

Issue Date 3/16/2018

Revision Date 10/13/2021

Version 14.5

1. Identification**Product Name** WT-1000**Other means of identification****Synonyms** Aqueous solution of Polycarboxylic acids and phosphonic acid derivative**Recommended use of the chemical and restrictions on use****Recommended Use** Antiscalant / Dispersant**Uses advised against** No information available**Manufacturer Address**

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

Emergency telephone number

Chemtrec 1-800-424-9300

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification (EC 1272/2008)****Physical hazards** Met. Corr. 1 - H290**Health hazards** Eye Dam. 1 - H318**Environmental hazards** Not Classified**2.2. Label elements****Hazard pictograms****Signal word** Danger**Hazard statements** H318 Causes serious eye damage.
H290 May be corrosive to metals.

WT-1000

Precautionary statements	<p>P234 Keep only in original packaging.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P390 Absorb spillage to prevent material damage.</p> <p>P406 Store in a corrosion-resistant container with a resistant inner liner.</p>
---------------------------------	--

Contains Phosphonic acid derivative

2.3. Other hazards**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

Polycarboxylic acid 10-30% CAS number: —
Classification Met. Corr. 1 - H290 Eye Irrit. 2 - H319 Aquatic Chronic 3 - H412
Polycarboxylic acid 10-30% CAS number: —
Classification Met. Corr. 1 - H290 Skin Irrit. 2 - H315 Eye Irrit. 2 - 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

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

SECTION 4: First aid measures**4.1. 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.
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.

WT-1000

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 persists, seek medical attention and bring these instructions.

4.2. 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.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is non-combustible. Extinguish with the following media: Dry chemicals, sand, dolomite etc. Carbon dioxide (CO₂). Foam. Water spray, fog or mist.

5.2. Special hazards arising from the substance or mixture

Specific hazards Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Oxides of the following substances: Nitrogen. Phosphorus. Sulphur. No unusual fire or explosion hazards noted.

5.3. 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.

SECTION 6: Accidental release measures

6.1. 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.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment. To prevent release, place container with damaged side up.

6.3. 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 labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

WT-1000

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

7.2. 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.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

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

8.2. 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Liquid.

Colour Light (or pale). Yellow.

Odour Slightly acidic odour

Odour threshold Not available.

pH pH (concentrated solution): <2

WT-1000

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.
Vapour 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
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information Not available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity Reacts with alkalis and generates heat.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong alkalis. Strong oxidising agents. Strong reducing agents. Chemically-active metals.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Oxides of the following substances: Nitrogen. Phosphorus. Sulphur.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity - oral**

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

WT-1000

Species	Rat
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 sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	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.

SECTION 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.

12.1. Toxicity**Acute aquatic toxicity**

Acute toxicity - fish LC50, 96 hours: > 1000 mg/l, Scophthalmus maximus (juvenile Turbot)
 LC₅₀, 96 hours: >1000 mg/l, Fish
 LC50, 96 hours: 695 mg/L, Fathead minnow

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 1000 mg/l, Daphnia magna
 EC₅₀, 48 hours: >1000 mg/l, Daphnia magna
 LC50, 48 hours: 707 mg/L, C. dubia (daphnia)

Acute toxicity - aquatic plants IC₅₀, 72 hours: > 100 mg/l, Marinewater algae
 IC₅₀, 72 hours: >100 mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

WT-1000

Partition coefficient log Pow: < 0

12.4. Mobility in soil

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

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not available.

SECTION 13: Disposal considerations**13.1. 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.

SECTION 14: Transport information**14.1. UN number**

UN No. (ADR/RID) 3265

UN No. (IMDG) 3265

UN No. (ICAO) 3265

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

ADR/RID class 8

IMDG class 8

ICAO class/division 8

Transport labels**14.4. Packing group**

WT-1000

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

IMDG Code segregation group 1. Acids

EmS F-A, S-B

Emergency Action Code 2X

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Classification Code (Adr) C3

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

Polymeric materials are exempt under Article II of REACH (EC No 1907/2006). Currently Chemical Safety Assessments or Exposure Scenarios are not required.

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

WT-1000**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

All the ingredients are listed or exempt.

SECTION 16: Other information

General information WT-1000 is certified by UL LLC 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.

**NSF/ANSI Standard 60
Drinking Water Treatment Additives 68GA** Reverse osmosis antiscalant. Maximum dose 5 mg/L

Revision comments	Updated SDS, no substantial changes.
Issued by	lmt
Revision date	10/13/2021
Revision	14.5
Supersedes date	09/04/2020
SDS number	10309
Hazard statements in full	H290 May be corrosive to metals. H318 Causes serious eye damage.

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.