

1. Identification

DfcX i Wh' BU a Y WT-1000

Ch \Yf' a YUbg' cZ']XYbh]Z]WUh]cb'

Gmbcbm a g Aqueous solution of Polycarboxylic acids and phosphonic acid derivative

FYWc a a YbXYX' i gY' cZ'h \Y'W\Y a]WU''UbX' fYghf]Wh]cbg' cb' i gY'

 FYWc a a YbXYX' I gY Antiscalant / Dispersant
 I gYg'UX j]gYX'U [U]bgh No information available

AUb i ZUWh i fYf' 5XXfYgg

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

9 a Yf [YbWm'hY'Yd\cbY'bi a VYf'

Chemtrec 1-800-424-9300

2. Hazard(s) identification
Classification of the substance or mixture

Acute Toxicity (oral)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

Label elements

Hazard symbols



Signal word

DANGER

Hazard statements

 H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H315 Causes skin irritation
 H318 Causes serious eye damage.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

 P234 Keep only in original container.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a poison center/ doctor.
 P390 Absorb spillage to prevent material damage.

Contains

P406 Store in corrosive resistant container with a resistant inner liner.

*Phosphonic acid derivative

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3. Composition/information on ingredients**Mixtures**

*Polycarboxylic acid	**10-30%
CAS number: —	
Classification	
Met. Corr. 1 - H290	
Eye Irrit. 2A - H319	
Aquatic Chronic 3 - H412	

*Polycarboxylic acid	**10-30%
CAS number: —	
Classification	
Met. Corr. 1 - H290	
Skin Irrit. 2 - H315	
Eye Irrit. 2A - H319	

*Phosphonic acid derivative	**1-5%
CAS number: —	
Classification	
Met. Corr. 1 - H290	
Acute Tox. 4 - H302	
Eye Dam. 1 - H318	

The full text for all hazard statements is displayed in Section 16.

Confidentiality Claims 12362

Ingredient notes **The composition unit of measure is wt/wt.

Composition comments Aqueous solution containing polycarboxylic acids and a phosphonic acid derivative.

4. First-aid measures**Description of first aid measures**

Inhalation Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

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Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin Contact	Immediately remove contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least 30 minutes. Get medical attention if irritation persists after washing.
Eye contact	Immediately flush with plenty of water for up to 30 minutes. Remove any contact lenses and open eyelids widely. If irritation persist, seek medical attention and bring these instructions.

Most important symptoms and effects, both acute and delayed

Inhalation	No specific symptoms known. Upper respiratory irritation.
Ingestion	No specific symptoms known. May cause stomach pain or vomiting.
Skin contact	No specific symptoms known. Prolonged skin contact may cause redness and irritation.
Eye contact	May cause blurred vision and serious eye damage.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	The product is non-combustible. Extinguish with the following media: Dry chemicals, sand, dolomite etc. Carbon dioxide (CO ₂). Foam. Water spray, fog or mist.
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Special hazards arising from the substance or mixture

Flammability Class	No Uniform Fire Code noted.
Specific hazards	Fire creates: Toxic gases/vapors/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂). Oxides of the following substances: Nitrogen. Phosphorus. Sulfur. No unusual fire or explosion hazards noted.

Advice for firefighters

Protective actions during firefighting	Move containers from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Leave danger zone immediately. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Follow precautions for safe handling described in this safety data sheet. Wear protective clothing as described in Section 8 of this safety data sheet.
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Environmental precautions

Environmental precautions	Avoid release to the environment. To prevent release, place container with damaged side up.
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Methods and material for containment and cleaning up

Methods for cleaning up	Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb in vermiculite, dry sand or earth and place into containers. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Containers with collected spillage must be properly labeled with correct contents and hazard symbol.
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Reference to other sections For waste disposal, see section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Good personal hygiene procedures should be implemented.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in a tightly-closed, original container in a dry, cool, and well-ventilated place. Store at temperatures not exceeding 50°C /122°F. Protect from freezing and direct sunlight. If frozen: once thawed, agitate container vigorously to ensure the product is homogeneous. Store away from the following materials; alkalis, acids, cyanides, reducing agents, oxidizing materials and aluminum. Do not use containers made of Carbon steel. Keep separate from food, feeds, fertilizers, and other sensitive materials.

Storage class Corrosive storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Ingredient comments No exposure limits known for ingredient(s).

Exposure controls

Protective equipment



Appropriate engineering controls Provide adequate general and local exhaust ventilation.

Eye/face protection The following protection should be worn: Chemical splash goggles. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Full face visor or shield.

Hand protection Selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Wear protective gloves made of the following material: Neoprene. Nitrile rubber. Polyethylene. Polyvinyl chloride (PVC). It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear apron or protective clothing in case of contact.

Hygiene measures Provide eyewash station. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

Respiratory protection No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Liquid.

Color Light (or pale). Yellow.

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Odor	Slightly acidic odor
Odor threshold	Not available.
pH	pH (concentrated solution): <2
Melting point	< -5°C
Initial boiling point and range	100 - 102 @°C @ 760 mm Hg
Boiling Point:	
Freezing Point:	
Flash point	Not applicable.
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not applicable.
Vapor pressure	Not available.
Relative density	1.14 - 1.17 @ @ 20°C
Solubility(ies)	Miscible with water.
Partition coefficient	log Pow: < 0
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not available.
Viscosity	9 - 15 cSt @ 25°C
Oxidizing properties	Does not meet the criteria for classification as oxidizing.
Other information	Not available.

