

Canusa-CPS HBE-DX Cure

SECTION 1. IDENTIFICATION

Product Identifier	Canusa-CPS HBE-DX Cure
Product Family	Epoxy
Recommended Use	The Canusa HBE-DX is a robust liquid epoxy coating system specifically designed to protect field joint girth welds during directional drilling pipeline construction. The formulation presents high properties of gouge resistance, tensile elongation, impact strength and ease of build. Applied as a stand alone direct-to-steel coating system, HBE-DX has proven to withstand pipe operating temperatures up to 95°C (203°F) with excellent anti corrosion performance. This environmentally friendly, 100% solids, novolac epoxy system can either be spray applied or brush applied to the intended substrate.
Manufacturer	CANUSA-CPS, A DIVISION OF SHAWCOR LTD., 25 BETHRIDGE ROAD, TORONTO, ON, M9W 1M7, (416) 743-7111
Emergency Phone No.	Canusa, (613) 996-6666 (CANUTEC)

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

Classification

Acute toxicity (Oral) - Category 4; Acute toxicity (Inhalation) - Category 4; Skin irritation - Category 2; Serious eye damage - Category 1; Reproductive toxicity - Category 2; Aquatic hazard (Chronic) - Category 2

Label Elements



Danger

Harmful if swallowed, in contact with skin or if inhaled.

Causes serious eye damage.

Suspected of damaging fertility.

Toxic to aquatic life with long lasting effects.

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash hands thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Take off contaminated clothing and wash it before reuse.

IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
AMINOETHYLPIPERAZINE	140-31-8	10-50	
PHENOL 4,4'- (1-METHYLETHYLIDENE)BIS-	80-05-7	7-30	
4-Nonylphenol, branched (mixed isomers)	84852-15-3	7-20	
Benzyl alcohol	100-51-6	1-20	
Benzylamine, N,N-dimethyl-	103-83-3	1-10	
Ethylenediamine, N-(3-(trimethoxysilyl)propyl)-	1760-24-3	0.1-2.5	
1,3-Phenylenebismethylamine	1477-55-0	<10	
Amines, polyethylenepoly-	68131-73-7	<5	
Tetraethylenepentamine	112-57-2	<1	
Triethylenetetramine	112-24-3	<0.1	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. If symptoms persist seek medical attention.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Get medical attention.

Ingestion

Do not induce vomiting. Immediately call a Poison Centre or doctor.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Specific Hazards Arising from the Product

Oxides of carbon and nitrogen; carboxylic acids; aldehydes.

Special Protective Equipment and Precautions for Fire-fighters

Do not use direct stream of water.

Self-contained breathing apparatus and full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Eliminate all ignition sources if safe to do so. Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Dispose of in compliance with applicable legislation.

Product Identifier: Canusa-CPS HBE-DX Cure

Date of Preparation: January 06, 2014

Page 02 of 06

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear appropriate PPE.

Conditions for Safe Storage

Store in an area that is: cool, dry. Adequate general ventilation is recommended; local ventilation if in a confined or restricted area.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
PHENOL 4,4'-(1-METHYLETHYLIDENE)BIS-	Not established		Not established			
Benzyl alcohol	Not established		Not established		10 ppm	
Triethylenetetramine	Not established		Not established		1 ppm Skin	

Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles. Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: butyl rubber, Viton®, neoprene rubber. The following materials should NOT be used: natural rubber, nitrile rubber.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an organic vapour cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Green.
Odour	Ammonia-like
Relative Density (water = 1)	1.031
Solubility	Not available in water
Other Information	
Physical State	Liquid

SECTION 10. STABILITY AND REACTIVITY

Possibility of Hazardous Reactions

Hazardous polymerizations will not occur.

Incompatible Materials

Avoid strong acids and oxidizers.

