SAFETY DATA SHEET

Date Prepared: May 1, 2015

1. Product and Company Identification

CEDA Specialty Services LP
2130-121 Ave. NE
Edmonton, Alberta T6S 1B1
Canada
(780) 472-6766

Product Name:	E.S. 103-P
Product Type:	Accelerator
Product Description:	White powder with black specs
General Use :	Accelerates cure time of some thermo setting sealants

2. Hazards Identification

GHS Classification :

Skin Sens, 1
Respiratory Sens, 1,
Flammable Solid, 2

GHS Label Elements :
Signal Word : Warning

Hazard Statements :
H228 Flammable Solid
H315 / 320 Causes Skin and Eye Irritation
H335 May cause respiratory irritation

Precautionary Statements :
P261 Avoid breathing dust and vapors
P262 Do not get in eyes, on skin, or on clothing
P285 In case of inadequate ventilation wear respiratory protection
P281 Use personal protective equipment as required
P301/P310 If Swallowed: Immediately call a Poison Center or Physician
P333/P313 If skin irritation or rash develops: Get medical attention.
P302/P352 If on skin: Wash with plenty of soap and water
P305/P351/P338 If in eyes : Rinse cautiously with water for several minutes. Remove contact lenses. Continue Rinsing.
P337/P313 If eye irritation persists: Get medical attention
P342/P311 If experiencing respiratory symptoms : Get medical attention.
P233 Keep container tightly closed
P210 Keep away from open flames. – No Smoking
P501 Dispose of observing all Federal, State and Local regulations.

3. Composition / Information on Ingredients

Ingredients	CAS No.	% by weight
Hexamethylenetetramine	100-97-0	70-100

4. First Aid Measures

Ingestion: DO NOT INGEST. Do not induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. Call a physician or get medical help immediately.

Inhalation: Remove to fresh air. If symptoms persist, seek medical attention. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous for the person providing aid to give mouth to mouth resuscitation. If unconscious place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin Contact: Flush contaminated skin with plenty of water, remove contaminated shoes and clothing. Wash contaminated clothing thoroughly with water before removing it or wear gloves. Consult physician if symptoms develop.

Eye Contact: Flush with water 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. If symptoms persist, seek medical attention.

Note to Physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours**.**

5. Fire Fighting Measures

Recommended Extinguishing Agent:
Foam, Dry Chemical, Carbon Dioxide, Water Fog

Special Fire Fighting Procedures:
Self contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. (Professionally Trained Personnel).

Hazardous Products Formed by Fire or Thermal Decomposition:
Carbon Oxides, Nitrogen Oxides, Ammonia, Aldehydes (including Formaldehyde) Metal oxide /oxides, and Hydrogen Cyanide

Unusual Fire or Explosion Hazards:
Promptly isolate the scene by removing all persons in the vicinity if there is a fire. No action shall be Taken involving any person risk without suitable training.

Compressed Gases: None

Pressure at Room Temperature: Does not apply

6. Accidental Release Measures

Steps to be taken in cases of spill or leak:

Minimize airborne dust and eliminate all fire/ignition sources. Do not use air hoses for cleaning. Minimize dry sweeping to avoid generation of dust clouds. Vacuum dust accumulating on surfaces and remove to a chemical disposal area. Vacuums with explosion proof motors should be used. Wear proper personal protective equipment. Remove any sources of ignition from the area and allow hot surfaces to cool. Return uncontaminated material to metal container and seal container tightly. Dispose of contaminated material or waste. Prevent entry into waterways, soil, drains and sewers.

7. Handling and Storage

Storage: Cool, dry, storage, away from direct sunlight. Store in closed containers. Keep away from incompatible materials (See section 10) and food and drink. Keep containers tightly closed and sealed until ready for use.

