



Safety Data Sheet

Clearal 270

1. IDENTIFICATION

Product name	Clearal 270
Description	Aqueous anti-microbial solution
Product class	Biocide
Supplier address	511 Railroad Ave Homer City, PA 15748
Telephone numbers	
<u>Company Phone Number</u>	(724) 915-8388
<u>Emergency Telephone</u>	CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

Hazard classification	Acute Toxicity: Oral, Category 4 Skin Corrosion, Category 1 Respiratory Sensitization, Category 1A Serious Eye Damage, Category 1
Signal word	Danger
Hazard statements	Harmful if swallowed. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Causes serious eye damage.

Pictograms of related hazards**Precautionary statements**Prevention

Wash skin thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Wear protective gloves, protective clothing, eye protection, and face protection.
Avoid breathing fumes, mist, vapors, or spray.
Wear respiratory protection.

Response

Wash contaminated clothing before reuse.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Immediately contact a POISON CENTER or health care provider.
IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with

water or emergency shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately contact a POISON CENTER or health care provider.

If experiencing respiratory symptoms: Contact a POISON CENTER or health care provider.

Storage

Store locked up.

Disposal

Dispose of contents and container in accordance with local, state, and federal regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %
Glutaraldehyde	111-30-8	20–30
Alkyl dimethyl benzyl ammonium chloride	68391-01-5	5–10
Didecyl dimethyl ammonium chloride	7173-51-5	5–10
Ethanol	64-17-5	1–5
Non-hazardous substances	Proprietary	50–60

4. FIRST-AID MEASURES

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally to ensure complete rinsing. Remove contact lenses if present and easy to do, then resume rinsing. Get medical attention immediately.
Skin contact	Immediately remove all contaminated clothing. Rinse with copious amounts of water; use an emergency shower if available. Wash contaminated clothing before reuse.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Note to health care provider	Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use extinguishing media appropriate for the surrounding fire.
Unsuitable extinguishing media	No information available

Protective equipment and precautions for firefighters	Stay upwind of the fire. Full protective equipment including self-contained breathing apparatus should be used. Use water to cool closed containers. Contain water runoff if possible. Move containers from fire area if possible.
Specific hazards	Combustion may produce toxic gases.
Hazardous combustion products	Carbon oxides, nitrogen oxides

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Evacuate the area of all non-essential personnel. Do not touch spilled material without proper protective equipment. Ventilate the area and mitigate further release if it is safe to do so. Avoid contact with eyes.
Methods for clean-up	
<u>Small spills</u>	Contain spill and soak up with an inert absorbent material and place residues in a properly labeled container for disposal. Avoid discharge into sewer or surface water.
<u>Large spills</u>	Contain spill using trenches, diking, or absorption with an inert material (i.e. sand or earth). Reclaim spilled material into recovery or salvage drums or tank truck for proper disposal.

7. HANDLING AND STORAGE

Advice on safe handling	Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Wash hands thoroughly after handling.
Storage conditions	Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers closed when not in use.
Suitable materials of construction	No information available
Unsuitable materials of construction	No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/face protection	Chemical splash goggles
Skin protection	Chemical-resistant gloves and body-covering clothing
Respiratory protection	Observe published airborne exposure limits. NIOSH approved respirator should be used in accordance with OSHA respiratory protection requirements (29 CFR 1910.134).
Engineering controls	Adequate ventilation, eye-wash station, and emergency shower
General hygiene considerations	Do not eat, drink, or smoke while handling this product.

Chemical Name	OSHA PEL	ACGIH TLV
Glutaraldehyde	0.2 ppm; 0.8 mg/m ³	0.05 ppm
Alkyl dimethyl benzyl ammonium chloride	None established	None established
Didecyl dimethyl ammonium chloride	None established	None established
Ethanol	1900 mg/m ³	STEL: 1000 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

pH	3.5-6.5
Appearance	Clear colorless to pale yellow liquid
Odor	Fruity
Odor Threshold	No information available
Melting/freezing point	No information available
Initial boiling point/boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper/lower flammability or explosive limits	No information available
Vapor pressure	No information available
Vapor density	No information available
VOC content	No information available
Specific gravity	1.010-1.090
Solubility	Complete
Partition coefficient n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available

10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions of storage and handling.
Hazardous polymerization	Polymerization will not occur.
Conditions to avoid	Extreme temperatures, incompatibilities
Incompatibilities	Strong acids, strong bases, strong oxidizers
Hazardous decomposition products	No known non-thermal decomposition hazards.

11. TOXICOLOGICAL INFORMATION

Likely routes of exposure Skin, eyes, ingestion

Glutaraldehyde

Parameter	Result
LD ₅₀ , Oral (rat)	134 mg/kg
LD ₅₀ , Dermal (rat)	2,500 mg/kg

LC ₅₀ , Inhalation (rat)	480 mg/m ³ /4hr
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Alkyl dimethyl benzyl ammonium chloride, (82.26% solution)

Parameter	Result
LD ₅₀ , Oral (rat)	280.8-510.9 mg/kg
LC ₅₀ , Dermal (rat)	704-1,100 mg/kg
LC ₅₀ , Inhalation (rat)	0.054-0.510 mg/L
Primary dermal irritation	Corrosive
Sensitization	Not a dermal sensitizer

Didecyl dimethyl ammonium chloride

Parameter	Result
LD ₅₀ , Oral (rat)	84 mg/kg
LD ₅₀ , Oral (mouse)	268 mg/kg

Ethanol

Parameter	Result
LD ₅₀ , Oral (rat)	7,060 mg/kg
LD ₅₀ , Dermal (rabbit)	20,000 mg/kg
LC ₅₀ , Inhalation (rat)	20,000 ppm
LD _{Lo} , Oral (human)	1,400 mg/kg

