

SAFETY DATA SHEET
EX-99R Anti-Fog Cleaner

Revision Date: 12/31/2018

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EX-99R Anti-Fog Cleaner

PRODUCT USE: Anti-Fog cleaning solution in aqueous isopropanol.

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

EMERGENCY: Call (01) 361-991-8391

SECTION 2 – HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Health	Environmental	Physical
Serious eye damage/eye irritation Acute toxicity, inhalation	Acute toxicity: Chronic toxicity:	Flammable liquids Category 2
Category 2A Category 3	Not applicable Not applicable	

GHS LABEL:



Signal Word: DANGER

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

Hazard Statements	Precautionary Statements
H225 Highly Flammable liquid and vapour. H319 Causes serious eye irritation. H335 May cause respiratory irritation.	P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P370 + P378 In case of fire: Use dry chemical or carbon dioxide for extinction. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/container according to local and national material disposal regulations.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS#	Concentration, %
Isopropanol Alcohol	67-63-1	70

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 with water. Give nothing to drink. Do not induce vomiting. Immediately consult a doctor/medical service. Call Poison Information Centre. Ingestion of large quantities: immediately to hospital. Take the container/vomit to the doctor/hospital. Take this SDS. Doctor: administration of chemical antidote. Doctor: gastric lavage.

SECTION 5 – FIREFIGHTING MEASURES

Suitable Extinguishing Media: Water spray, alcohol resistant foam, dry chemical or carbon dioxide
Unsuitable Extinguishing Media: Solid water jet ineffective as extinguishing medium.
Exposure Hazards: Gas/vapor flammable with air within explosion limits.
Combustion Products: Hazardous decomposition products formed under fire conditions include formaldehyde and carbon oxides.
Advice for firefighters: Use self-contained breathing apparatus (SCBA) operated in positive pressure mode and complete protective clothing. Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personnel 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: Store at room temperature. Keep out of direct sunlight. Store in a dry area. Keep container in a well-ventilated place. Fireproof storeroom. Keep locked up. Provide for a tub to collect spills. Provide the tank with earthing/grounding. Unauthorized persons are not admitted. Meet all legal requirements.

SECTION 8 – PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:
 Expressed in ppm

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
Isopropyl Alcohol	200	200	400	400

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:	3 - 610 ppm
Melting:	-88 °C	Boiling Range:	82 °C to 100 °C
Flash Point:	12 °C TCC	Evaporation Rate:	21 (ether = 1)
Specific Gravity:	0.890 @20°C	Flammability Limits:	LEL: 2 %; UEL: 12%
Vapor Density:	2.1 (Air = 1)	Solubility:	100% water
Viscosity:	2 cP @ 25 °C	Vapor Pressure:	44 hPa @ 20°C (68°F)
Auto-ignition Temp:	399 °C	Decomposition Temperature:	not listed
VOC Content:	6.82 lb/gal	Flammability (GHS Hazard category)	2

SECTION 10 – STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and handling. Polymerization will not occur	HMIS	NFPA
Hazardous decomposition:	When heated produces acrid and toxic smoke and fumes composed of carbon oxides.	Health	1
Conditions to avoid:	Ignition sources, flame/heat, high temperatures and contact with incompatible materials.	Flammability	3
Incompatible materials:	Strong oxidizers. Ammonia. Strong acids. Peroxides.	Reactivity	0
		Personal Protection	H

SECTION 11 – TOXICOLOGICAL INFORMATION

Likely routes of Exposure: Inhalation.

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
No information	No information	None	No information	None expected	No information

Toxicity: LD₅₀ (oral, rats): 5045 mg/kg LC₅₀ (inhalation, rats, 4h): 73 mg/L

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Ground water pollutant. Not harmful to fishes (LC50(96h) >1000 mg/l). Not harmful to invertebrates (Daphnia) (EC50 (48h) > 1000 mg/l). Not harmful to algae (EC50 (72h) >1000 mg/l). Inhibition of activated sludge.

Mobility: No data

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: II

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 – Yes	Delayed Hazard – No	Fire Hazard – Yes	Pressure Hazard – No	Reactivity Hazard - No
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Section 302 extremely hazardous substance Not listed **Section 311/312/313 hazardous chemical** Isopropyl Alcohol

State regulations
None

Ingredient Listings USA TSCA

SECTION 16 – OTHER INFORMATION

Intended Use: Anti-Fog cleaning solution in aqueous isopropanol.

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.