

INEOS/KOH 14-01 Liquid Chlorine

Section 1. Identification

GHS product identifier : INEOS/KOH 14-01 Liquid Chlorine
Product code : Not available.
Chemical name : chlorine
Other means of identification : Chlorine, liquid chlorine, compressed chlorine
Product type : Liquefied gas.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Chlorinating agent, Manufacturing plastics, Water treatment chemicals
Area of application : Industrial applications.

Uses advised against	Reason
None known.	-

Supplier's details : INEOS KOH
3509 Middle Road,
Ashtabula OH
44004 USA

Telephone no.: +1-440-997-5221

e-mail address of person responsible for this SDS : koh.customerservice@ineos.com

Emergency telephone number (with hours of operation) : Chemtrec: 800-424-9300 (24 hours)

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 : H270 OXIDIZING GASES - Category 1
H280 GASES UNDER PRESSURE - Liquefied gas
H330 ACUTE TOXICITY (inhalation) - Category 2
H314 SKIN CORROSION - Category 1
H318 SERIOUS EYE DAMAGE - Category 1
H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

GHS label elements

Hazard pictograms :



Signal word : Danger

Date of issue/Date of revision : 06/16/2026 **Date of previous issue** : No previous validation **Version** : 1 1/15

Section 2. Hazards identification

Hazard statements	: H270 - May cause or intensify fire; oxidizer. H280 - Contains gas under pressure; may explode if heated. H314 - Causes severe skin burns and eye damage. H330 - Fatal if inhaled. H335 - May cause respiratory irritation.
<u>Precautionary statements</u>	
Prevention	: P280 - Wear protective gloves, protective clothing and eye or face protection. P284 - In case of inadequate ventilation wear respiratory protection. P220 - Keep away from clothing and other combustible materials. P244 - Keep valves and fittings free from oil and grease. P271 - Use only outdoors or in a well-ventilated area. P260 - Do not breathe gas. P264 - Wash thoroughly after handling.
Response	: P370 + P376 - In case of fire: Stop leak if safe to do so. P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P301, P330, P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P363 - Wash contaminated clothing before reuse. P305 + P351 + P338 - IF IN EYES: Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor.
Storage	: P405 - Store locked up. P410 + P403 - Protect from sunlight. P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.
Hazards identified when used	: No known significant effects or critical hazards.

Section 3. Composition/information on ingredients

Substance/mixture	: Substance
Chemical name	: chlorine
Other means of identification	: Chlorine, liquid chlorine, compressed chlorine

Ingredient name	Synonyms	%	Identifiers
chlorine	-	100	CAS: 7782-50-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Es sind keine weiteren Inhaltsstoffe enthalten, die nach aktuellem Kenntnisstand des Lieferanten und in den anwendbaren Konzentrationen als klassifiziert gelten und daher in diesem Abschnitt gemeldet werden müssen.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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** : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. In case of contact with liquid, warm frozen tissues slowly with lukewarm water and get medical attention. Do not rub affected area. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Chemical burns must be treated promptly by a physician. Ingestion of liquid can cause burns similar to frostbite. If frostbite occurs, get medical attention. Never give anything by mouth to an unconscious person. 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. As this product rapidly becomes a gas when released, refer to the inhalation section.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage. Liquid can cause burns similar to frostbite.
- Inhalation** : Exposure to low concentrations may result in a sore throat, coughing and a tightness of the chest. More severe exposure may lead to a choking sensation and difficulty in breathing. Symptoms can include rapid breathing, discoloration of the skin and wheezing. Exposure to high concentrations can be fatal.
- Skin contact** : Causes severe burns. Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.
- Ingestion** : Ingestion of liquid can cause burns similar to frostbite.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
frostbite
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
frostbite

Section 4. First aid measures

Ingestion : Adverse symptoms may include the following:
frostbite
stomach pains

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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Contains gas under pressure. Oxidizing material. This material increases the risk of fire and may aid combustion. Contact with combustible material may cause fire. In a fire or if heated, a pressure increase will occur and the container may burst or explode. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
halogenated compounds
Hydrogen gas is released in contact with most metals.

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. For large fires, and fires involving tanks and tank cars, fight the fire from a maximum distance. Withdraw immediately in case of escalating leakage.

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. For incidents involving large quantities, thermally insulated undergarments and thick textile or leather gloves should be worn.

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. Avoid unnecessary personnel and equipment traffic in the spill area. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

- Small spill** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Neutralize spilled material with crushed limestone, soda ash or lime.
- Large spill** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Neutralize spilled material with crushed limestone, soda ash or lime.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Do not get in eyes or on skin or clothing. Do not breathe gas. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep away from clothing, incompatible materials and combustible materials. Keep reduction valves free from grease and oil. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Avoid exposure - obtain special instructions before use. Use only chlorine-compatible lubricants.
- 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** : Do not store above the following temperature: 251.667°C (485°F). 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). Store locked up. Separate from reducing agents and combustible materials. Store away from grease and oil. 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

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
chlorine	ACGIH TLV (United States, 1/2025) A4. TWA 8 hours: 0.1 ppm. STEL 15 minutes: 0.4 ppm. NIOSH REL (United States, 10/2020) CEIL 15 minutes: 0.5 ppm. CEIL 15 minutes: 1.45 mg/m ³ . OSHA PEL (United States, 5/2018) CEIL: 1 ppm. CEIL: 3 mg/m ³ . CAL OSHA PEL (United States, 1/2025) STEL 15 minutes: 3 mg/m ³ . STEL 15 minutes: 1 ppm. TWA 8 hours: 1.5 mg/m ³ . TWA 8 hours: 0.5 ppm.

