

Safety Data Sheet

Envirosan

1. IDENTIFICATION

Product Identifier: Envirosan
Canadian TDG: Not regulated
Synonyms: None
Chemical Family: Quaternary
Recommended Use: Sanitizer concentrate for industrial use.
Restrictions on Use: None

Manufacturer / Supplier:

Genesis Chemicals
602 – 13th St SE
Medicine Hat, AB
T1A 1X3

Prepared by: The Environmental, Health and Safety Department of Genesis Chemicals Ltd

Preparation Date of SDS: February 16, 2017

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2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity, oral – Category 5; Skin corrosion – Category 1; Serious eye damage – Category 1; Hazardous to aquatic environment, acute – Category 2



Signal Word: Danger

Hazard Statement(s):

May be harmful if swallowed.
Causes severe skin burns and eye damage.
Causes serious eye damage.
Toxic to aquatic life.

Precautionary Statement(s):

General:

Keep out of reach of children.
Read label before use.

Prevention:

Do not breathe dust/ fumes/ gas/ mist/ vapours/ spray.
Wash hands, face and any exposed skin thoroughly after handling.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
Avoid release to the environment.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.
IF INHALED: Call a poison center or doctor/physician if you feel unwell.
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 so. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Storage:

Store in a closed container.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards:

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration %
Alkyl (68% C12, 32% C14) Dimethyl Ethylbenzyl Ammonium Chloride	85409-23-0	<5
Alkyl Dimethyl Benzyl Ammonium Chloride (C12-C18)	68391-01-05	<5
Sodium Carbonate	497-19-8	1-5
Alcohols, C12-15, Ethoxylated	68131-39-5	1-5
Tetrasodium Ethylene Diamine Tetraacetate	64-02-8	1-5

Notes

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First-aid Measures**
Inhalation

Move to fresh air. Keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor if you feel unwell or are concerned.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation or a rash occurs, get medical advice/attention. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice/attention.

Ingestion

Immediately call a Poison Centre or doctor. Do not induce vomiting.

Most Important Symptoms and Effects, Acute and Delayed

If inhaled: at high concentrations symptoms may include headache, nausea, dizziness, drowsiness and confusion.

If on skin: may cause an allergic skin reaction in some people. Symptoms include redness, rash, itching and swelling.

If in eyes: symptoms include sore, red eyes, and tearing.

If swallowed: may be drawn into the lungs if swallowed or vomited, causing severe lung damage. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

Immediate Medical Attention and Special Treatment

Special Instructions

Not applicable.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Water spray (fog). Carbon dioxide (CO₂). Water. Foam.

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

Irritating and toxic gases or fumes may be released during a fire.

Hazardous Combustion Products

Carbon monoxide and carbon dioxide, and toxic chloride vapors.

Special Protective Equipment and Precautions for Fire-fighters

Evacuate area. Before entry, especially into confined areas, use an appropriate monitor to check for: toxic gases or vapours, flammable or explosive atmosphere. Dike and recover contaminated water for appropriate disposal.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn. If there is potential for skin contact with concentrated cleaner: chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary. See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up. Before entry, especially into confined areas, check atmosphere with an appropriate monitor. Monitor area for flammable or explosive atmosphere.

Product (diluted as directed): use the personal protective equipment recommended in Section 8 of this safety data sheet. No other special precautions are necessary.

Environmental Precautions

Concentrated product: do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Contain and collect with an inert absorbent and place into an appropriate container for disposal. Rinse area with clean water and dry before permitting traffic.

Other Information

Report spills to local health, safety and environmental authorities, as required.

7. HANDLING AND STORAGE

Precautions for Safe Handling

When handling diluted product: no special handling precautions are necessary.

When handling concentrated product: Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. For industrial and commercial use only. Avoid contact with skin, eyes or clothing.

Conditions for Safe Storage

Concentrated product: store in an area that is: temperature-controlled, well-ventilated, out of direct sunlight and away from heat and ignition sources, an approved, fire-resistant area, separate from incompatible materials (see Section 10: Stability and Reactivity). Store in a closed container.

Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity). Keep amount in storage to a minimum. Avoid bulk storage indoors. Comply with all applicable health and safety regulations, fire and building codes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Ingredients	ACGIH® TLV®	OSHA PEL	IDLH
Alkyl (68% C12, 32% C14) Dimethyl Ethylbenzyl Ammonium Chloride	Not available	Not available	Not available
Alkyl Dimethyl Benzyl Ammonium Chloride (C12-C18)	Not available	Not available	Not available
Sodium Carbonate	Not available	Not available	Not available
Alcohols, C12-15, Ethoxylated	Not available	Not available	Not available
Tetrasodium Ethylene Diamine Tetraacetate	Not available	Not available	Not available

Consult local authorities for provincial or state exposure limits.

Appropriate Engineering Controls

General ventilation is usually adequate. Provide eyewash and safety shower if contact or splash hazard exists.

When handling large quantities of concentrated product: use a local exhaust ventilation and enclosure, if necessary, to control amount in the air. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

Individual Protection Measures

Eye/Face Protection

Do not get in eyes. Wear chemical safety goggles.

Skin Protection

Prevent all skin contact. Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: Barrier® (PE/PA/PE), Silver Shield/4H® (PE/EVAL/PE), Tychem® Responder, Tychem® TK.

The following materials should NOT be used: neoprene rubber, nitrile rubber, polyvinyl alcohol.

Respiratory Protection

Not normally required if product is used as directed.

Concentrated product: wear a NIOSH approved air-purifying respirator with an organic vapour cartridge.

