

MATERIAL SAFETY DATA SHEET

PRODUCT: HBE – HT BRUSH CURE
 REVISION DATE: October 28th, 2009

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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: +1-613-996-6666 (CANUTEC)
INFORMATION NUMBER: +1-416-743-7111

PRODUCT IDENTITY **HBE-HT BRUSH CURE**
 (AS USED ON LABEL AND LIST):
PRODUCT USE: Curing agent for HBE-HT Brush Base Coating Pipelines
PRODUCT I.D. NUMBER (PIN): UN 2735

SECTION 2 - HAZARDS IDENTIFICATION

ADVERSE HEALTH EFFECTS:
 NOT APPLICABLE

ENVIRONMENTAL EFFECTS:
 NOT APPLICABLE

PHYSICAL AND CHEMICAL HAZARDS:
 APPLICABLE

SPECIFIC HAZARDS:
 NOT APPLICABLE

CARCINOGENICITY INFORMATION:
 NOT APPLICABLE

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS #</u>	<u>EU- EINECS</u>	<u>%</u>	<u>HAZARD SYMBOLS</u>	<u>RISK PHRASES</u>
BENZYL ALCOHOL	100-51-6	202-858-9	30-60	Xn	R: 20/22
AMINOETHYLPIPERAZINE	140-31-8	205-411-0	10-30	C	R: 21/22-34- 43-52/53

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BISPENOL A EPOXY	80-05-7	201-245-8	10-30	Xn	R37-41-43-52-62
LIQUID EPOXY RESIN	25155-81-1	500-034-0	10-30	N/A	N/A
NONYLPHENOL	25154-52-3	246-672-0	5-10	C, N	R: 22-34-50/53-62-63
BENZYL DIMETHYLAMINE	103-83-3	246-672-0	0.1-1	C	R:10-20/21/22-34-52/53

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 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

NOTE TO PHYSICIAN:

NOT AVAILABLE

SECTION 5 - FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:

WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE, FOAM. USE SELF CONTAINED BREATHING APPARATUS (SCBA) DURING FIREFIGHTING.

FIRE-FIGHTING HAZARDS:

NOT AVAILABLE

FIRE-FIGHTING PERSONAL PROTECTIVE EQUIPMENT:

FIRE RETARDANT CLOTHING AND A SCBA.

FIRE-FIGHTING PROCEDURES:

NOT APPLICABLE

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THERMAL DECOMPOSITION BY-PRODUCTS:

THERMAL DECOMPOSITION MAY CAUSE THE RELEASE OF TOXIC, IRRITATING AND FLAMMABLE PRODUCTS, OXIDES OF NITROGEN, CARBON (CO, CO₂), CARBOXYLIC ACIDS, ALDEHYDES

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

NOT AVAILABLE

ENVIRONMENTAL PRECAUTIONS:

NOT AVAILABLE

METHODS FOR CLEANING UP:

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.

SECTION 7 - HANDLING AND STORAGE

HANDLING REQUIREMENTS:

MAINTAIN GOOD PERSONAL HYGIENE.

STORAGE REQUIREMENTS:

COOL DRY WELL VENTILATED ENVIRONMENT AWAY FROM INCOMPATIBLE MATERIALS AND ALL SOURCES OF IGNITION. KEEP IN TIGHTLY SEALED CONTAINERS.

INCOMPATIBLE MATERIALS:

STRONG ACIDS, OXIDIZERS (PERCHLORATES, NITRATES)

VENTILATION:

GENERAL VENTILATION

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

ADEQUATE GENERAL VENTILATION IS REQUIRED

PERSONAL PROTECTIVE EQUIPMENT (PPE):

GLOVES/TYPE: CHEMICAL RESISTANT GLOVES WHEN HANDLING MATERIAL.

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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.

