

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** CCS AC-1 for Asphalt Part B  
**SYNONYMS:** 110B  
**PRODUCT CODES:** 110B

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

**EMERGENCY PHONE:**  
Chemtrec: Domestic: 800 424-9300  
International: +1 703 527-3887

**RECOMMENDED USE:** Epoxy Resin Hardener, 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!

**PHYSICAL HAZARDS:** Flammable Liquid, Cat.4

**HEALTH HAZARDS (ACUTE AND CHRONIC)**

**EYES:** Serious Eye Damage Cat. 1.  
**SKIN:** Skin Sensitization Cat. 1.  
Skin Corrosion Cat. 1B  
Specific target organ toxicity- repeated exposure Cat.2  
**INGESTION:** Acute Oral Toxicity Cat. 4  
Reproductive Toxicity Cat. 1B.  
Specific target organ toxicity- single exposure Cat.3  
**INHALATION:** Acute Inhalation Cat.2  
Aspiration Hazard, Cat.1  
**CARCINOGEN:** Possible carcinogen.  
**ENVIRONMENTAL HAZARDS:**  
Acute Aquatic Cat.1  
Chronic Aquatic Cat.1  
Acute Toxicity Cat.4

**HAZARD STATEMENTS:**

H227 - Combustible liquid  
H302+H312+H332 - Harmful if swallowed, inhaled or in contact with skin  
H304 – May be fatal if swallowed and enters airways.  
H314 - Causes severe skin burns and eye damage  
H317 - May cause an allergic skin reaction  
H318- Causes serious eye damage  
H330 - Fatal if inhaled  
H335 - May cause respiratory irritation  
H340 – May cause genetic defects.  
H350 – May cause cancer.  
H351- Suspected of causing cancer.  
H361 - Suspected of damaging fertility or the unborn child.  
H373 - May cause damage to organs through prolonged or repeated exposure if swallowed.  
H410 - Very toxic to aquatic life with long lasting effects

**PRECAUTIONARY STATEMENTS:**

**SDS110bb**  
**SDS DATE:** 8-Jun-17

P201 - Obtain special instructions before use  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
 P262 - Do not get in eyes, on skin, or on clothing  
 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  
 P281 - Use personal protective equipment as required  
 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 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.  
 P310- -Immediately call a POSION CENTER or doctor/physician.  
 P333+P337+P313- If skin irritation or rash occurs and/or eye irritation persists: Get medical advice/attention.  
 P363 - Wash contaminated clothing before reuse.  
 P391 - Collect spillage.  
 P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
 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.

**HAZARDS NOT OTHERWISE CLASSIFIED**

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, the inhalation toxicity may not be applicable.  
 Very toxic by inhalation.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

HAZARDOUS COMPONENTS	CAS #:	CAL-OSHA PEL TWA (8hours)	ACGIH TLV TWA (8 hours)	Other Limits RECOMMENDED	% BY WEIGHT
Diethylenetriamine	111-40-0	No Data	No Data		<15%
Benzyl Alcohol	100-51-6	No Data	No Data	TWA WEEL 10ppm	<10%
4-tert-Butylphenol	98-54-4	No Data	No Data		<30%
Carbon black	1333-86-4	No Data	No Data		<1%
Coumarone-indene resin	63393-89-5	No Data	No Data		proprietary
Naptha, petroleum, arom.-contg.	68603-08-7	No Data	No Data		Proprietary
Napthalene	91-20-3	10 ppm	10 ppm		<100 ppm

**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.

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**SECTION 5: FIRE-FIGHTING MEASURES**

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<b>SUITABLE EXTINGUISHING MEDIA:</b>	Extinguish with foam, carbon dioxide, dry powder, or water fog.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	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.
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	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.
<b>FLASH POINT:</b>	99 C (210F)
<b>METHOD USED:</b>	TCC (BA)

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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<b>PERSONAL PROTECTION:</b>	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.
<b>ACCIDENTAL RELEASE MEASURES:</b>	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.
<b>WASTE DISPOSAL:</b>	Observe Federal, State and local regulations covering chemical waste spills.