10. Stability and reactivity

Reactivity	Reacts with alkalis and generates heat.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Will not polymerize.
Conditions to avoid	Avoid excessive heat for prolonged periods of time.
Materials to avoid	Strong alkalis. Strong oxidizing agents. Strong reducing agents. Chemically-active metals.
Hazardous decomposition products	Fire creates: Toxic gases/vapors/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂). Oxides of the following substances: Nitrogen. Phosphorus. Sulfur.

11. Toxicological information**Information on toxicological effects****Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg) 2,400.0

Species Rat

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ATE oral (mg/kg)	11,111.11
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Based on available data the classification criteria are not met. OECD404 Not irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye damage. OECD 405
<u>Respiratory sensitization</u>	
Respiratory sensitization	No information available.
<u>Skin sensitization</u>	
Skin sensitization	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	No specific test data are available. Does not contain any substances known to be carcinogenic.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No specific test data are available. Does not contain any substances known to be toxic to reproduction.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Data lacking.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Data lacking.
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

12. Ecological information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC50, 96 hours: > 1000 mg/l, Scophthalmus maximus (juvenile Turbot) LC ₅₀ , 96 hours: >1000 mg/l, Fish LC50, 96 hours: 695 mg/L, Fathead minnow
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 1000 mg/l, Daphnia magna EC ₅₀ , 48 hours: >1000 mg/l, Daphnia magna LC50, 48 hours: 707 mg/L, C. dubia (daphnia)
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: > 100 mg/l, Marinewater algae IC ₅₀ , 72 hours: >100 mg/l, Algae
<u>Persistence and degradability</u>	
Persistence and degradability	The product is not readily biodegradable.
<u>Bioaccumulative potential</u>	
Bio-Accumulative Potential	The product does not contain any substances expected to be bioaccumulating.
Partition coefficient	log Pow: < 0

WT-1000**Mobility in soil**

Mobility The product is miscible with water. May spread in water systems.

Other adverse effects

Other adverse effects Not available.

13. Disposal considerations**Waste treatment methods**

General information When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Liquid material should be incinerated. Material absorbed onto sand or earth should be disposed of as solid waste in accordance with local regulations. Empty packaging may contain product residues and due consideration should be given prior to disposal.

14. Transport information**UN Number**

UN No. (TDG) 3265

UN No. (IMDG) 3265

UN No. (ICAO) 3265

UN No. (DOT) 3265

UN proper shipping name

Proper shipping name (TDG) CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (Contains polycarboxylic acids and a phosphonic acid.)

Proper shipping name (IMDG) CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (Contains polycarboxylic acids and a phosphonic acid.)

Proper shipping name (ICAO) CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (Contains polycarboxylic acids and a phosphonic acid.)

Proper shipping name (DOT) CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (Contains polycarboxylic acids and a phosphonic acid.)

Transport hazard class(es)

TDG class 8

TDG label(s) CORROSIVE

IMDG Class 8

ICAO class/division 8

Transport labels**Packing group**

TDG Packing Group III

IMDG packing group III

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ICAO packing group III

DOT packing group III

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

IMDG Code segregation group 1. Acids

EmS F-A, S-B

Classification Code (Adr) C3

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

None of the ingredients are listed.

CAA Accidental Release Prevention

None of the ingredients are listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed.

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed.

Massachusetts "Right To Know" List

The following ingredients are listed:

**Phosphonic acid derivative*

Rhode Island "Right To Know" List

The following ingredients are listed:

**Phosphonic acid derivative*

Minnesota "Right To Know" List

The following ingredients are listed:

**Phosphonic acid derivative*

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New Jersey "Right To Know" List

The following ingredients are listed:

**Phosphonic acid derivative*

Pennsylvania "Right To Know" List

The following ingredients are listed:

**Phosphonic acid derivative*

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None of the ingredients are listed.

Australia - AICS

All the ingredients are listed or exempt.

Japan - ENCS

All the ingredients are listed or exempt.

JAPAN- IHSL

Japan MITI

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines - PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

Taiwan -TCSI

16. Other information

General information

WT-1000 is certified by NSF International for use as an antiscalant in reverse osmosis plants. The maximum approved dose level is 5 mg/l in the feedwater. Classified as corrosive class 8 for transportation on the basis of its effect on mild steel and/or aluminium.

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Revision comments	14. Taiwanese inventory information added 14.1 Section 11 revised 14.2 WGK classification added to DE language version 14.3_ Added the word Dispersal in Section 1.2 Identified Uses
Issued by	lmt
Revision date	4/5/2018
Revision	14.2
Supersedes date	3/16/2018
SDS No.	10309
Hazard statements in full	H290 May be corrosive to metals. H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
NFPA - health hazard	Temporary incapacitation, injury. (2)
NFPA - flammability hazard	Will not burn. (0)
NFPA - instability hazard	Normally stable. (0)
NFPA - special hazard	N/A
ACA HMIS Health rating.	Moderate Hazard. (2)
ACA HMIS Flammability rating.	Will not burn. (0)
NSF/ANSI Standard 60	Reverse osmosis antiscalant. Maximum dose 5 mg/L
ACA HMIS Physical hazard rating.	Normally stable. (0)
ACA HMIS Personal protection rating.	D

For safety reasons it is IMPERATIVE that customers:-

1. Ensure that all those within their control who use the products are supplied with all relevant information contained within the Safety Data Sheet and Technical Bulletin concerning the applications for which the product is designed and any instructions and warnings contained therein.
2. Consult Anderson Chemical Company before using or supplying the product for any other applications. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.