

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : CORR11509A

Other means of identification : Not applicable.

Recommended use : CORROSION INHIBITOR

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : ChampionX LLC
11177 S. Stadium Drive
Sugar Land, Texas 77478
USA
TEL: (281) 632-6500

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 10/23/2024

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 2

Acute toxicity (Oral) : Category 3

Acute toxicity (Inhalation) : Category 3

Acute toxicity (Dermal) : Category 3

Skin corrosion : Category 1B

Serious eye damage : Category 1

Skin sensitization : Category 1

Reproductive toxicity : Category 2

Specific target organ toxicity : Category 1 (Eyes)

- single exposure

Specific target organ toxicity : Category 3 (Central Nervous System)

- single exposure

Specific target organ toxicity : Category 2 (Heart, Liver)

- repeated exposure (Oral)

Acute toxicity (inhalation : Category 1

(dust/mist/fume))

GHS Label element

Hazard pictograms :     

Signal Word : Danger

Hazard Statements : Highly flammable liquid and vapour.
Toxic if swallowed, in contact with skin or if inhaled.
Causes severe skin burns and eye damage.

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May cause an allergic skin reaction.
May cause drowsiness or dizziness.
Suspected of damaging fertility or the unborn child.
Causes damage to organs (Eyes).
May cause damage to organs (Heart, Liver) through prolonged or repeated exposure if swallowed.

- Precautionary Statements : **Prevention:**
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
Storage:
Store in a well-ventilated place.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.
- Other hazards : The headspace of containers and manufacturing equipment containing this product may accumulate hydrogen sulfide (H₂S) gas. Attach or wear a H₂S monitor before opening containers and using or transferring this product. Containers should only be opened in well-ventilated areas. Avoid breathing vapors from the headspace of newly opened containers.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Concentration: (%)</u>
Quaternary ammonium compounds	Proprietary	30 - 60
Methanol	67-56-1	30 - 60
Fatty acid-amine condensate	Proprietary	10 - 30
2-Mercaptoethanol	60-24-2	5 - 10
Isopropanol	67-63-0	1 - 5

SECTION 4. FIRST AID MEASURES

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention immediately.
- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Foam
Carbon dioxide
Dry powder
Other extinguishing agent suitable for Class B fires
For large fires, use water spray or fog, thoroughly drenching the burning material.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Fire Hazard
Keep away from heat and sources of ignition.
Flash back possible over considerable distance.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Hazardous combustion products : Carbon oxides nitrogen oxides (NOx) Sulphur oxides Hydrogen chloride
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : A respirator and monitor suitable for H₂S may be necessary in the event of a spill in a confined area. Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise

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contain material to ensure runoff does not reach a waterway. Do not flush into surface water or sanitary sewer system.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Hydrogen sulfide gas may accumulate in the headspace of containers during storage. Containers should be opened cautiously and only in well-ventilated areas. Exercise care to avoid exposure to vapors from totes or IBCs when loosening the cap. Use the container bottom valve to perform product transfers. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Ground and bond container and receiving equipment. Open drum carefully as content may be under pressure. Do not breathe dust, fume, gas, mist, vapours or spray. Do not get in eyes, on skin, or on clothing. Do not ingest. Wash face, hands and any exposed skin thoroughly after handling. Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, or expose containers to flame or other sources of ignition.
- Conditions for safe storage : Keep away from heat and sources of ignition. Keep in a cool, well-ventilated place. Keep away from oxidizing agents. Keep container tightly closed. Store in suitable labelled containers.
- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.
- Unsuitable material : not determined

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m ³	NIOSH REL
		ST	250 ppm 325 mg/m ³	NIOSH REL
		TWA	200 ppm 260 mg/m ³	OSHA Z-1
2-Mercaptoethanol	60-24-2	TWA	0.2 ppm	US WEEL
Isopropanol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m ³	NIOSH REL
		ST	500 ppm 1,225 mg/m ³	NIOSH REL
		TWA	400 ppm 980 mg/m ³	OSHA Z-1

- Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational

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exposure standards.