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**SECTION 7: HANDLING AND STORAGE**

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

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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<b>PROTECTIVE MEASURE:</b>	Wear appropriate personal protective equipment.
<b>EYE PROTECTION:</b>	Wear appropriate safety glasses with side shields, goggles or full face shield. When working on a overhead application a full face shield is recommended.
<b>HAND PROTECTION:</b>	Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.
<b>SKIN AND BODY PROTECTION:</b>	Wear long sleeve shirts/long pants and other clothing as required to minimize contact.
<b>RESPIRATORY PROTECTION:</b>	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.
<b>WORK HYGIENIC PRACTICES:</b>	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.
<b>ENGINEERING CONTROLS:</b>	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)
Diethylenetriamine 111-40-0	No Data	No Data	1 ppm (4mg/m3) skin
Benzyl Alcohol 100-51-6	No Data	No Data	No Data
4-tert-ButylAlcohol 98-54-4	No Data	No Data	No Data
Carbon black 1333-86-4	TWA 3.5 mg/m3	TWA 3.5 mg/m3	TWA 3.5 mg/m3
4-Nonylphenol, branched	No Data	No Data	No Data
Coumarone-indene resin 63393-89-5	No Data	No Data	No Data
Naptha, petroleum, arom.-contg. 68603-08-7	No Data	No Data	No Data
Napthalene 91-20-3	TWA 10ppm	TWA 10ppm	TWA 10ppm

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE:</b>	Black
<b>ODOR:</b>	Mild/ Ammonia
<b>PHYSICAL STATE:</b>	Liquid
<b>pH AS SUPPLIED:</b>	Basic
<b>BOILING POINT:</b>	205 (BA)
<b>MELTING POINT:</b>	N/D
<b>FREEZING POINT:</b>	N/D
<b>VAPOR PRESSURE (mmHg):</b>	<1mm Hg @ 20C
<b>VAPOR DENSITY (AIR = 1):</b>	Heavier than air
<b>SPECIFIC GRAVITY (H2O = 1):</b>	0.99
<b>EVAPORATION RATE:</b>	N/D
<b>SOLUBILITY IN WATER:</b>	Slight
<b>PERCENT SOLIDS BY WEIGHT:</b>	No Data
<b>PERCENT VOLATILE:</b>	N/D
<b>VOLATILE ORGANIC COMPOUNDS (VOC):</b>	N/D
<b>MOLECULAR WEIGHT:</b>	N/D
<b>VISCOSITY:</b>	2500

**SECTION 10: STABILITY AND REACTIVITY**

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

**SECTION 11: TOXICOLOGICAL INFORMATION**

	CAS#	
Acute Oral Toxicity:		No data available on the product itself
Oral-Components		
4-tert-Butylphenol:	<b>98-54-4</b>	LD50 >2000mg/kg (OECD Test Guidelines401)
Benzyl alcohol	<b>100-51-6</b>	LD50 Oral Rat: 1230mg/kg
Napthalene	<b>91-20-3</b>	LD50 Oral Rat: 1110 mg/kg
Acute Dermal Toxicity:		No data available on the product itself
Dermal-Components		
Napthalene	<b>91-20-3</b>	LD50 Rabbit 1120 mg/kg
Acute Inhalation Toxicity:		No data available on the product itself
Inhalation components:		

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Diethylenetriamine	<b>111-40-0</b>	LC50(4hr): >0.07-0.3 mg/L Species: Rat
Benzyl Alcohol	<b>100-51-6</b>	LC50 (4hr): >4.178 mg/L Species: Rat OECD Test Guideline 403
4-tert-Butylphenol	<b>98-54-4</b>	LCLO 5.6mg/l Species Rat OCED test guideline 403
Napthalene	<b>91-20-3</b>	LC50(1hr) Rat >340 mg/m3
Skin Corrosion/ Irritation: Corrosion/Irritation Components		Skin Irritation/Corrosion
Eye Damage/Irritation: Damage/Irritation Components		Severe eye damage/irritation
4-tert-Butylphenol	<b>98-54-4</b>	Cat. 1 irreversible effects on the eye respiratory irritation.
Respiratory Damage/Irritation: Damage/irritation Components		
Sensitization: Sensitization Components		May cause sensitization by inhalation and skin contact.
Germ Cell Mutagenicity		The product or a component may be mutagenic, the data is inconclusive.
Maternal Toxicity:		No data available on the product itself
<b>Carcinogenicity:</b>	May be carcinogenic.	
<b>ACGIH:</b>	(91-20-3) Not classifiable as a Human carcinogen.	
<b>IARC:</b>	Carbon black is possibly carcinogenic to humans (Group 2B) IARC (91-20-3) Group 2A possibly carcinogenic to humans.	
<b>NTP</b>	(91-20-3) Reasonably anticipated to be a Human carcinogen.	
<b>OSHA</b>	No data	