Acute symptoms and effects

Eye	Eye irritation with or without pain, burning, itching, redness, discharge, and serious eye damage.
Skin	Skin irritation with or without pain, burning, itching, redness, and swelling. Symptoms may be exacerbated by open wounds, excoriations, rashes, or other skin breaches.
Ingestion	Gastrointestinal distress with or without nausea, vomiting, and diarrhea.
Inhalation	Upper respiratory irritation with or without cough, watering of the eyes, and postnasal drip.
Reproductive effects	No information available
Teratogenicity	No information available
Mutagenicity	No information available
Embryotoxicity	No information available
Sensitization to product	No information available
Synergistic products	No information available
Carcinogenicity	No components have been identified as carcinogenic by OSHA, NTP, or IARC.
Chronic	No information available

12. ECOLOGICAL INFORMATION**Aquatic toxicity*****Glutaraldehyde***

Parameter	Result
96 hr LC ₅₀ , Bluegill sunfish	12.2 ppm

96 hr LC ₅₀ , Fathead minnow	5.4 ppm
96 hr LC ₅₀ , Rainbow trout	9.5 ppm
48 hr EC ₅₀ , Daphnia magna	0.75 ppm

Alkyl dimethyl benzyl ammonium chloride

Parameter	Result
96 hr LC ₅₀ , Bluegill sunfish	0.515 mg/L
NOAEC, Bluegill sunfish	0.456 mg/L
96 hr LC ₅₀ , Fathead minnow	0.28 mg/L
NOAEC, Fathead minnow	0.53 mg/L
96 hr LC ₅₀ , Rainbow trout	0.36 mg/L
NOAEC, Rainbow trout	0.619 mg/L
48 hr EC ₅₀ , Daphnia magna	0.0059 mg/L
48 hr EC ₅₀ , Daphnia magna	0.02 mg/L
NOAEC, Sheepshead minnow	0.047 mg/L
96 hr LC ₅₀ , Mysid shrimp	0.092 mg/L
96 hr LC ₅₀ , Mysid shrimp	0.08 mg/L
96 hr LC ₅₀ , Inland silverside	0.31 mg/L
48 hr LC ₅₀ , Eastern oyster	0.055 mg/L
14 day LC ₅₀ , Chironomus tentans	548 mg/kg
14 day LOAEC, Chironomus tentans	520 mg/kg
14 day NOAEC, Chironomus tentans	260 mg/kg
14 day MATC, Chironomus tentans	368 mg/kg
14 day LC ₅₀ , Chironomus tentans	479 mg/kg
14 day LOAEC, Chironomus tentans	1,200 mg/kg
14 day NOAEC, Chironomus tentans	520 mg/kg
14 day MATC, Chironomus tentans	790 mg/kg
34 day LOAEC, Fathead minnow	0.0759 mg/L
34 day NOAEC, Fathead minnow	0.0322 mg/L
34 day MATC, Fathead minnow	0.0494 mg/L

Didecyl dimethyl ammonium chloride

Parameter	Result
96 hr LC ₅₀ , Fathead minnow	0.330 mg/L
96 hr LC ₅₀ , Fathead minnow	0.470 mg/L
96 hr LC ₅₀ , Rainbow trout	0.537 mg/L
48 hr EC ₅₀ , Daphnia magna	0.160 mg/L

Ethanol

Parameter	Result
96 hr LC ₅₀ , Fathead minnow	13,400 mg/L
48 hr EC ₅₀ , Daphnia magna	>10,000 mg/L

13. DISPOSAL CONSIDERATIONS**Disposal**

Dispose of in accordance with federal, state, and local regulations.

RCRA status Discarded product, as sold, would not be considered a RCRA Hazardous Waste.

14. TRANSPORT INFORMATION

US Department of Transportation (DOT)

UN Number UN1903
 Proper shipping name Disinfectant, liquid, corrosive, n.o.s. (contains quaternary ammonium compound)
 Primary hazard class/division 8
 Secondary hazard None
 Packing group III
 Label Corrosive

15. REGULATORY INFORMATION

OSHA Hazard Communication Status Acute Toxicity: Oral, Category 4
 Skin Corrosion, Category 1
 Respiratory Sensitization, Category 1A
 Serious Eye Damage, Category 1

EPA Registration Number 12487-20-92757

TSCA The ingredients of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA

EPA Hazardous Substances (40 CFR 302)

Chemical Name	Reportable Quantity (RQ)
Glutaraldehyde	None
Alkyl dimethyl benzyl ammonium chloride	None
Didecyl dimethyl ammonium chloride	None
Ethanol	None

SARA Title III (Sections 302, 311, 312, and 313)

Section 302 Extremely Hazardous Substances (40 CFR 355)

Chemical Name	CAS#	RQ	TPQ
None			

Section 311 and 312 Health and Physical Hazards

Immediate	Delayed	Fire	Pressure	Reactivity
Yes	No	No	No	No

Section 313 Toxic Chemicals (40 CFR 372)

Chemical Name	CAS Number	Percent by Weight
None		

16. OTHER INFORMATION

HMIS Ratings	Health—3; Flammability—0; Reactivity—0
NFPA Ratings	Health—3; Flammability—0; Reactivity—0
HMIS/NFPA Rating Scale	Minimal—0; Slight—1; Moderate—2; Serious—3; Severe—4
SDS Issue Date	6/4/2021
Version	1

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