
SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CCS Concentrated Sulfuric Acid Resistance, Part B
SYNONYMS: 161B
PRODUCT CODES: 161B

MANUFACTURER: ChemCo Systems Inc.
ADDRESS: 2800 Bay Road
Redwood City, CA. 94063
PHONE: 650 261-3790

EMERGENCY PHONE:
Chemtrec: Domestic: 800 424-9300
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RECOMMENDED USE: Epoxy Resin, For further information refer to the Product Data Sheet.

SECTION 2: HAZARDS IDENTIFICATION

GHS Hazard:



ROUTES OF ENTRY: **EYES:** YES **SKIN:** YES **INGESTION:** YES **INHALATION:** YES

SIGNAL WORD: DANGER!

HEALTH HAZARDS (ACUTE AND CHRONIC)

EYES: Serious Eye Damage Cat. 2.
Eye irritation Cat. 2
SKIN: Acute Dermal Toxicity Cat.4
Skin Irritant Cat. 2
Skin Sensitization Cat. 1.
Skin Corrosion Cat. 1B
INGESTION: Acute Oral Toxicity Cat. 4
INHALATION: Acute Toxicity Cat 4

ENVIRONMENTAL HAZARDS:

Acute Aquatic Cat.1
Chronic Aquatic Cat.1
Acute Toxicity Cat.4

HAZARD STATEMENTS:

H302+H312+H332 - Harmful if swallowed, inhaled or in contact with skin
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H332 - Harmful if inhaled

PRECAUTIONARY STATEMENTS:

P201 - Obtain special instructions before use
P202 - Do not handle until all safety regulations have been read and understood.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash...thoroughly after handling with soap and water
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear Protective gloves/protective clothing/eye protection/face protection
P301+P312 - IF SWALLOWED Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331 - IF SWALLOWED rinse mouth. DO NOT induce vomiting.
P304+P340 - IF INHALED Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P303+P361+P353 - If ON SKIN (or hair): Remove/ take off immediately all contaminated clothing. Rinse skin with

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water/shower.

P305+P351+P338 - IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

P370+P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P391 - Collect spillage.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container to an approved waste disposal plant.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Persons with preexisting skin or respiratory disorders may have their conditions aggravated by over exposure to this material.

This product is not for use in an aerosol or spray. This product contains a component that is toxic by inhalation when aerosolized or sprayed. Refer to Section 11 of the SDS for toxicity information. Review the toxicity information against your intended use. If product is not being aerosolized or sprayed, inhalation toxicity is not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	CAS #:	CAL-OSHA PEL TWA (8hours)	ACGIH TLV TWA (8 hours)	Other Limits RECOMMENDED	% BY WEIGHT
2,2'-iminodiethylamine	111-40-0	No Data	No Data		30-50
Benzenediamine, ar, ar-diethyl-ar-methyl-	68479-98-1	No Data	No Data		30-50
2-sec-BUTYLPHENOL	89-72-5	No Data	No Data		30-50

SECTION 4: FIRST AID MEASURES

- EYES:** Immediately flush eyes with water for a minimum of 15 minutes while holding eyes open. Remove contact lenses if present and easy to do. If redness, burning, blurred vision, or swelling persists, consult a physician.
- SKIN:** Remove contaminated clothing and product. Immediately wash affected area with soap and water. Do not apply greases or ointments. If skin irritation persists, consult a physician.
- INGESTION:** Rinse mouth immediately. Give small amounts of water, only if person is conscious. Only induce vomiting at the instruction of medical personnel. consult a physician
- INHALATION:** Remove patient to fresh air. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, consult a physician. Call Poison Center

SECTION 5: FIRE-FIGHTING MEASURES

- SUITABLE EXTINGUISHING MEDIA:** Extinguish with foam, carbon dioxide, dry powder, or water fog.
- SPECIAL FIRE FIGHTING PROCEDURES:** Use standard fire-fighting procedures and consider the hazards of other involved materials. In case of a fire and / or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
- HAZARDOUS DECOMPOSITION PRODUCTS:** Hazardous decomposition products may occur when material polymerizes at temperatures above 500 °F (260 °C). Irritating and toxic gases/fumes may be released during a fire. Do not allow run-off from fire-fighting to enter drains or water courses.
- FLASH POINT:** 205 °F / 96 °C
- METHOD USED:** (TCC)

