Safety Data Sheet
SCW-7125

1. Product and company identification

Product name : SCW-7125

Material uses : Industrial applications: Scale Inhibitor

Internal code : OFS0445

System code : OFS0445

Supplier : Bachman Services, Inc.
2220 S.Prospect Avenue
Oklahoma City, OK 73129

Information contact : (800) 535-5053 [Emergency], (405) 677-8296 [Info]

e-mail address of person responsible for this SDS : sdsinfo@innospecinc.com

Emergency telephone number

In USA, Canada and North America, 24 hour / 7 day emergency information for our product is provided by the CHEMTREC® Emergency Call Center based in the USA

Country information	:	Emergency telephone number
USA, Canada, Puerto Rico, Virgin Islands	:	+1 800 424 9300
In case of difficulties, or for ships at sea	:	+1 703 527 3887

In Europe, Middle East, Africa, Asia Pacific and South America 24 hour / 7 day emergency response for our products is provided by the NCEC CARECHEM 24 global network

Country information	:	Emergency telephone number	Location
South America (all countries)	:	+1 215 207 0061	Philadelphia USA
Brazil	:	+55 113 711 9144	Brazil
Mexico	:	+52 555 004 8763	Mexico
Europe (all countries) Middle East, Africa (French, Portuguese, English)	:	+44 (0) 1235 239 670	London, UK
Middle East, Africa (Arabic, French, English)	:	+44 (0) 1235 239 671	Lebanon
Asia Pacific (all countries except China)	:	+65 3158 1074	Singapore
China	:	+86 10 5100 3039	Beijing China

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 : SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention : P260 - Do not breathe vapor.

Response : P314 - Get medical attention if you feel unwell.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Target organs : Contains material which causes damage to the following organs: kidneys, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
Contains material which may cause damage to the following organs: lungs.

See toxicological information (Section 11)

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
ethanediol; ethylene glycol	15 - 30	107-21-1
phosphoric acid; orthophosphoric acid	0.99 - 4.99	7664-38-2
hydrochloric acid	0.99 - 4.99	7647-01-0

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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

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 following exposure or if feeling unwell.

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 following exposure or if feeling unwell. 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. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. 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.

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.

Ingestion : No known significant effects or critical hazards.

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.

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 : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
phosphorus oxides
halogenated compounds
metal oxide/oxides

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.

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.

Flash point : Closed cup: >93.3°C (>199.9°F)

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. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised 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 : 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).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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 dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
ethanediol; ethylene glycol	**ACGIH TLV (United States, 4/2014).** C: 100 mg/m³, 0 times per shift, 0 hours. Form: Aerosol **OSHA PEL 1989 (United States, 3/1989).** CEIL: 50 ppm, 0 times per shift, 0 hours. CEIL: 125 mg/m³, 0 times per shift, 0 hours.
phosphoric acid; orthophosphoric acid	**ACGIH TLV (United States, 4/2014).** TWA: 1 mg/m³, 0 times per shift, 8 hours. STEL: 3 mg/m³, 0 times per shift, 15 minutes. **OSHA PEL 1989 (United States, 3/1989).** TWA: 1 mg/m³, 0 times per shift, 8 hours. STEL: 3 mg/m³, 0 times per shift, 15 minutes. **NIOSH REL (United States, 10/2013).** TWA: 1 mg/m³, 0 times per shift, 10 hours. STEL: 3 mg/m³, 0 times per shift, 15 minutes. **OSHA PEL (United States, 2/2013).** TWA: 1 mg/m³, 0 times per shift, 8 hours.
hydrochloric acid	**ACGIH TLV (United States, 1/2009).** C: 2 ppm **OSHA PEL 1989 (United States, 3/1989).** CEIL: 5 ppm CEIL: 7 mg/m³ **NIOSH REL (United States, 6/2009).** CEIL: 5 ppm CEIL: 7 mg/m³ **OSHA PEL (United States, 11/2006).** CEIL: 5 ppm CEIL: 7 mg/m³

Section 8. Exposure controls/personal protection

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, 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 : 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 protection

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 : Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. 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

Appearance

Physical state : Liquid.

Color : Clear. Amber.

Odor : Mild. [Slight]

Odor threshold : Not available.

pH : 5.5 to 6.5

Melting point : Not available.

Boiling point : 100°C (212°F)

Flash point : Closed cup: >93.3°C (>199.9°F)

Evaporation rate : 1

Section 9. Physical and chemical properties

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Greatest known range: Lower: 1.8% Upper: 15.3% (Ethanediol)

Vapor pressure : Highest known value: 3.2 kPa (23.8 mm Hg) (at 20°C) (water). Weighted average: 2.45 kPa (18.38 mm Hg) (at 20°C)

Vapor density : Highest known value: 2.14 (Air = 1) (Ethanediol). Weighted average: 2.05 (Air = 1)

Density : 1.0699 g/cm³ [15°C (59°F)]

Specific gravity : Not available.

Density : 8.93 lbs/gal

Solubility : Easily soluble in the following materials: cold water.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Lowest known value: 399.85°C (751.7°F) (Ethanediol).

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C (104°F)): 0.04 cm^2/s (4 cSt)

Pour point : -28.9°C

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.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Test	Species	Result	Dose
Ethanediol	-	Rat	LD50 Oral	4700 mg/kg
phosphoric acid	-	Rat	LD50 Oral	1.25 g/kg

Potential chronic health effects

Not available.