Biological exposure indices

None known.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Not applicable.

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. Avoid exposure - obtain special instructions before use.

Eye/face protection : Wear chemical-resistant safety glasses. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Use chemical-resistant, impervious gloves. Recommended: neoprene, Butyl, Viton®

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. high concentrations: For dermal or airborne exposure, full body chemical protective clothing is required when handling the chemical product. (Class A/ Class B) Wear rubber boots.

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. Wear suitable protective clothing.

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. Recommended: Approved/certified respirator with acid gas cartridge./ full face mask (DIN EN 136)

Section 8. Exposure controls/personal protection

Thermal hazards : If there is a risk of contact with the liquid, all protective equipment worn should be suitable for use with extremely low temperature materials.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Gas. [Liquefied gas.]				
Color	: Green. / Yellow./ Amber.				
Odor	: Suffocating./ Pungent./ Irritant				
Odor threshold	: 0.31 ppm				
pH	: Not applicable.				
Melting point/freezing point	: -101°C (-149.8°F)				
Boiling point or initial boiling point and boiling range	: -34°C (-29.2°F)				
Flash point	: Not applicable.				
Evaporation rate	: Not available.				
Flammability	: Non-combustible. Greatly increases the burning rate of combustible materials.				
Lower and upper explosion limit/flammability limit	: Not applicable.				
Vapor pressure	: 638.3 kPa (4788 mm Hg) [room temperature] 1430 kPa (10725.88 mm Hg) [50°C (122°F)]				
Relative vapor density	: 2.5 [Air = 1]				
Relative density	: 1.467 [Air = 1]				
Density	: 1.402 g/cm ³ [20°C (68°F)]				
Solubility(ies)	<table border="1"> <thead> <tr> <th>Media</th><th>Result</th></tr> </thead> <tbody> <tr> <td>water</td><td>Very slightly soluble</td></tr> </tbody> </table>	Media	Result	water	Very slightly soluble
Media	Result				
water	Very slightly soluble				
Solubility in water	: 10 g/l				
Miscible with water	: No.				
Partition coefficient: n-octanol/water	: Not available.				
Auto-ignition temperature	: Not available.				
Decomposition temperature	: Not available.				
SADT	: Not available.				
Viscosity	: Dynamic (room temperature): 0.01 mPa·s (0.01 cP) Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.				
Molecular weight	: 70.9 g/mole				
Particle characteristics					
Median particle size	: Not applicable.				
Other information					
Physical/chemical properties comments	: No additional information.				

Section 10. Stability and reactivity

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: The product is stable under normal conditions.
Possibility of hazardous reactions	: Hazardous reactions or instability may occur under certain conditions of storage or use. Reacts violently with water. Hazardous polymerization may occur under certain conditions of storage or use.
Conditions to avoid	: Avoid excessive heat.
Incompatible materials	: Highly reactive or incompatible with the following materials: combustible materials reducing materials grease oil Chlorine reacts with water to produce hypochloric acid and hypochlorous acid. Chlorine reacts as an oxidizer with most organic materials (except those fully halogenated) at room temperature. It reacts with many metals at elevated temperatures. Dry chlorine will react with titanium and aluminum. Wet chlorine is corrosive to most metals except titanium. Chlorine will combine with carbon monoxide and sulfur dioxide to form phosgene and sulfuryl chloride respectively. Avoid excessive heat. moisture
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
chlorine	Rat - Inhalation - LC50 Gas. 293 ppm [1 hours]

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Conclusion/Summary [Product] : Corrosive to the skin.

Serious eye damage/eye irritation

Conclusion/Summary [Product] : Corrosive to eyes.

Respiratory corrosion/irritation

Section 11. Toxicological information

Conclusion/Summary [Product] : Irritating to respiratory system.

Respiratory or skin sensitization

Skin

Conclusion/Summary [Product] : Non-sensitizer to skin.

Respiratory

Conclusion/Summary [Product] : Not classified for respiratory sensitization.

Germ cell mutagenicity

Conclusion/Summary [Product] : No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary [Product] : No known significant effects or critical hazards.

Reproductive toxicity

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

chlorine

Result

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
(Respiratory tract irritation) - Category 3

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

- Eye contact** : Causes serious eye damage. Liquid can cause burns similar to frostbite.
- Inhalation** : Exposure to low concentrations may result in a sore throat, coughing and a tightness of the chest. More severe exposure may lead to a choking sensation and difficulty in breathing. Symptoms can include rapid breathing, discoloration of the skin and wheezing. Exposure to high concentrations can be fatal.
- Skin contact** : Causes severe burns. Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.
- Ingestion** : Ingestion of liquid can cause burns similar to frostbite.

Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
frostbite
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
frostbite
- Ingestion** : Adverse symptoms may include the following:
frostbite
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary [Product] : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
chlorine	N/A	N/A	146.5	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name

chlorine

Result

Acute - LC50 - Fresh water

Fish - Rainbow trout,donaldson trout -

Oncorhynchus mykiss

Size: 10.16 to 12.7 cm

14 µg/l [96 hours]

Effect: Mortality

Acute - LC50 - Fresh water

Crustaceans - Aquatic sowbug -

Asellus racovitzai

2.03 µg/l [2 days]

Effect: Mortality

Acute - EC50 - Marine water

Algae - Giant kelp - *Macrocystis pyrifera*

- Young

5.1 ppm [4 days]

Effect: Physiology

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Conclusion/Summary [Product] : Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/Water partition coefficient

: Not available.

Other adverse effects

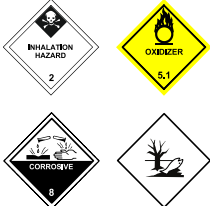
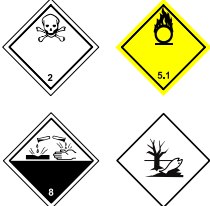
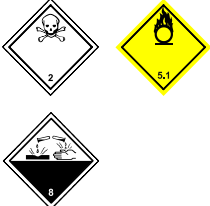
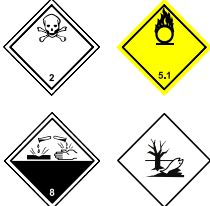
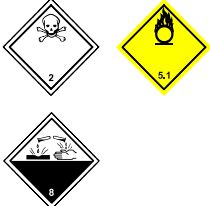
No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty pressure vessels should be returned to the supplier. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN1017	UN1017	UN1017	UN1017	UN1017
UN proper shipping name	Chlorine	CHLORINE	COLORO	CHLORINE	Chlorine
Transport hazard class(es)	2.3 (5.1, 8) 	2.3 (5.1, 8) 	2.3 (5.1, 8) 	2.3 (5.1, 8) 	2.3 (5.1, 8) 
Packing group	-	-	-	-	-
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

DOT Classification

- : Toxic - Inhalation hazard Zone B
This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.
Reportable quantity 10 lbs / 4.54 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
Limited quantity No.
Packaging instruction Exceptions: None. Non-bulk: 304. Bulk: 314, 315.
Quantity limitation Passenger aircraft/rail: Forbidden. Cargo aircraft: Forbidden.
Special provisions 2, B9, B14, N86, T50, TP19

TDG Classification

- : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2), 2.23-2.25 (Class 5), 2.40-2.42 (Class 8), 2.7 (Marine pollutant mark).
Toxic - Inhalation hazard
The marine pollutant mark is not required when transported by road or rail.
Explosive Limit and Limited Quantity Index 0
ERAP Index 500
Passenger Carrying Vessel Index Forbidden
Passenger Carrying Road or Rail Index Forbidden
Special provisions 23

IMDG

- : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-C, S-U

IATA

- : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: Forbidden. Packaging instructions: Forbidden. Cargo Aircraft Only: Forbidden. Packaging instructions: Forbidden. Limited Quantities - Passenger Aircraft: Forbidden. Packaging instructions: Forbidden.
Special provisions A2

Section 14. Transport information

Special precautions for user : Not available.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined
 United States inventory (TSCA 8b): This material is active or exempted.
 Clean Water Act (CWA) 311: chlorine
 Clean Air Act (CAA) 112 regulated toxic substances: chlorine

TSCA 12(b) - Chemical export notification

Not applicable.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
chlorine	100	Yes.	100	-	10	-

SARA 304 RQ : 10 lbs / 4.5 kg

SARA 311/312

Classification : OXIDIZING GASES - Category 1
 GASES UNDER PRESSURE - Liquefied gas
 ACUTE TOXICITY (inhalation) - Category 2
 SKIN CORROSION - Category 1
 SERIOUS EYE DAMAGE - Category 1
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Composition/information on ingredients

Section 15. Regulatory information

Name	%	Classification
chlorine	100	OXIDIZING GASES - Category 1 GASES UNDER PRESSURE - Liquefied gas ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	chlorine	7782-50-5	100
Supplier notification	chlorine	7782-50-5	100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts	: This material is listed.
New York	: This material is listed.
New Jersey	: This material is listed.
Pennsylvania	: This material is listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

Section 16. Other information

Classification	Justification
OXIDIZING GASES - Category 1 GASES UNDER PRESSURE - Liquefied gas ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	On basis of test data On basis of test data On basis of test data Expert judgment Expert judgment Expert judgment

History

Date of issue/Date of revision	: 06/16/2026
Date of previous issue	: No previous validation
Version	: 1
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods IMO = International Maritime Organization LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group TDG = Transportation of Dangerous Goods UN = United Nations
References	: HCS (U.S.A.) - Hazard Communication Standard International transport regulations

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.