Handling: Avoid contact with skin and eyes. Do not breathe vapors. Wear appropriate safety gear as required in work area. Eating , drinking and smoking should be prohibited in areas where this product is being used. Wear appropriate respirator when ventilation is inadequate. High dust concentrations should be avoided. Combustible dusts at sufficient concentrations can form explosive mixtures in with air. Keep away from heat, hot surfaces, sparks, flame or other ignition sources. Do not use air hoses for cleaning. Minimize dry sweeping to avoid generation of dust clouds. Vacuum dust –accumulating on surfaces and remove to a chemical disposal area. Vacuums with explosion proof motors should be used.

8. Exposure Controls / Personal Protection

Exposure Limits Ingredients	ACGIH (TLV)	OSHA (PEL)	OTHER
Hexamethylenetetramine	Consult local authorities for acceptable exposure limits		

Personal Protective Equipment (PPE)

Eyes: Safety Glasses
Full face shield recommended. (during injection process)

Skin: Chemical resistant impervious gloves.

Respiratory Protection:

Respirator selection must be based on known or anticipated exposure levels, the hazards of the products and the safe working limits of the selected respirator. If necessary, use a properly fitted, air purifying or air fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Other Protective Clothing or Equipment:

Coveralls or other protective clothing. Safety equipment as required in area.

Work / Hygienic Practices:

Avoid contact with skin. Wash hands before eating, smoking or using the lavatory.

Engineering Controls : Local exhaust if poorly ventilated area or in confined spaces. If dust fumes or mist is generated use process enclosures, local exhaust or other engineering controls to keep workers exposure to airborne contaminants below any recommended or statutory limits. Use explosion proof ventilation equipment.

9. Chemical and Physical Properties

Appearance:	White powder with black specs
Odor:	Distinct odor
pH:	8.0
Solubility in Water:	NIL
Specific Gravity:	1.33 (H2O =1)
Evaporation Rate:	Not Applicable
Boiling Point:	Not Applicable
Melting Point:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density:	Not Established
VOC Content:	None to minimal content
Flash Point:	>381^0 F. Method: Cleveland Open Cup

Flammable Limits:

LEL: Not Established
UEL: Not Established

10. Stability and Reactivity

Stability:	Stable
Hazardous Polymerization:	Will not occur
Hazardous Decomposition Or By-Products:	Carbon Oxides, Nitrogen Oxides, Ammonia, Aldehydes (including Formaldehyde) Metal oxide /oxides, and Hydrogen Cyanide
Incompatibility:	Oxidizing materials and acids

Flammability of the product : Flammable Solid. Fine dust clouds may form explosive mixtures with air. Run off to sewer may create fire or explosion hazard. Combustible Solid that burns. Eliminate all fire/ignition sources including static discharges near product / package. Keep away from heat, hot surfaces, sparks, and flame

11. Toxicology Information

Primary Routes of Entry: Inhalation and contact.

Signs and Symptoms of Overexposure:

Inhalation: Adverse symptoms may include: respiratory tract Irritation, coughing, wheezing and breathing difficulties, asthma.

Eyes: Redness and irritation, watering, pain.

Skin: Irritation and redness

Existing Conditions Aggravated by Exposure: Pre-existing respiratory and skin disorders involving any other target organs' mentioned in this SDS as being at risk may be aggravated by over-exposure to this product

Carcinogenicity

NTP:	None
IARC:	None
OSHA Regulated:	NO

Toxicity : LD50 Oral Mouse 569 mg/kg

Mutagenicity : Hexamethylenetetramine : In an Ames assay (in vitro) using Salmonella typhimurium, this chemical produced weak dose response increase in mutations in strain TA100 with metabolic activation and, in strain TA98 with and without metabolic activation. However, it was reported as NOT mutagenic when tested in an Ames assay (In Vitro) using Salmonella typhimurium strains TA1535, TA1537 and TA 1538 with and without activation.

Acute Health Hazards:

Skin: Irritating to skin. May cause sensitization by skin contact.

Inhalation: Irritating to respiratory system. May cause sensitization by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Eyes: Irritating to eyes.

Ingestion: Not expected to be harmful under normal conditions of use.

Chronic Health Hazards: Can cause target organ damage : mucous membranes, skin, eyes.