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICITY:**

	<b>CAS#</b>	
Aquatic toxicity:		Exposure at low concentrations may kill fish
Toxicity to Fish-Components		
Benzyl Alcohol	<b>100-51-6</b>	LC50(96hr): 10 mg/l Species Bluegill sunfish (Lepomis macrochirus)
Benzyl Alcohol	<b>100-51-6</b>	LC50(96hr): 460 mg/l Species Fathead minnow (Pimephales promelas)
4-tert-Butylphenol	<b>98-54-4</b>	LC50(96hr): 5.14mg/l Species: Fathead Minnow
Napthalene	<b>91-20-3</b>	LC50(96hr) 0.91-2.82mg/l Species: Oncorhynchus mykiss
Toxicity to algae-Components		
Benzyl Alcohol	<b>100-51-6</b>	IC50(72hr): 700mg/l Species: Algae
4-tert-Butylphenol	<b>98-54-4</b>	IC50(72hr): 11.2mg/l Species: Algae (Desmodesmus subspicatus)
Napthalene	<b>91-20-3</b>	EC50(72hr) 0.4mg/l Species: Skeletonema costatum
Toxicity-Aquatic Invertebrates		
Benzyl Alcohol	<b>100-51-6</b>	EC50(24hr): 55mg/l Species: Daphnia magna(OECD Test Guideline 202)
4-tert-Butylphenol	<b>98-54-4</b>	EC50(48hr) 4.8mg/l Species: Daphnia magna (OECD Test Guideline 202)
Napthalene	<b>91-20-3</b>	EC50(48hr) 1.09-3.4 mg/l Species: Daphnia magna
Toxicity to other organisms:		

**PERSISTENCE & DEGRADABILITY:**

<b>BIODEGRADABILITY:</b>		
Biodegradability-Components		
4-tert-Butylphenol	<b>98-54-4</b>	60% Biodegradable: aerobic-exposure time 28d (OECD Test Guideline 301F)
<b>BIOACCUMULATIVE POTENTIAL:</b>		
BioAccumulative-Components:		
4-tert-Butylphenol	<b>98-54-4</b>	BCF 120 (3d): 46ug/L Species: Leuciscus idus melanotus BCF 20.43(8w): 40mg/L Species Cyprinus carpio
<b>MOBILITY IN SOIL:</b>		NDA
<b>OTHER ADVERSE EFFECTS:</b>		NDA
<b>AQUATIC RELEASE:</b>		Advise authorities if product has entered or may enter watercourses or sewer drains.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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**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.

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**SECTION 14: TRANSPORT INFORMATION**

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**U.S. DEPARTMENT OF TRANSPORTATION (DOT)**

**PROPER SHIPPING NAME:** Amines, liquid, corrosive, n.o.s. (Diethylenetriamine, Paratertiarybutylphenol)  
**HAZARD CLASS:** 8  
**ID NUMBER:** UN2735  
**PACKING GROUP:** III  
**LABEL STATEMENT:** Corrosive

**WATER TRANSPORTATION (IMDG)**

**PROPER SHIPPING NAME:** Amines, liquid, corrosive, n.o.s. (Diethylenetriamine, Paratertiarybutylphenol), Marine Pollutant  
**HAZARD CLASS:** 8  
**ID NUMBER:** UN2735  
**PACKING GROUP:** III  
**LABEL STATEMENT:** Corrosive

**AIR TRANSPORTATION (IATA / ICAO)**

**PROPER SHIPPING NAME:** Amines, liquid, corrosive, n.o.s. (Diethylenetriamine, Paratertiarybutylphenol), Marine Pollutant  
**HAZARD CLASS:** 8  
**ID NUMBER:** UN2735  
**PACKING GROUP:** III  
**LABEL STATEMENT:** Corrosive

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**SECTION 15: REGULATORY INFORMATION**

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**U.S. FEDERAL REGULATIONS****TSCA (TOXIC SUBSTANCE CONTROL ACT):****CERCLA (COMPREHENSIVE RESPONSE  
COMPENSATION, AND LIABILITY ACT):****OSHA:**

29 CFR 1910.1200 (Hazard Communication required)

**WHMIS**

Class B 3, Class D A, Class E

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):****302/304****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:**

N/A

**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.

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**SECTION 16: OTHER INFORMATION**

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HAZARDOUS MATERIALS IDENTIFICATION SYSTEM	
HMIS HAZARD RATING	
HEALTH	2
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.