Irritation/Corrosion

Product/ingredient name	Test	Species	Result
Ethanediol	-	Rabbit	Eyes - Mild irritant -
	-	Rabbit	Eyes - Moderate irritant -
	-	Rabbit	Skin - Mild irritant -

Sensitization

Not available.

Mutagenicity

Section 11. Toxicological information

Not available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP
hydrochloric acid	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
hydrochloric acid	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
ethanediol; ethylene glycol	Category 2	Oral	Not determined

Aspiration hazard

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ethanediol; ethylene glycol	Acute LC50 1000000000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 13140000 µg/l Fresh water	Daphnia - Ceriodaphnia dubia	48 hours
	Acute LC50 41000 mg/l	Fish	96 hours
	Acute LC50 8050 mg/l	Fish	96 hours
	Acute LC50 >10000 mg/l	Fish	96 hours
	Acute LC50 49000 mg/l	Fish	96 hours
	Acute LC50 53000 mg/l	Fish	96 hours
	Chronic NOEC 11610000 µg/l Fresh water	Daphnia - Ceriodaphnia dubia	48 hours
	Chronic NOEC 6090000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
phosphoric acid; orthophosphoric acid	Acute EC50 >100 mg/l	Aquatic plants	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 98 to 106 mg/l	Fish	96 hours
hydrochloric acid	Acute LC50 240000 µg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
	Acute LC50 282000 µg/l Fresh water	Fish - Gambusia affinis - Adult	96 hours

Persistence and degradability

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ethanediol; ethylene glycol	-	-	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
ethanediol; ethylene glycol	-1.93	-	low

Section 13. Disposal considerations

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. 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	**Reportable quantity** 26237.1 lbs / 11911.6 kg [2941.1 gal / 11133.4 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	-	The environmentally hazardous substance mark may appear if required by other transportation regulations.

Section 14. Transport information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.

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

DEA List II Chemicals (Essential Chemicals) : Listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
hydrochloric acid	0.99 - 4.99	Yes.	-	-	-	-
Proprietary Ingredient #3 in CST-68421	0.99 - 4.99	Yes.	-	-	5000	-
Proprietary Ingredient #4 in CST-68421	0.09 - 0.99	Yes.	-	-	5000	-

SARA 304 RQ : 473781 lbs / 215096.6 kg [53110.1 gal / 201043.6 L]

SARA 311/312

Classification : Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
ethanediol; ethylene glycol	15 - 30	No.	No.	No.	Yes.	Yes.
phosphoric acid; orthophosphoric acid	0.99 - 4.99	No.	No.	No.	Yes.	No.
hydrochloric acid	0.99 - 4.99	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Ethanediol Hydrogen chloride Proprietary Ingredient #3 in CST-68421	107-21-1 7647-01-0 -	15 - 30 0.99 - 4.99 0.99 - 4.99
Supplier notification	Ethanediol Hydrogen chloride	107-21-1 7647-01-0	15 - 30 0.99 - 4.99

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 : The following components are listed: ETHYLENE GLYCOL; PHOSPHORIC ACID; HYDROGEN CHLORIDE

New York : The following components are listed: Ethylene glycol; Phosphoric acid; Hydrochloric acid

Section 15. Regulatory information

New Jersey : The following components are listed: ETHYLENE GLYCOL; 1,2-ETHANEDIOL; PHOSPHORIC ACID; HYDROGEN CHLORIDE; HYDROCHLORIC ACID

Pennsylvania : The following components are listed: 1,2-ETHANEDIOL; PHOSPHORIC ACID; HYDROCHLORIC ACID

California Prop. 65 : CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product is not known to the State of California to cause cancer, birth defects or other reproductive harm.

International lists

National inventory

Australia inventory (AICS) : All components are listed or exempted.

Canada inventory : All components are listed or exempted.

China inventory (IECSC) : All components are listed or exempted.

Europe inventory : All components are listed or exempted.

Japan inventory (ENCS) : All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC) : Not determined.

Philippines inventory (PICCS) : Not determined.

Korea inventory (KECI) : All components are listed or exempted.

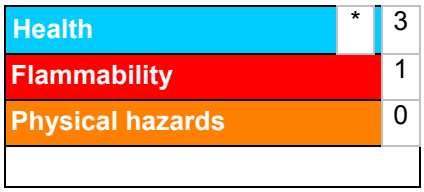
Taiwan inventory (TCSI) : Not determined.

United States inventory (TSCA 8b) : All components are listed or exempted.

Our REACH (pre-) registrations DO NOT cover the following:
1. The manufacture of these products by our company outside the EU unless covered by the Only Representative provisions, and
2. The importation of these products into Europe by other companies. Re-importation by other companies is not covered by our (pre-) registrations
Customers and other third parties importing and/or re-importing our products into Europe will need either:
- Their own (pre-) registration for substances contained in the imported product, or constituent monomers (imported above 1 tonne per year and >2% by weight) in the case of imported polymers, or
- In the case of importation only, to make use of the "Only Representative" provisions, if available.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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

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Section 16. Other information

Classification according to Directive 67/548/EEC [DSD] or Classification according to Directive 1999/45/EC [DPD]

Risk phrases : This product is not classified according to EU legislation.

Safety phrases : Not applicable.

History

Date of printing : 2015-07-24

Date of issue/Date of revision : 2015-07-24

Date of previous issue : 2015-05-12

Version : 1.01

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
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

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.