SECTION 6: ACCIDENTAL RELEASE MEASURES

- PERSONAL PROTECTION:** Keep unnecessary personnel away. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment. Do not touch containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillage cannot be contained.
- ACCIDENTAL RELEASE MEASURES:** In case of spill, clean up using absorbent material such as earth or sand. Small quantities can be wiped up with cloth, place cloth in leak proof container and dispose of properly.
- WASTE DISPOSAL:** Observe Federal, State and local regulations covering chemical waste spills.

SECTION 7: HANDLING AND STORAGE

- PERSONAL PROTECTION:** Use personal protective equipment to ensure product does not contact eyes or skin when handling materials.
- HANDLING AND STORAGE:** Store in cool dry place out of direct sunrays. Keep from freezing. Recommend storage temperatures range: between 40° and 95 °F (4° - 35 °C)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- PROTECTIVE MEASURE:** Wear appropriate personal protective equipment.
- EYE PROTECTION:** Wear appropriate safety glasses with side shields, goggles or full face shield. When working on an overhead application a full face shield is recommended.
- HAND PROTECTION:** Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.
- SKIN AND BODY PROTECTION:** Wear long sleeve shirts/long pants and other clothing as required to minimize contact.
- RESPIRATORY PROTECTION:** Do not breathe gas/fumes/vapor/ or spray. The use of a respirator is not required during general use of this product provided adequate ventilation. If grinding or cutting cured product the use of an approved respirator is recommended.
- WORK HYGIENIC PRACTICES:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
- ENGINEERING CONTROLS:** When using indoors, good ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Ready access to running water is required. Provide eyewash station.

EXPOSURE LIMITS

Component	OSHA (PEL)	ACGIH (TLV)	NIOSH (Pocket Guide)
2,2'-iminodiethylamine 111-40-0	No Data	No Data	No Data
Benzenediamine, ar, ar-diethyl-ar-methyl-68479-98-1	No Data	No Data	No Data
2-sec-BUTYLPHENOL – 89-72-5	No Data	TWA 5 ppm	TWA 30mg/m ³

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Amber liquid
ODOR:	Ammonia
PHYSICAL STATE:	Liquid
pH AS SUPPLIED:	Alkaline
BOILING POINT:	ND
MELTING POINT:	N/D
FREEZING POINT:	N/D
VAPOR PRESSURE (mm Hg):	1 mmHg 20C (DETA)
VAPOR DENSITY (AIR = 1):	Heavier than air
SPECIFIC GRAVITY (H₂O = 1):	1.0
EVAPORATION RATE:	Negligible
SOLUBILITY IN WATER:	Slight
PERCENT SOLIDS BY WEIGHT:	No Data
PERCENT VOLATILE:	Negligible
VOLATILE ORGANIC COMPOUNDS (VOC):	No Data
MOLECULAR WEIGHT:	N/D
VISCOSITY:	1400 cp.

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable
CONDITIONS TO AVOID (STABILITY):	Exposure to excessive heat and open flame
INCOMPATIBILITY (MATERIAL TO AVOID):	Strong acids, peroxides and other oxidizing agents.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	Normal combustion forms carbon dioxide, carbon monoxide, oxides of carbon and other organic compounds,
HAZARDOUS POLYMERIZATION:	Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

	CAS#	
Acute Oral Toxicity:		No data available on the product itself
2,2'-iminodiethylamine	111-40-0	LD50: Oral Rat: 1080 mg/kg
Benzenediamine,ar, ar-diethyl-ar-methyl-	68479-98-1	LD50: Oral Rat: 738 mg/kg
2-sec-BUTYLPHENOL –	89-72-5	LD50: Oral Rat: 200-2000 mg/kg (OECD 401)
Acute Dermal Toxicity:		No data available on the product itself
2,2'-iminodiethylamine	111-40-0	LD50 1090 mg/kg Species: Rabbit
Benzenediamine,ar, ar-diethyl-ar-methyl-	68479-98-1	LD50 Dermal Rabbit M : >2000 mg/kg
2-sec-BUTYLPHENOL –	89-72-5	LD50 Dermal Rabbit : 5560 mg/kg
Acute Inhalation Toxicity:		No data available on the product itself
Inhalation/toxicity Components		
2,2'-iminodiethylamine	111-40-0	LC50 4 hours – 0.3mg/l Species: Rat

Carcinogenicity:

This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.