Personal protective equipment

- Eye protection : Safety goggles
Face-shield
- Hand protection : Wear impervious chemical-resistant gloves when handling this product.
The following glove types are recommended based on our review of glove manufacturer information and/or other available sources.
butyl-rubber
Other glove types may be used for short term, incidental contact if determined by testing to provide adequate worker protection.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
- Respiratory protection : Use local exhaust ventilation or other engineering controls as necessary to control airborne vapour and mist.
Respiratory protection for hydrogen sulfide is not expected to be necessary in well-ventilated areas. However, if after a thorough hazard assessment respiratory protection is deemed necessary, an appropriate H₂S respirator must be used.
Use a particulate pre-filter where operations generate significant mists or aerosols.
Recommended gas and vapour cartridge:
Multi-purpose combination filter.
In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA or supplied-air respirator should be used.
Methanol Warning! Protection provided by air purifying respirators is limited due to methanol's ability to break through filter media and its poor warning properties. For prolonged exposures, entry into unknown environments or where methanol is suspected to exceed exposure limits, use a positive pressure, full-facepiece SCBA or supplied-air respirator.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Remove and wash contaminated clothing before re-use. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

The Personal Protective Equipment (PPE) recommendations provided above have been made in good faith based on typical expected conditions of use. PPE selection should always be completed in conjunction with a proper risk assessment and in accordance with a PPE management program.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Liquid
- Colour : Colorless
- Odour : Pungent
- Flash point : 10.0 °C, Method: Pensky-Martens closed cup

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pH	: 7.34, Neat
Odour Threshold	: no data available
Melting point/freezing point	: POUR POINT: < -40 °C
Initial boiling point and boiling range	: 65.5 °C
Evaporation rate	: no data available
Flammability (solid, gas)	: Not applicable.
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: 150.4 mm Hg,
Relative vapour density	: no data available
Relative density	: 0.892 - 0.932, (15.6 °C),
Density	: 7.5 lb/gal
Water solubility	: no data available
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: 11.72 mPa.s (25 °C)
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: 44.4 %, Calculation method

Note: properties listed in this section may be typical, calculated, or estimated values and should not be used as product specifications or for system design. For product specifications see the COA or Technical Data sheet.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Product is stable; however, 2-Mercaptoethanol (2-ME), a component of this product is made from hydrogen sulfide (H ₂ S). 2-ME contains residual H ₂ S and slowly degrades generating additional H ₂ S which can partition from the liquid into the container headspace. Degradation of 2-ME increases with temperature.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Strong oxidizing agents

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Hazardous decomposition products : Hydrogen sulfide (H₂S)
In case of fire hazardous decomposition products may be produced such as:
Carbon oxides
nitrogen oxides (NO_x)
Sulphur oxides
Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact, Ingestion

Potential Health Effects

Eyes : Causes serious eye damage.

Skin : Toxic in contact with skin. Causes severe skin burns. May cause allergic skin reaction.

Ingestion : May cause blindness if swallowed. Toxic if swallowed. Causes digestive tract burns.

Inhalation : Toxic if inhaled. May cause nose, throat, and lung irritation. Inhalation may cause central nervous system effects.

Chronic Exposure : Suspected of damaging fertility or the unborn child. May cause damage to organs. May cause damage to organs through prolonged or repeated exposure.

Experience with human exposure

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Irritation, Corrosion, Allergic reactions

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough, Dizziness, Drowsiness

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate: 220.6 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: 6.97 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : Acute toxicity estimate: 610.28 mg/kg

Skin corrosion/irritation : no data available

Serious eye damage/eye irritation : no data available

Respiratory or skin sensitization : no data available

Carcinogenicity : no data available

Reproductive effects : no data available

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Germ cell mutagenicity : no data available
Teratogenicity : no data available
STOT - single exposure : no data available
STOT - repeated exposure : no data available
Aspiration toxicity : no data available

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Environmental Effects : Very toxic to aquatic life with long lasting effects.

