



Hypochlorous Surface Disinfectant Safety Data Sheet

1. CHEMICAL MATERIAL, PREPARATION, AND SUPPLIER IDENTIFICATION

Product Name: Hypochlorous Surface Disinfectant

Manufacturer: Envirocleanse, LLC
12621 W. Airport, Suite 200
Sugar Land, TX 77478
713-840-0404

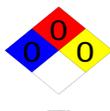
Recommended Use: Biocide/Disinfectant (EPA Reg. #85134-1-93990) for use on hard surfaces as well as biocide in oil fracking & sour wells, disinfectant of food, and disinfectant of potable water. Prepared by means of diaphragmatic electrolysis from aqueous 10 – 30 % sodium chloride (table salt) solution.

2. HAZARD IDENTIFICATION

Hazards connected with possibility of fire or explosion: None

Hazards for health of people, results of possible effect: Can irritate eyes. In case of eye contact, eyes can get red, they can tingle. In case of skin contact the affected skin can become sensitive or injured irritation, skin can become red. It can cause slight health disorders when inhaled or ingested. For more information see part 11.

Hazards for environment and effects of possible injury: Not classified as hazardous for environment disinfectant.



3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No.	EINECS No.	Chemical Name	Concentration (%) Product Mass	Symbols of Hazardousness
7790-92-3	232-232-5	Hypochlorous Acid	0.025%	None
7681-52-9	231-668-3	Hypochlorite Ion	0.00418%	None
N/A	N/A	Ozone, Chlorine Dioxide, Chloric Acid, Chlorous Acid	<0.0003%	None
N/A	N/A	Water	99.77%	None
N/A	N/A	Salt	0.2%	None

4. FIRST AID MEASURES

Inhalation: In case of inhalation, take the injured into the fresh air. If dizziness persists or symptoms of respiratory tract occur, immediately call 911.

Skin Contact: In case of skin contact, rinse with water.



Eye Contact: Immediately flush with water. If irritation persists, contact doctor.

Ingestion: Rinse mouth with water, drink water.

Measures that can be taken only by doctor: Effect can be considered as slight intoxication with chlorine. In case of suspicions of intoxication with this material, contact immediately the nearest first aid, poison control center or local Emergency room.

5. FIRE FIGHTING MEASURES

Flammability of the Product: Non-Flammable

Suitable fire extinguishing measures: N/A.

Hazardous Thermal Decomposition Products: Trace amounts of chlorine gas may be present if product is exposed to extreme heat.

6. ACCIDENTAL RELEASE MEASURES

Measures of collective protection and personal protection: When washing or rinsing spilled product, it is recommended to ventilate the room, wear waterproof gloves. Take appropriate measures to avoid inhaling vapours.

Environment pollution preventive measures: N/A

Gathering and neutralization measures: Clean and gather the spilled preparation with any absorbing material. Additional decontamination ways are not necessary as Anolite decomposes within hours, returning to its initial state - water and salt. Do not use the gathered preparation for its purpose, it is can be emptied into sanitary sewer.

7. HANDLING AND STORAGE

Requirements and recommendations for handling: Handle in accordance with the requirements of handling instructions found on the product label.

Requirements for storage: Store in tightly closed, UV-resistant container in a dark and cool place. Storage temperature should not be less than 5°C.

Requirements to packing of chemical material, preparation: Tightly closed plastic bottles, reservoirs or containers, meant for storing Anolite by the user. Packaging must always be market with an approved label.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Avoid direct contact with eyes, mucous membranes or direct inhalation of product. With continuous direct skin contact, recommend wearing protective latex or similar gloves. Product can bleach clothing if direct contact occurs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid, mist, ice
Color:	Colorless

Odor:	Slight chlorine-like odor
pH:	6.0 – 7.5
Specific Gravity:	1.02 – 1.06 g/L
Freezing Point:	0° C
Boiling Point:	100° C
Flash Point:	N/A

10. STABILITY AND REACTIVITY

Stability: Product is stable under normal ambient temperatures including ice as well as maintaining stability up to 82° C. No use of stabilizers required to maintain product activity. No need for special safety precautions if product is converted to mist or ice form.

