

## MATERIAL SAFETY DATA SHEET

ChemCo Systems, Inc., 2800 Bay Road, Redwood City, CA 94063

Prepared by Dept. of Safety, Phone: 650/261-3790

24 Hour Emergency Phone: 800-424-9300 CHEMTREC

**1. PRODUCT NAME:**  
**CCS™ Coating, Concentrated**  
**Sulfuric Acid Resistance, Part B**  
Chemical Family: Polyamines

### 2. HAZARDOUS INGREDIENTS

NAME	CAS No.	TLV	STEL	PEL	CONTENT
Alkylated Phenolic Polyamine	68413-29-6	none	none	none	50-55%
Diethyltoluenedi amine (DETDA)	68479-98-1	none	none	none	25-30%
O-sec-butylphenol (OSBP)	89-72-5	5ppm	none	none	15-25%
Diethylenetriamine	111-40-0	1ppm	none	1ppm	3-5%

reference section 7, Health Hazard Data for LD (50)

### 3. PHYSICAL DATA:

Boiling Point:	ND	Water/Oil Distribution Coefficient:	N/D
Percent Volatile:	< 1%	Solubility in Water:	partial
Freezing Point	N/D	Specific Gravity:	1.0
Vapor Pressure @ 20C:	< 1mm Hg	pH:	alkaline
Vapor Density	Heavier than air	Evaporation Rate:	N/D
Odor Threshold	N/D	Odor	Ammoniacal
Appearance	Amber liquid		

N/D = Not Determined

### 4. FIRE AND EXPLOSION HAZARD DATA:

HMIS Flammability Rating:	1 - (Slight Hazard)
Flash Point:	210 F (BA) TCC
Auto Ignition Temperature:	N/D
Limits of Flammability:	N/D UEL: N/D
EXTINGUISHING MEDIA:	CARBON DIOXIDE, FOAM, DRY CHEMICAL & WATER FOG
SPECIAL FIRE & UNUSUAL HAZARDS:	Self-contained respirator equipment and full protective clothing are required when smoke and fumes are generated. Electrical grounding is not recommended.

### 5. REACTIVITY DATA:

HMIS Reactivity Rating:	0 - (Least Hazard)
STABILITY:	Stable. This product must be mixed with another component to react. Not sensitive to mechanical impact.
INCOMPATIBILITY:	Strong oxidizing agents, acids, isocyanates and organic peroxides may result in violent reactions.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide and dioxide, nitrogen oxides and various hydrocarbons from incomplete combustion.
HAZARDOUS POLYMERIZATION:	Will not occur.

### 6. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS AND LEAKS:	Ventilate area. Wear appropriate protective gear. Contain leak/spill. Clean up residue with absorbent material. Wash down area with water and diluted acetic acid. Prevent washings from entering waterways.
WASTE DISPOSAL METHOD:	Handle disposal of waste material in manner which complies with local, state, province, and federal regulations. Landfill if solidified or incinerate at agency approved waste-disposal facility. Because of alkalinity this product may be hazardous waste under RCRA regulations.

The information given herein is given in good faith. No warranty, expressed or implied, is made regarding the accuracy of these data or the results obtained from the use thereof. All materials may present unknown health hazards and must be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Consult ChemCo Systems Inc. for further information.

MSDS161B11/05

### 7. HEALTH HAZARD DATA:

HMIS Health Rating:	3 - (Severe Hazard)
Primary Route Of Entry:	Dermal, inhalation.
Effects of Overexposure:	
Inhalation	Due to low vapor pressure of this product, fumes will be minimal below 25 C. At higher temperatures, fumes will be irritating.
Eyes:	Contact can cause severe burns and irreversible damage, irritation, redness, tearing or blurred vision. CAS 68413-29-6 93.5/110 in FHSA rabbit eye irritation score.
Skin Contact:	Short single exposure may cause moderate irritation to mild burn. Prolonged or repeated exposure may cause a severe burn. May result in an allergic reaction or sensitization response in some individuals.
Skin Absorption	DETDA and OSBP may be absorbed through the skin and are considered to be toxic. LD (50) (rabbit) 89-72-5 5.5g/kg. CAS 68479-98-1 700 mg/kg.
Ingestion:	Intake can cause gastrointestinal irritation, nausea, vomiting, diarrhea, headache and drowsiness. Can result in burns of mouth esophagus and stomach. Moderately toxic. LD (50) CAS 68479-98-1 485 mg/kg (rat) LD (50) CAS 89-72-5 340 mg/kg (rat)
Chronic:	None known.

### 8: FIRST AID:

Eyes:	Flush eyes with water and/or 1% boric acid, lifting upper and lower lids occasionally for 30 minutes. Seek prompt medical attention.
Skin:	Wash with soap and water for at least 15 minutes. Remove contaminated clothing and wash before re-use. Destroy contaminated leather. Seek medical attention if irritation persists.
Ingestion:	Do not induce vomiting. Give large quantities of water or vinegar diluted with water. Get immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquids into lungs. Do not give anything by mouth to an unconscious person.
Inhalation	Remove victim from exposure. If difficulty with breathing; administer oxygen and seek immediate medical assistance.

### 9. SPECIAL PROTECTION INFORMATION:

HMIS Personal Protection	C (Safety Glasses, Gloves, Apron)
Ventilation:	Ventilation is recommended. Air movement must be designed to insure turnover at all locations in work area to avoid build-up of heavy vapors.
Personal Protection:	Use eye protection and gloves. Selection of specific items such as gloves, boots and apron will depend on the operation. Wear respirator protection whenever airborne concentrations exceed TLV ceilings or TWA, use NIOSH approved respirators for listed hazard. Confined spaces, rooms or tanks are areas where concern for TLV's is especially important. Reference OSHA Regulation CFR 29 1910.134 for recommended respiratory protection.

### 10. ADDITIONAL INFORMATION:

DOT Proper Shipping Name:	Alkyl amines, n.o.s. (Alkylated phenolic polyamine)
DOT Hazard Class or Division:	8
Identification Number:	UN 2735
Packaging group:	II
Labels Required:	Corrosive
WHMIS Classification:	Class D, Div. 2, Sub. A&B; Class E.
WHMIS Labeling:	Test tube, hand. Stylized T
Storage Conditions:	Keep containers tightly sealed; store in cool and dry area. Avoid freezing conditions.
Shelf life:	Indefinite
Special Instructions:	None.