Note: Residual formaldehyde gas may be released by this product during processing. The amount and level will depend on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. OSHA has listed formaldehyde as a potential human carcinogen. IACR has classified formaldehyde as carcinogenic to humans.

12. Ecological Information

No known significant effect or critical hazards.

13. Disposal Considerations

Recommended Methods of Disposal:

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product solutions and by-products should at all times comply with the requirements of the environmental protection and waste disposal legislation and any regional local authority requirements.
Certain state regulations could affect whether a material is considered a hazardous waste upon disposal. It must also be noted that a material can become a hazardous waste if it is mixed with or comes in contact with a hazardous substance during use. Under RCRA it is the responsibility of user of a product to determine at the time of disposal, whether a material should be classified as a hazardous waste.

14. Transport Information

DOT (49 CFR 172): Hexamethylenetetramine
UN 1328
Class 4.1 PG III

IATA : Hexamethylenetetramine
UN 1328
Class 4.1 PG III

Liquid / Solid (per ASTM D 4359-90) : Material is a solid

15. REGULATORY INFORMATION

CERCLA HAZARDOUS SUBSTANCES (40 CFR Part 302.4): This product is not reportable under 40 CFR Part 302.4.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR Part 355): This product does not contain any SARA 302 Extremely Hazardous Substances.

SARA TITLE III SECTION 311/312 HAZARDOUS CATEGORIZATION (40 CFR Part 370): Certain ingredients of this product are regulated under Sara Title III Section 311/312, see section 3 of this MSDS.

SARA TITLE III SECTION 313 (40 CFR Part 372): None

U.S. INVENTORY (TSCA): Any chemical substances (as defined in 40 CFR Part 710.2), that are contained in, or used in the manufacture of this product, are reported in the EPA TSCA Inventory. (As required per 40 CFR 710.3)

CALIFORNIA PROPOSITION 65: None

CANADA WHMIS: Class B4 Flammable Solid, Class D, Div 2A, 2B Canada NPRI : None Required

EUROPEAN UNION : Hexamethylenetetramine: CLP Skin Sens, 1, Respiratory Sens, 1, Flammable Solid, 2

OZONE DEPLETERS: * This product is not manufactured with or contains any Class I or Class II Ozone Depleting Chemicals. (ODC's)

16. OTHER INFORMATION

The information contained in this MSDS sheet is based upon data supplied by our suppliers and data determined by us in our facilities at the time these products were formulated. We have reviewed any information that we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety data in this sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. If after reviewing this MSDS you have determined that this product poses unusual risks to you, your plant, or your plant personnel, or if you cannot comply fully with all safety recommendations, do not use this product. This product is intended for a temporary repair. The responsibility for whether or not the product is suitable for use rest solely with the purchaser. We recommend that the product be tested prior to use. Your use of this information is beyond our control, therefore, the information is provided without warranty expressed or implied. We accept no liability beyond the purchase price of the material.

Estimated HMIS® Code:

Health Hazard:	2* * See section XI for chronic effects.
Flammability Hazard:	3
Physical Hazard:	0
Personal Protection:	NPCA recommends that PPE codes be determined by the employer, who is familiar with the actual conditions under which chemicals in the facility are used.

Procedural Warning
Procedural Warning:
Attn: Technician
(For industrial use by professionally trained personnel only) When the compound is curing, vapors and gasses are given off and should be vented. Steps should be taken to insure that the injection pressure in conjunction with pressure that may occur from gassing off does not exceed the pressure limitations of the piping system. Also, be aware it is quite common that the application temperature will exceed the compound flash point. Be aware of the possibility of a flash and take necessary precautions. Avoid contact with skin and eyes. See section 8 of SDS for personal protective equipment. Ventilation may be needed during heating/curing stage to exhaust organic vapors resulting from vaporization of certain organic agents. Always avoid direct contact with smoke and vapors being emitted from the compound during the heating/curing process. These vapors may be irritating to the skin, eyes and respiratory system. Read product technical data and safety information before use.

PREPARATION INFORMATION

Prepared By:	Safety Department
Company:	CEDA Specialty Services LP
Revision Date:	05-01-15 Revision: F