ACGIH:	No data
IARC:	No data
NTP	No data
OSHA	No data

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:	CAS#	
Aquatic toxicity:		Exposure at low concentrations may kill fish
Toxicity to Fish-Components		
2,2'-iminodiethylamine	111-40-0	NA
Benzenediamine,ar, ar-diethyl-ar-methyl-	68479-98-1	LC50(96hr): 104 mg/l Species: Fathead Minnow
2-sec-BUTYLPHENOL –	89-72-5	LC50(96hr): 0.05 mg/l Species: Fish
Toxicity to algae-Components		
2,2'-iminodiethylamine	111-40-0	NA
Benzenediamine,ar, ar-diethyl-ar-methyl-	68479-98-1	EC50(72hr): 104 mg/l Species: Algae
2-sec-BUTYLPHENOL –	89-72-5	EC50(72hr): 10 mg/l Species: Algae
Toxicity-Aquatic Invertebrates		
2,2'-iminodiethylamine	111-40-0	NA
Benzenediamine,ar, ar-diethyl-ar-methyl-	68479-98-1	EC50(48hr): 5.8 mg/l Species: Daphnia
2-sec-BUTYLPHENOL –	89-72-5	EC50(48hr): 3.7 mg/l Species: Daphnia
PERSISTENCE & DEGRADABILITY:		
BIODEGRADABILITY:		
2,2'-iminodiethylamine	111-40-0	NA
Benzenediamine,ar, ar-diethyl-ar-methyl-	68479-98-1	Not readily biodegradable
2-sec-BUTYLPHENOL –	89-72-5	Biodegrades Slowly
BIOACCUMULATIVE POTENTIAL:		NA
MOBILITY IN SOIL:		Yes
OTHER ADVERSE EFFECTS:		NDA
AQUATIC RELEASE:		Advise authorities if product has entered or may enter watercourses or sewer drains.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Do not allow this material to drain into sewers / waterways, ditches, containment pools or water supplies. Dispose of contents / containers in accordance with local/regional/international regulations.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

PROPER SHIPPING NAME: Polyamines, Liquid, Corrosive, n.o.s. (Diethylenetriamine)
HAZARD CLASS: 8
ID NUMBER: UN2735
PACKING GROUP: II

WATER TRANSPORTATION (IMDG)

PROPER SHIPPING NAME: Polyamines, Liquid, Corrosive, n.o.s. (Diethylenetriamine), Marine Pollutant
HAZARD CLASS: 8
ID NUMBER: UN2735
PACKING GROUP: II

AIR TRANSPORTATION (IATA / ICAO)

PROPER SHIPPING NAME: Polyamines, liquid, corrosive, n.o.s. (Diethylenetriamine)
HAZARD CLASS: 8
ID NUMBER: UN2735
PACKING GROUP: II

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT):
CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Not Listed

OSHA: 29 CFR 1910.1200 (Hazard Communication required)
WHMIS: Class D: Corrosive, Div.2, Sub. A&B; Class E

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

302/304: No
311/312 HAZARD CATEGORIES:
 Acute Health Hazard: Yes
 Chronic Health Hazard: Yes
 Fire Hazard: No
 Pressure Release Hazard: No
 Reactivity Hazard: No
313 REPORTABLE INGREDIENTS: None

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65 (THE SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT)

This product contains chemicals in trace quantities that are on the California Proposition 65 carcinogens list.

SECTION 16: OTHER INFORMATION

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM	
HMIS HAZARD RATING	
HEALTH	3
FLAMMABILITY	1
REACTIVITY	1
PERSONAL PROTECTION	C
4 – Severe, 3 – Serious, 2 – Moderate, 1 - Slight	
C – (Safety glasses, gloves, apron)	

The information provided herein was believed by ChemCo Systems to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use.