

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HCAF-504 Part B4

PRODUCT USE: Used to prepare HCAF-504 Anti-Fog Coating Solution.

MANUFACTURER: Exxene Corporation, 5939 Holly Road, Corpus Christi, TX 78412, 1-361-991-8391

EMERGENCY: For Hazardous Materials Incident - Spill, Leak, Fire, Exposure, or Accident - Call CHEMTREC 1-800-424-9300

SECTION 2 – HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Health	Environmental	Physical
Acute toxicity, inhalation Acute toxicity, oral Serious eye damage/eye irritation	Acute toxicity: Chronic toxicity:	Flammable liquids
Category 5 Category 3 Category 1	Not applicable Not applicable	Category 3

GHS LABEL:



Signal Word: WARNING

WHMIS CLASSIFICATION: Class B, Division 3
Class D, Division 2, Subdivision B

Hazard Statements	Precautionary Statements
<p>H226 Flammable liquid and vapour. H305 May be fatal if swallowed and enters airways. H313 May be harmful in contact with skin H320 Causes eye irritation H333 May be harmful if inhaled H336 May cause drowsiness or dizziness.</p>	<p>P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P241 Use explosion-proof electrical, ventilating, mixing, handling, and lighting equipment. P243 Take precautionary measures against static discharge. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P370 + P378 In case of fire: Use dry chemical or carbon dioxide for extinction. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. 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. P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P501 Dispose of contents/container according to local and national material disposal regulations.</p>

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS#	Concentration, %
Diacetone Alcohol	123-42-2	> 90%

SECTION 4 – FIRST AID MEASURES

Contact with eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention. Take SDS.
Skin contact: Remove contaminated clothing and shoes. Wash with plenty of soap and water. Seek medical attention. Take this SDS.
Inhalation: Remove the victim to fresh air. Monitor respiratory function. If there is breathing difficulty, provide oxygen. If necessary, give artificial respiration. Seek medical attention. Take this SDS.
Ingestion: Rinse mouth of victim with plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention. Take this SDS.

SECTION 5 – FIREFIGHTING MEASURES

Suitable Extinguishing Media: Water spray, alcohol resistant foam, dry chemical or carbon dioxide
Unsuitable Extinguishing Media:
Exposure Hazards: Flammable product. Fire may produce irritating and toxic gases. Containers may explode when heated. Vapors may form explosive mixtures with air. Explosion hazard indoors.
Combustion Products: Hazardous decomposition products formed under fire conditions-Carbon oxides
Advice for firefighters: Use self-contained breathing apparatus (SCBA) operated in positive pressure mode and complete protective clothing.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid breathing vapors, mists or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low area.
Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods for cleaning spills: Discard any product, waste, container or wrapper available in an appropriate manner as not to harm the environment, according to federal regulations, state and local.

SECTION 7 – HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Avoid inhalation with vapor or mist. Use proper personal protective equipment as indicated in Section 8. Use explosion proof equipment. Keep away from ignition sources. Take measures to prevent buildup of electrostatic charge.
Storage: Keep only in original container, in a cool, dry, well ventilated place. Keep away from food. Store locked up. Keep out of reach of children. Avoid static electricity by grounding. Damaged or perforated packages should be emptied. Incompatible with strong oxidizing agents.

SECTION 8 – PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:
Expressed in ppm

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
Diacetone Alcohol	50	50	100	100

Engineering Controls: Provide mechanical ventilation or direct exhaust to the external media. It is recommended safety shower and eye bath available near work site.
Monitoring: Maintain breathing zone airborne concentration below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Eye Protection: Avoid contact with eyes; wear splash-proof chemical goggles, face shield, safety glasses (spectacles) as may be appropriate for exposure.
Respiratory Protection: Prevent inhalation of the solvent. Use in a well-ventilated location. Ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	colorless liquid	Odor:	alcohol
pH:	na	Odor Threshold:	not listed
Melting:	-47 °C	Boiling Range:	175 °C
Flash Point:	58 °C TCC	Evaporation Rate:	43.5 (ether = 1)
Specific Gravity:	0.9g/cm ³ @20°C	Flammability Limits:	LEL: 1.8%; UEL: 6.9%
Vapor Density:	4.0 (Air = 1)	Solubility:	Miscible in water
Viscosity:	na	Vapor Pressure:	0.88 mm Hg @ 20°C (68°F)
Auto-ignition Temp:	643 °C	Decomposition Temperature:	not listed
VOC Content:	7.5 lb/gal	Flammability (GHS Hazard category):	3

SECTION 10 – STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and handling. Polymerization will not occur.	Health	HMIS	NFPA
		Flammability	1	1
		Reactivity	2	2
Hazardous decomposition products:	When heated produces acrid and toxic smoke and fumes composed of carbon oxides.		0	0
Conditions to avoid:	Ignition sources, flame/heat, high temperatures and contact with incompatible materials.			
Incompatible materials:	Strong oxidizers.			

SECTION 11 – TOXICOLOGICAL INFORMATION

Likely routes of Exposure: Inhalation, skin absorption, skin contact

Acute symptoms and effects:

Inhalation: May cause central nervous system disorders with headache, muscle weakness, dizziness and unconsciousness. May cause respiratory irritation with cough and shortness of breath.
Eye contact: Irritating and may cause damage to eyes with redness and pain
Skin contact: Irritating to skin with redness, pain and dryness.
Ingestion: May cause gastrointestinal disturbances with nausea, vomiting and diarrhea.

Chronic symptoms and effects: Skin rash/inflammation. Headache. Gastrointestinal complaints. Cardiac and blood circulation effects.

Reproductive Effects	Teratogenicity	Mutagenicity	Embryo toxicity	Sensitization to Product	Synergistic Products
None	None	None	No information	None expected.	No information

Toxicity: LD₅₀ (oral, rats): 2520 mg/Kg

LC₅₀ (inhalation, rats, 4h): 19,2 mg/L

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Not classified as hazardous to aquatic organisms.
Mobility: High mobility in soil.
Degradability: Expected low persistence and high degradability.
Bioaccumulation: Expected low bioaccumulative potential in aquatic organisms.

SECTION 13 – WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal experts and your regulatory agency.

SECTION 14 – TRANSPORT INFORMATION

Proper Shipping Name: Coating Solution
Hazard Class: 3
Secondary Risk:
UN/NA Number: 1139
Packing Group: III
Label Required: Class 3 Flammable Liquid
Marine Pollutant: No

SECTION 15 – REGULATORY INFORMATION

CERCLA (Superfund) reportable quantity: 5000 lbs

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard – No Delayed Hazard – No Fire Hazard – Yes Pressure Hazard – No Reactivity Hazard - No
Section 302 extremely hazardous substance Not listed **Section 311 hazardous chemical** Diacetone Alcohol

State regulations

Diacetone Alcohol CAS-No. 123-42-2 can be found on the following right to know lists: California, New Jersey, Pennsylvania, and Massachusetts.

Ingredient Listings USA TSCA, Europe EINECS, Canada DSL, Australia, Korea ECL/TCCL, Japan MITI (ENCS)

SECTION 16 – OTHER INFORMATION

E-mail address: info@Exxene.com
Intended Use: Used to prepare HCAF-504 Anti-Fog Coating Solution.

Disclaimer: This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. This information does not represent any guarantee of the properties of the product, and Exxene Corporation and its Affiliates shall not be held liable for any damage resulting from handling or contact with the product.