EQUIPMENT AS LISTED ABOVE. SOAK UP SPILLS WITH INERT ABSORBENT MATERIALS AND PLACE IN CLOSED CONTAINERS. PREVENT RUN-OFF FROM REACHING STORM OR SEWER DRAINS.
WASTE DISPOSAL:	DISPOSE OF IN COMPLIANCE WITH ALL FEDERAL, PROVINCIAL AND MUNICIPAL LEGISLATION.
HANDLING PROCEDURES AND EQUIPMENT:	MAINTAIN GOOD PERSONAL HYGIENE.
STORAGE NEEDS:	ALL EQUIPMENT MUST BE GROUNDED. COOL DRY WELL VENTILATED ENVIRONMENT AWAY FROM INCOMPATIBLE MATERIALS AND ALL SOURCES OF IGNITION. KEEP IN TIGHTLY SEALED CONTAINERS.
SPECIAL SHIPPING INSTRUCTIONS:	CLASS 8, PIN UN-2735.

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SECTION 8 – 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 CONTAMINATED CLOTHING. SEEK MEDICAL ATTENTION.

INHALATION: REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, A TRAINED PERSON SHOULD PERFORM ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION.

INGESTION: SEEK **IMMEDIATE** MEDICAL ATTENTION. DO NOT INDUCE VOMITING

SECTION 9 – PREPARATION INFORMATION

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

ADDITIONAL INFORMATION: **CEPA:** NOT ALL INGREDIENTS OF THIS PRODUCT ARE LISTED ON THE DOMESTIC SUBSTANCES LIST.
TSCA: ALL THE INGREDIENTS OF THIS PRODUCT ARE ON THE TSCA.

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