A CSW Industrials Company

SAFETY DATA SHEET

LINESHOT™
Drain Line Flush

Section 1 - Product and Company Information

Product name
LineShot

Product Codes
81981

Chemical Family
Organic

Use
Drain line flush

Manufacturer's Name
RectorSeal LLC
2601 Spenwick Drive
Houston, Texas 77055 USA

Date of validation
November 5, 2019

Date of Preparation
November 5, 2019

HMIS Codes

Health	2
Flammability	0
Reactivity	0
PPI	B

Emergency Telephone No.
Chemtrec 24 Hours
(800) 424-9300 USA
(703) 527-3887 International

Technical Service Telephone No.
(800) 231-3345 or (713) 263-8001

Section 2 - Hazards Identification

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture GASES UNDER PRESSURE - Liquefied gas Simple asphyxiant.

GHS Label elements, including precautionary statements



GHS04	Gas Cylinder
Signal Word	Warning

Hazard Statements:

H280	Contains gas under pressure; may explode if heated.
H380	May displace oxygen and cause rapid suffocation.
CGA-HG03	May increase respiration and heart rate.

Precautionary Statements:

P202	Do not handle until all safety precautions have been read and understood
P271	Use only outdoors or in a well-ventilated area
P304+P340	If inhaled: Remove person to fresh air and keep comfortable for breathing
P313	Get medical advice/attention
CGA-PG05	Use a back flow preventive device in the piping
CGA-PG21	Open valve slowly
CGA-PG06	Close valve after each use and when empty
CGA-PG10	Use only with equipment rated for cylinder pressure
CGA-PG14	Approach suspected leak area with caution
CGA-PG02	Protect from sunlight when ambient temperature exceeds 52°C (125°F)
P403	Store in a well-ventilated place

Section 3 - Composition/Information on Ingredients

Ingredient:	Carbon dioxide
Percentage by weight:	100
Cas Number:	124-38-9
EC#:	204-696-9

Section 4 - First Aid Measures

Description of necessary first aid measures

Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin Contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	As this product is a gas, refer to the inhalation section.

Most important symptoms/effects, acute and delayed potential acute health effects

Eye Contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Skin Contact	No known significant effects or critical hazards.
Frostbite	Try to warm up the frozen tissues and seek medical attention.
Ingestion	As this product is a gas, refer to the inhalation section.

Over-exposure signs/symptoms

Eye Contact	No specific data.
Inhalation	No specific data.
Skin Contact	No specific data.
Ingestion	No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.
Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide, carbon monoxide

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6 - Accidental Release Measures

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

Environmental precautions: Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Small spill: Immediately contact emergency personnel. Stop leak if without risk.
Large spill: Immediately contact emergency personnel. Stop leak if without risk.
Note: See Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7 - Handling and Storage

PRECAUTIONS FOR SAFE HANDLING PROTECTIVE MEASURES:

Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid breathing gas. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement. Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous.

ADVICE ON GENERAL OCCUPATIONAL HYGIENE:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52°C (125 °F). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.

Section 8 - Exposure Controls/Personal Protection

Ingredient	Units
Carbon dioxide	
ACGIH TLV (United States, 3/2017). Oxygen Depletion [Asphyxiant].	
STEL	54000 mg/m³ 15 minutes.
STEL	30000 ppm 15 minutes.
TWA	9000 mg/m³ 8 hours.
TWA	5000 ppm 8 hours.
NIOSH REL (United States, 10/2016)	
STEL	54000 mg/m³ 15 minutes.
STEL	30000 ppm 15 minutes.
TWA	9000 mg/m³ 8 hours.
TWA	5000 ppm 8 hours.
OSHA PEL (United States, 6/2016)	
TWA	9000 mg/m³ 8 hours.
TWA	5000 ppm 8 hours.
OSHA PEL 1989 (United States, 3/1989)	
STEL	54000 mg/m³ 15 minutes.
STEL	30000 ppm 15 minutes.
TWA	18000 mg/m³ 8 hours.
TWA	10000 ppm 8 hours.

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side- shields.

Skin/Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9 - Physical and Chemical Properties

Physical state:	Gas. [Compressed gas.]
Color:	Colorless.
Odor:	Odorless.
Oder threshold	Not available.
pH:	Not available.
Melting point:	Sublimation temperature: -79°C (-110.2 to °F)
Boiling point:	Not available.
Critical temperature:	30.85°C (87.5°F)
Flash Point:	[Product does not sustain combustion.]
Evaporation rate:	Not available.
Flammability (solid, gas):	Not available.
Lower and upper explosive (flammable) limits:	Not available.
Vapor pressure:	830 (psig)
Vapor density:	1.53 (Air = 1)
Liquid Density@BP:	Solid density = 97.5 lb/ft3 (1562 kg/m3)

Specific Volume ft (3/lb):	8.7719
Gas Density (lb/ft 3):	0.114
Relative density Solubility:	Not applicable.
Solubility in water:	Not available.
Partition coefficient:	0.83
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Molecular weight:	44.01 g/mole

Section 10 - Stability and Reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No specific data.

Incompatible materials: No specific data.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11 - Toxicology Information

CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Toxicology Data

Ingredient Name

Carbon Dioxide - 55 pph Inhalation Mouse TCLo (4 hour, 6 day(s)); 55 pph I Inhalation Mouse TCLo (2 hour, 3 day(s)); 2 pph Inhalation Mouse TCLo (8 hour, pregnant 10 day(s)); 13 pph Inhalation Rabbit TCLo (4 hour, pregnant 9-12 day(s)); 6 pph Inhalation Rat TCLo (24 hour, pregnant 10 day(s)); 6 pph Inhalation Rat TCLo (24 hour, pregnant 10 day(s))

Section 12 - Ecological Information

Ecological Data

Ingredient Name

Carbon Dioxide

Food Chain Concentration Potential	None
WATERFOWL TOXICITY	N/A
BOD	None
AQUATIC TOXICITY	N/A

Section 13 - Disposal Considerations

Waste Classification: Compressed gas

Disposal Method: Empty containers can be disposed of in trash. Full containers should be depressurized. Dispose of all waste in accordance with all local, state and federal regulations.

Section 14 - Transportation Information

DOT:	Limited Quantity or LTD-QTY
OCEAN (IMDG):	UN1013, Carbon Dioxide, Class 2.2, LTD-QTY, EMS-No: F-A, S-A
AIR (IATA):	UN1013, Carbon Dioxide, Class 2.2

ADR

14.1 UN Number:UN1013
14.2 UN Proper Shipping Name:CARBON DIOXIDE
14.3 Transport Hazard Class(es)
Class:2
Label(s):2.2
Hazard No. (ADR):20
Tunnel restriction code:(C/E)
14.4 Packing Group:–
14.5 Environmental hazards:not applicable
14.6 Special precautions for user: –

RID

14.1 UN Number:UN1013
14.2 UN Proper Shipping Name:CARBON DIOXIDE
14.3 Transport Hazard Class(es)
Class:2
Label(s):2.2
Hazard No. (ADR):20
14.4 Packing Group:–
14.5 Environmental hazards:not applicable
14.6 Special precautions for user: –

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: not applicable

Additional identification:

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers ensure that they are firmly secured. Ensure that the container valve is closed and not leaking. Container valve guards or caps should be in place.

Section 15 - Regulatory Information

Regulatory Data

Ingredient:	Carbon Dioxide
SARA 313	No
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

Section 16 - Other Information

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made. Consult RectorSeal for further information: (713) 263-8001