For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an organic vapour Cartridge, or, wear a NIOSH approved self-contained breathing apparatus (SCBA) or supplied air respirator.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location.

9. CHEMICAL AND PHYSICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Pale yellow liquid
Odour	Lemon
Odour Threshold	Not available
pH	10.9 – 11.9
Melting Point/Freezing Point	-3°C / 26.6°F
Initial Boiling Point/Range	100°C / 212°F
Flash Point	>100°C
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable (liquid).
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Specific Gravity	Not determined
Solubility	Soluble
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available
Other Information	
Physical State:	Liquid

10. STABILITY AND REACTIVITY

Reactivity

Not reactive. Not sensitive to mechanical impact.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Keep out of reach of children. Keep from freezing. Keep away from heat and strong oxidizing agents.

Incompatible Materials

Oxidizing agents, reducing agents

Hazardous Decomposition Products

During a fire, irritating/toxic gases, such as carbon monoxide, carbon dioxide and other toxic and irritating compounds, such as may be formed, depending on fire conditions.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Ingredients	LD50s and LC50s Route & Species
Alkyl (68% C12, 32% C14) Dimethyl Ethylbenzyl Ammonium Chloride	Not available
Alkyl Dimethyl Benzyl Ammonium Chloride (C12-C18)	Not available
Sodium Carbonate	Dermal LD50 Mouse = 2210 mg/kg Inhalation LC50 Rat = 2300 mg/m ³ 2 h Oral LD50 Rat = 4090 mg/kg
Alcohols, C12-15, Ethoxylated	Oral LD50 (Rat) 2000 mg/kg Oral LD50 (Rat) 4150 mg/kg
Tetrasodium Ethylene Diamine Tetraacetate	Oral LD50 Rat = 10 g/kg

Skin Corrosion/Irritation

May cause slight skin irritation. Prolonged or repeated contact may cause defatting and drying of the skin.

Serious Eye Damage/Irritation

May irritate eyes.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Not listed as STOT single exposure.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Following skin contact: Prolonged or repeated contact may cause defatting and drying of the skin.

Respiratory and/or Skin Sensitization

Not a respiratory sensitizer or skin sensitization

Acute Test of Product:

Acute Oral LD50: Not available.

Acute Dermal LD50: Not available.

Acute Inhalation LC50: Not Available.

Carcinogenicity

Chemical Name	IARC	ACGIH
Alkyl (68% C12, 32% C14) Dimethyl Ethylbenzyl Ammonium Chloride	Not listed	Not listed
Alkyl Dimethyl Benzyl Ammonium Chloride (C12-C18)	Not listed	Not listed
Sodium Carbonate	Not listed	Not listed
Alcohols, C12-15, Ethoxylated	Not listed	Not listed
Tetrasodium Ethylene Diamine Tetraacetate	Not listed	Not listed

Reproductive Toxicity/ Teratogenicity/ Embryotoxicity/ Mutagenicity:

Not available

Interactive Effects

No information was located.

Additional Information

No information was located.

12. ECOLOGICAL INFORMATION**Ecotoxicological Information:****Component Information**

Toxic to aquatic organisms.

Persistence/Degradability

This product is readily biodegradable.

Bioaccumulation

Not expected to bioaccumulate.

Mobility

Not determined

Other Information:

Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams or public waterways. Block off drains and ditches. Spill areas must be cleaned and restored to original condition or to the satisfaction of authorities. May be harmful to aquatic life. Biodegrades (slow). Rapid volatilization. Not expected to bioconcentrate.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Recommended disposal methods are for the product, as sold. (Used material may contain other hazardous contaminants). The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user.

Burn in an approved incinerator according to federal, provincial/state, and local regulations.

Empty containers retain product residue. Follow label warnings even if container appears to be empty. The container for this product can present explosion or fire hazards, even when emptied. Do not cut, puncture, or weld on or near this container.

14. TRANSPORT INFORMATION

DOT (U.S.):

DOT Shipping Name: Not Regulated.

DOT Hazardous Class: Not Applicable.

DOT UN Number: Not Applicable.

DOT Packing Group: Not Applicable.

DOT Reportable Quantity (lbs): Not Available.

Note: No additional remark.

Marine Pollutant: No.

TDG (Canada):

TDG Shipping Name: Not Regulated.

Hazard Class: Not Applicable.

UN Number: Not Applicable.

Packing Group: Not Applicable.

Note: No additional remark.

Marine Pollutant: No.

Special Precautions for User

Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. REGULATORY INFORMATION

Canada

WHMIS Classification

E CORROSIVE MATERIALS

D2B TOXIC MATERIALS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

CEPA - National Pollutant Release Inventory (NPRI)

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

16. OTHER INFORMATION

- Additional Information:** This product has been classified in accordance with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) and the SDS contains all the information required by the Hazardous Products Regulations (HPR).
- Prepared by:** The Environmental, Health and Safety Department of Genesis Chemicals Ltd
- Date of Latest Revision:** February 16, 2017
- Key to Abbreviations:** IARC = International Agency for Research on Cancer. Group 3 = Not classifiable as to its carcinogenicity to humans. ACGIH® = American Conference of Governmental Industrial Hygienists. A4 = Not classifiable as a human carcinogen. NTP = National Toxicology Program. OSHA = US Occupational Safety and Health Administration. ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. STEL = Short-term Exposure Limit. A4 = Not classifiable as a human carcinogen. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. IDLH = Immediately Dangerous to Life and Health.
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*****END OF SDS*****