Components

Toxicity to fish : Methanol
LC50: 15,400 mg/l
Exposure time: 96 h

2-Mercaptoethanol
LC50 *Leuciscus idus* (Golden orfe): 37 mg/l
Exposure time: 96 h

Isopropanol
LC50 *Pimephales promelas* (fathead minnow): 9,640 mg/l
Exposure time: 96 h

Components

Toxicity to daphnia and other aquatic invertebrates : Quaternary ammonium compounds
EC50 : 0.47 mg/l

Methanol
EC50 : > 10,000 mg/l
Exposure time: 48 h

2-Mercaptoethanol
EC50 *Daphnia magna* (Water flea): 0.4 mg/l
Exposure time: 48 h

Isopropanol
LC50 *Daphnia magna* (Water flea): > 10,000 mg/l

Components

Toxicity to algae : Quaternary ammonium compounds
NOEC : 0.009 mg/l

Methanol
EC50 : 22,000 mg/l
Exposure time: 72 h

2-Mercaptoethanol
EC50 *Desmodesmus subspicatus* (*Scenedesmus subspicatus*): 19 mg/l

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Exposure time: 72 h

Components

Toxicity to bacteria : Methanol
> 1,000 mg/l

Isopropanol
1,050 mg/l

Components

Toxicity to fish (Chronic toxicity) : Methanol
NOEC: 7,900 mg/l
Exposure time: 8.3 d

Fatty acid-amine condensate
LC50: 71 mg/l
Exposure time: 96 d

Components

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Fatty acid-amine condensate
EC50: 105 mg/l
Exposure time: 48 d

2-Mercaptoethanol
NOEC: 0.063 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

Persistence and degradability

The organic portion of this preparation is expected to be readily biodegradable.

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air : <5%
Water : 10 - 30%
Soil : 70 - 90%

The portion in water is expected to float on the surface.

Bioaccumulative potential

Component substances have a low potential to bioconcentrate.

Other information

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no data available

SECTION 13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated at the time of disposal to determine the proper waste identification and disposal methods in compliance with applicable regulations.

- Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
- Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

The presence of an RQ component (Reportable Quantity for U.S. DOT) in this product causes it to be regulated with an additional description of RQ for road, or as Environmentally hazardous for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

Land transport (DOT)

- Proper shipping name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Technical name(s) : Methanol, Quaternary ammonium compounds
UN/ID No. : UN 2924
Transport hazard class(es) : 3, 8
Packing group : II
Reportable Quantity (per package) : 14,981 lbs
RQ Component : Methanol

Air transport (IATA)

- Proper shipping name : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.
Technical name(s) : Methanol, Organic sulfur compound, Quaternary ammonium compounds
UN/ID No. : UN 3286
Transport hazard class(es) : 3, 6.1, 8
Packing group : II
Reportable Quantity (per package) : 14,981 lbs
RQ Component : Methanol

Sea transport (IMDG/IMO)

- Proper shipping name : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.
Technical name(s) : Methanol, Organic sulfur compound, Quaternary ammonium compounds
UN/ID No. : UN 3286
Transport hazard class(es) : 3, 6.1, 8
Packing group : II

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*Marine pollutant : Quaternary ammonium compounds

* Note: This product is regulated as a Marine Pollutant when shipped by Rail or Highway (in bulk quantities), and when shipped by water in all quantities.

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Methanol	67-56-1	5000	14981

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)
Respiratory or skin sensitisation
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

<u>Components</u>	<u>CAS-No.</u>	<u>Weight percent</u>
Methanol	67-56-1	30 - 60 %

California Prop. 65

 **WARNING:** Reproductive Harm - www.P65Warnings.ca.gov

Methanol	67-56-1
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INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory

On or in compliance with the active portion of the TSCA inventory.

Australian Inventory of Industrial Chemicals

On the inventory, or in compliance with the inventory

Canadian Domestic Substances List (DSL)

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The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL). A substance in this product is subject to SNAc 15253. For use only in oil and gas production operations and refining operations of petroleum products.

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory

On the inventory, or in compliance with the inventory

China Inventory of Existing Chemical Substances

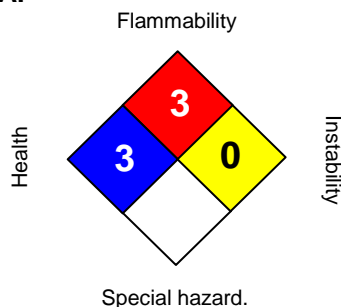
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

SECTION 16. OTHER INFORMATION

NFPA:



0 = not significant
1 = Slight
2 = Moderate
3 = High
4 = Extreme

Revision Date : 10/23/2024
Version Number : 1.9
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.