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>
BENZYL ALCOHOL	100-51-6	1230mg/Kg (rat, oral) 2000 mg/Kg (rabbit, dermal)	N/A	N/A	N/A
AMINOETHYLPIPERAZINE	140-31-8	2140mg/Kg (rat, oral) 880mg/Kg (rabbit, dermal)	N/A	N/A	N/A
BISPHENOL A EPOXY	80-05-7	2230mg/Kg (rat, oral) 3000mg/Kg (rabbit, dermal)	N/A	N/A	N/A
LIQUID EPOXY RESIN	25155- 81-1	N/A	N/A	N/A	N/A
NONYLPHENOL	25154- 52-3	1231mg/Kg (mouse, oral) 2140mg/Kg (rabbit, dermal)	N/A	N/A	N/A
BENZYLDIMETHYLAMINE	103-83-3	265mg/Kg (rat, oral) 1660mg/Kg (rabbit, dermal)	N/A	N/A	N/A

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DATA:

PHYSICAL STATE:	MODERATELY VISCOUS LIQUID
FORM:	NOT AVAILABLE
COLOUR:	AMBER COLOUR
ODOUR:	AMMONICAL ODOUR
ODOUR THRESHOLD (PPM):	NOT AVAILABLE
BOILING POINT:	NOT AVAILABLE
FREEZING POINT:	<=20C(68F)
MELTING POINT:	NOT AVAILABLE
EVAPORATION RATE:	NOT AVAILABLE
VAPOUR PRESSURE (mmHg):	<1.0@20C (68F)
VAPOUR DENSITY (AIR = 1):	NOT AVAILABLE
pH:	ALKALINIC
SPECIFIC GRAVITY (WATER = 1):	1.04 @ 25C (77F)
COEFFICIENT OF WATER/OIL DISTRIBUTION:	NOT AVAILABLE
SOLUBILITY IN WATER:	SLIGHT

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID:

IN NON-EMERGENCY CONDITIONS

MATERIALS TO AVOID:

STRONG ACIDS, OXIDIZERS(PERCHLORATES, NITRATES)

STABILITY AND REACTIVITY DATA:

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

FLAMMABILITY DATA:

DECOMPOSITION TEMPERATURE:	NOT AVAILABLE
FLASHPOINT [METHOD USED]:	>93.3C(200F) [PMCC]
AUTOIGNITION TEMPERATURE:	NOT AVAILABLE

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:

THERMAL DECOMPOSITION MAY CAUSE THE RELEASE OF OXIC, IRRITATING AND FLAMMABLE PRODUCTS, OXIDES OF NITROGEN, CARBON (CO, CO₂), CARBOXYLIC ACIDS, ALDEHYDES.

EXPLOSION DATA:

STATIC DISCHARGE:	NOT EXPECTED, BUT PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE COULD BE OBSERVED.
MECHANICAL IMPACT:	NOT AVAILABLE
LOWER EXPLOSIVE LIMIT, LEL (%):	NOT AVAILABLE

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UPPER EXPLOSIVE LIMIT, UEL (%): NOT AVAILABLE

SECTION 11 - TOXICOLOGY INFORMATION

EFFECTS FROM EYE CONTACT:

SEVERE IRRITATN. BURNS OF EYES MAY CAUSE BLINDNESS. CORROSIVE TO THE EYES.

EFFECTS FROM SKIN CONTACT:

CAUSES CHEMICAL BURNS. SEVERE IRRITANT. MAY CAUSE ALLERGIC SKIN REACTION

EFFECTS FROM INHALATION:

SEVERE REPIRATORY TRACT IRRITANT, MAY SEVERLY DAMAGE CONTACTED TISSUE AND PRODUCE SCARRING.

EFFECTS FROM INGESTION:

HEADACHES, NAUSEA, VOMITING. MAY CAUSE BLEEDING OF THE GASTROINTESTINAL TRACT.

TOXICOLOGICAL DATA:

EFFECTS OF ACUTE EXPOSURE:	SEE ABOVE
EFFECTS OF CHRONIC EXPOSURE:	ADVERSE EYE, SKIN AND RESPIRTORY EFFECTS. SENSITIZATION MAY OCCUR WITH PROLONGED SKIN CONTACT.
IRRITANCY OF MATERIAL:	SKIN ABSORPTION
SENSITIZING CAPABILITY:	YES
CARCINOGENICITY OF MATERIAL:	NONE KNOWN
REPRODUCTIVE TOXICITY:	NONE KNOWN
TERATOGENICITY:	NONE KNOWN
MUTAGENICITY:	NONE KNOWN
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 APPLICABLE