Hazardous Decomposition Products

Oxides of carbon and nitrogen. Carboxylic acids. Aldehydes.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
AMINOETHYLPIPERAZINE		2140 mg/kg (rat)	880 mg/kg (rabbit)
PHENOL 4,4'- (1-METHYLETHYLIDENE) BIS-		3300 mg/kg (female rat)	3600 mg/kg (rabbit)
Benzyl alcohol	> 4168-5400 mg/m ³ (rat) (4-hour exposure) (aerosol)	1230-1580 mg/kg (rat)	< 5250 mg/kg (guinea pig)
Benzylamine, N,N-dimethyl-		265 mg/kg (rat)	1660 mg/kg (rabbit)
Ethylenediamine, N-(3-(trimethoxysilyl)propyl)-		2413 mg/kg (rat)	2009 mg/kg (rat)
Tetraethylenepentamine		3990 mg/kg (rat)	660 mg/kg (rabbit)
4-Nonylphenol, branched (mixed isomers)		1300 mg/kg (rat)	
1, 3-Phenylenebismethylamine	700 ppm (rat) (1-hour exposure)	930 mg/kg (rat)	2000 mg/kg (rabbit)
Triethylenetetramine		4340-2500 mg/kg (rat)	805-550 mg/kg (rabbit)

Serious Eye Damage/Irritation

May cause irritation and burns.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause irritation. May damage contacted tissue and produce scarring.

Skin Absorption

May cause irritation. May cause burns. May cause allergic reaction.

Ingestion

Harmful if swallowed.

Respiratory and/or Skin Sensitization

Sensitization may occur following exposure to the liquid or vapour.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
AMINOETHYLPIPERAZINE	Not Listed	Not designated	Not Listed	Not Listed
PHENOL 4,4'- (1-METHYLETHYLIDENE) BIS-	Not Listed	Not Listed	Not Listed	Not Listed
Benzyl alcohol	Not Listed	Not Listed	Not Listed	
Benzylamine, N,N-dimethyl-	Not Listed	Not designated	Not Listed	Not Listed
Ethylenediamine, N-(3-(trimethoxysilyl)propyl)-	Not Listed	Not designated	Not Listed	Not Listed
Tetraethylenepentamine	Not Listed	Not Listed	Not Listed	Not Listed
4-Nonylphenol, branched (mixed isomers)	Not Listed	Not designated	Not Listed	Not Listed
Amines, polyethylenepoly- 1,	Not Listed	Not Listed	Not Listed	Not Listed

Product Identifier: Canusa-CPS HBE-DX Cure

Date of Preparation: January 06, 2014

Page 04 of 06

3-Phenylenebismethylamine				
Triethylenetetramine	Not Listed	Not Listed	Not Listed	Not Listed

Reproductive Toxicity

Sexual Function and Fertility

May cause effects on sexual function and/or fertility.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

May be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
AMINOETHYLPIPERAZINE	2190 mg/L (Pimephales promelas (fathead minnow); 96-hour; flow-through)			
PHENOL 4,4'-(1-METHYLETHYLIDENE) BIS-	4.6 mg/L (Pimephales promelas (fathead minnow); 48-hour; fresh water; flow-through)	2.7 mg/L (Selenastrum capricornutum (algae); 96-hour)		
Benzyl alcohol	770 mg/L (Pimephales promelas (fathead minnow); 48-hour; fresh water; static)	mg/L (Daphnia magna (water flea); 48-hour)		

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of as hazardous waste. Dispose of in compliance with all federal, state, provincial, municipal and local legislation.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	2735	Amines, Liquid, Corrosive, N.O.S	Class 8	III

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

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.

SECTION 16. OTHER INFORMATION

Product Identifier: Canusa-CPS HBE-DX Cure

Date of Preparation: January 06, 2014

Page 05 of 06

NFPA Rating **Health - 2** **Flammability - 2** **Instability - 0**
Based on AMINOETHYLPIPERAZINE

SDS Prepared By SHAWCOR LTD.

Phone No. (416) 743-7111

Date of Preparation January 06, 2014

Date of Last Revision October 05, 2016

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