Reactivity: Non-combustible, Non Flammable

11. TOXICOLOGICAL INFORMATION

Acute toxicity on animals:

Indigestion, LD₅₀: Tests with rats have established that even concentrated, 0.05 % Anolite solutions do not cause death.

Inhalation, LC₅₀: Not established.

Through skin, LD₅₀: Not established.

Irritation: Tests with rats guinea-pigs have established that long-term skin contact of concentrated, 0.05% Anolite solutions can cause dermatitis.

Other effects on animals: Tests have established that lethal to animals can be only concentrated 0.05 % Anolite solution injections, however lethal effects could not be achieved even after prolonged use of such concentration solutions.

Effects on human:

Inhalation: In case of correct use of Anolite, real danger does not exist. However when mixing concentrated solutions with acids or acidic preparations bigger quantity of chlorine can be emitted. Chlorine vapour has a pickling effect. Burning sense can occur, difficult and more rapid breathing, headache, dizziness, soar can tingle. After some time symptoms similar to asthma can occur. Long-term effect causes lung oedema.

Eye contact: Possible tingle, eye redness.

Skin contact: 0.05% Anolite can cause skin irritation, redness if skin is sensitive. Tests with animals have established that long –term repeated effect can cause dermatitis.

Ingestion: Test data does not exist.



Sensitization: Tests with guinea-pigs have established that even long-term contact does not cause allergy.

Carcinogenicity, mutagenicity, toxicity to reproduction: During tests with animals these effects have not been established. It is not harmful, non-toxic, non-carcinogenic to warm-blooded organisms and animals.

12. ECOLOGICAL INFORMATION

Chemical material, preparation properties with possible effect for environment: Hazardous for pathogenic organisms, viruses, and mildew fungi as a disinfectant.

Ecotoxicity (toxicity for water, soil organisms, other animals and plants): Lethal concentrations:

Fish: Not established

Daphnias: Tests have established that concentrated Anolite solutions attenuated in ratio 1:500 are not hazardous for daphnias

Mobility: Rapidly dissolves and resolves in water, dissipates.

Dissipation and decay (biodegradation) in environment: When getting into environment concentration of active chlorine decreases depending on water pH, microbiological, organic contamination, materials dissolved in it. The higher environment contamination, the quicker Anolite decays and neutralises.

Bioaccumulation: N/A

Data on other effects: N/A

13. CHEMICAL MATERIAL, PREPARATION WASTE HANDLING

Chemical material, preparation waste, contaminated packaging disposal ways: Reminders can be emptied to sewage. It neutralizes itself resolving into water and sodium chloride.

14. CHEMICAL MATERIAL, PREPARATION TRANSPORTATION

Preparation in tightly closed packages can be transported by any transport.

15. REGULATORY INFORMATION

Product approved by EPA Reg. #85134-1

FDA approval as Food Disinfectant

Information indicated on the label of chemical material, preparation package (tare):

Not worn away label has to be stuck on the package meant for keeping the preparation which has to contain the following information as minimum:

Anolite. Disinfecting solution. Active materials: Hypochlorous Acid. Use in accordance with the requirements indicated in the instruction. Best before: 6 months from its production.

Additionally a possibility to mark its production date and concentration of active chlorine after production has to be foreseen.

Hazard symbols: None

Risk phrases: None

Safety phrases: (S2) Keep out of reach of children



16. OTHER INFORMATION

List of hazard symbols, R phrases and digital signs according to sections 2 and 3

C	Corrosive
N	Environmental hazard
R31	Harmful when ingested
R34	Burns
R50	Very toxic to aquatic organisms

Date of original preparation March 1, 2020

Revision SDS 1 January 2021

Data provided in this safety data sheet has to be accessible to everyone whose work is connected with the chemical material, preparation. Data corresponds our possessed knowledge and is meant to describe chemical material, aspects of occupational safety and health, environment protection.. Information of safety data sheet will be replenished when new data on effects of chemical material, preparation on health and environment, on preventive measures to reduce hazards or totally avoid them originates. Information provided in the safety data sheet does not reveal other specific properties of chemical material, preparation.