SECTION 14 - TRANSPORT INFORMATION

SHIPPING INFORMATION:

SHIPPING NAME:	HBE-HT BRUSH CURE - AMINES, LIQUID, CORROSIVE, N.O.S.
PIN/UN NUMBER:	UN 2735
PACKING GROUP:	III
TDG REGULATED:	AMINES, LIQUID, CORROSIVE, N.O.S.
DOT REGULATED:	AMINES, LIQUID, CORROSIVE, N.O.S.
IATA REGULATED:	AMINES, LIQUID, CORROSIVE, N.O.S.
IMDG REGULATED:	UN 2735

SPECIAL SHIPPING INSTRUCTIONS:

NOT APPLICABLE

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.

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GENERAL MATERIAL INFORMATION:

WHMIS
CLASSIFICATION

D2A/D2B



E



EUROPEAN
CLASSIFICATION



X_n - , C - , N -

RISK PHRASES

R10, R20/21/22, R34, R36/37/38, R39, R41, R43, R50, R52/53-62

SAFETY PHRASES

S1/2, S26, S36/37/38, S39, S45, S46, S60, S61

COMPONENT ANALYSIS – LIST STATUS:

<u>INGREDIENT</u>	<u>CAS #</u>	<u>CANADA WHMIS IDL</u>	<u>US CERCLA PRIORITY LIST</u>
BENZYL ALCOHOL	100-51-6	YES	NO
AMINOETHYLPIPERAZINE	140-31-8	YES	NO
BISPENOL A EPOXY	80-05-7	YES	NO
LIQUID EPOXY RESIN	25155-81-1	N/A	NO
BENZYLDIMETHYLAMINE	103-83-3	YES	NO
NONYLPHENOL	25154-52-3	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>
BENZYL ALCOHOL	100-51-6	YES	YES	YES	YES

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AMINOETHYLPIPERAZINE	140-31-8	YES	YES	YES	YES
BISPHENOL A EPOXY	80-05-7	YES	YES	YES	YES
LIQUID EPOXY RESIN	25155-81-1	YES	YES	NO	YES
DIMETHYLBENZYLAMINE	103-83-3	YES	YES	NO	YES
NONYLPHENOL	25154-52-3	YES	YES	YES	YES

SECTION 16 - OTHER INFORMATION

PREPARED BY: SHAWCOR LTD.
TELEPHONE NUMBER: (416) 743-7111
DATE PREPARED: July 7th 2006

ADDITIONAL INFORMATION:

EUROPEAN/INTERNATIONAL HAZARD SYMBOLS AND RISK AND SAFETY PHRASES

HAZARD SYMBOLS:

D2A/D2B	OTHER TOXIC
E	CORROSIVE
Xn	HARMFUL
C	CORROSIVE
N	HARMFUL TO THE NATURAL ENVIRONMENT

RISK PHRASES:

R10	FLAMMABLE
R20/21/22	HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED
R34	CAUSES BURNS
R37	IRRITATING TO RESPIRATORY SYSTEM
R41	RISK OF SERIOUS DAMAGE TO EYES
R43	MAY CAUSE SENSITIZATION BY SKIN CONTACT
R52/53	HARMFUL TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM EFFECTS TO AQUATIC ENVIRONMENT
R62	POSSIBLE RISK OF IMPAIRED FERTILITY

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SAFETY PHRASES:

S1/2	KEEP LOCKED UP AND OUT OF REACH OF CHILDREN
S26	IN CASE OF CONTACT WITH EYES, RINSE WITH PLENTY OF WATER AND SEEK MEDICAL ATTENTION
S36/37/39	WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION
S38	IN CASE OF INSUFFICIENT VENTILATION WEAR SUITABLE RESPIRATORY EQUIPMENT
S45	IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL SEEK MEDICAL ADVICE IMMEDIATELY
S46	IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR MSDS SHEET
S60	THIS MATERIAL AND CONTAINER MUST BE DISPOSED AS HAZARDOUS WASTE
S61	AVOID RELEASE INTO THE ENVIRONMENT

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