

Midmark Corporation
60 Vista Drive
Versailles, OH 45380

Safety Data Sheet (SDS)
OSHA HazCom Standard 29 CFR 1910.1200.

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Enzymatic Ultrasonic Cleaner

Product Number: DP5500

Contact:

MIDMARK CORPORATION
60 VISTA DRIVE
VERSAILLES, OH 45380

Tel: 800-643-6275

Fax: 937-526-8285 (Sterilizer Op Group)

EMERGENCY TELEPHONE NUMBERS

24 HOURS A DAY

INTERNATIONAL

8 AM TO 4:30 PM – CENTRAL TIME

CHEMTREC 800-424-9300

CHEMTREC 703-527-3887

262-255-9500

SECTION 2 – HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

Causes serious eye damage.



Harmful if swallowed.

Causes skin irritation.

May cause an allergic reaction.

Label elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS05

Signal word: Danger

Hazard-determining components of labeling:

Tetrasodium ethylenediaminetetraacetate

Hazard statements

Harmful if swallowed.
 Causes skin irritation.
 Causes serious eye damage.
 May cause an allergic skin reaction.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Wash thoroughly after handling.
 Contaminated work clothing should not be allowed out of the workplace.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Take off contaminated clothing and wash before reuse.
 IF SWALLOWED: Rinse mouth. Do not induce vomiting. Call a POISON CENTER/doctor if you feel unwell.
 IF ON SKIN: Wash with plenty of water.
 If skin irritation or rash occurs: Get medical advice/attention.
 If any symptoms continue call a POISON CENTER/doctor.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:**NFPA ratings (scale 0 - 4)**

Health = 2
 Fire = 0
 Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 2
 Fire = 0
 Reactivity = 0

SECTION 3 - COMPOSITION /INFORMATION ON INGREDIENTS**Chemical characterization: Mixtures**

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous Components:

CAS No.	Description	GHS-US classification
CAS: 7732-18-5	Water	Hazard Classification: None Risk Phrase: None
CAS: 7758-29-4	Pentasodium triphosphate	⚠ Skin Irrit. 2, H315 ⚠ Eye Irrit. 2, H319
CAS: 64-02-8	Tetrasodium ethylenediaminetetraacetate	⚠ Eye Dam. 1, H318 ⚠ Acute Tox. 4, H302
CAS: 497-19-8	Sodium carbonate	⚠ Eye Irrit. 2, H319
CAS: NA	Surfactants	⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319
CAS: 9014-01-1	Bacterial protease	⚠ Resp Irrit. 1, H334

SECTION 4 - FIRST AID INFORMATION

Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident.

After inhalation:

If having difficulty breathing, contact emergency personnel immediately

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness, place patient securely on side position for transportation.

After skin contact:

Remove contaminated clothing. Wash clothing before reuse.

Immediately wash with water and soap and rinse thoroughly.

If irritation occurs consult a doctor.

After eye contact:

Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes.

Rinse opened eye for several minutes under running water. Seek medical treatment.

After swallowing:

Do not induce vomiting and call for medical help.

Never give anything by mouth to an unconscious person

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Information for doctor:

This product contains sodium carbonate at low concentrations. While no adverse complications are expected, consider endoscopy in all suspected cases of poisoning. Perform blood analysis to determine if dehydration, acidosis, or other electrolyte imbalances occurred.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5 - FIRE-FIGHTING INFORMATION

Extinguishing media

Suitable extinguishing agents:

CO2 or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

No further relevant information available.

Advice for firefighters

Protective equipment:

Full protective clothing and self-contained breathing apparatus should be worn.

SECTION 6 - ACCIDENTAL RELEASE INFORMATION

Personal precautions, protective equipment and emergency procedures:

Refer to section 8

Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 13.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with skin, eyes and clothing

Information about protection against explosions and fires:

No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Keep container tightly closed.

Store in a well-ventilated place.

Store in a cool, dry place.

Information about storage in one common storage facility:

Not required.

Further information about storage conditions:

Use plastics or stainless steel for suitable packaging.

Precautions for safe handling:

Avoid contact with skin, eyes and clothing

Specific end use(s)

No further relevant information available.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical systems:

No further data; see section 7.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from tobacco products.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

Breathing equipment: Not required.

Protection of hands:



Protective gloves



Protective goggles

The glove material must be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

Material of gloves

The selection of the suitable gloves depends on the material, and marks of quality, and varies from manufacturer to manufacturer.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break-through time must be determined and observed by the manufacturer of the protective gloves.

Eye protection:

(Continued of page 4)

Have a safety shower and eyewash fountain readily available in the immediate work area

Tightly sealed goggles

Body protection: Protective work clothing**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties****General Information****Appearance:**

Form: liquid

Color: Red which can fade

Odor: No significant odor

Odor threshold: Not determined

pH-value @ 20° C (68° F): 9.5

Change in condition:

Melting point/Melting range: Not determined.

Flash point: Not applicable

Boiling point/Boiling range: 100° C (212° F)

Flammability (solid, gaseous): Not determined**Ignition temperature:****Auto igniting:** Product is not self igniting.

Decomposition temperature: Not determined.

Danger of explosion: Product does not present an explosion hazard.**Explosion limits:**

Lower: Not determined

Upper: Not determined

Vapor pressure: Not applicable**Relative density** Not determined**Density:** Not determined**Vapor density** Not applicable**Evaporation rate** Not applicable**Partition coefficient (n-octanol/water):** Not determined**Viscosity:****Dynamic:** Not applicable**Kinematic:** Not applicable**Solvent content:****Organic solvents:** 0.0%**Specific Gravity (H2)=1** 1.04 ± 0.02**Other information****SECTION 10 – STABILITY AND REACTIVITY****Reactivity** No further relevant information available.**Chemical stability** Product is stable under normal conditions.**Thermal decomposition / conditions to be avoided:**

Carbon dioxide and carbon monoxide may form when heated to decomposition

Conditions to avoid:

Avoid strong oxidizing agents, aluminum, heat, moisture and other incompatible materials as stated above.

Incompatible materials:

Avoid oxidizing agents and acids. Avoid contact with bare aluminum. Flammable hydrogen gas may be produced in contact with bare aluminum. Sodium carbonate reacts with fluorine, aluminum, phosphorous pentoxide, sulfuric acid, zinc, lithium, moisture, calcium hydroxide and 2,4,6-trinitrotoluene and reacts violently with acid to form carbon dioxide.

Hazardous decomposition products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD/LC50 values that are relevant for classification

Pentasodium triphosphate (CAS: 7758-29-4)

LD50 oral rate	3900 mg/kg (rat)
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Tetrasodium ethylenediaminetetraacetate (CAS: 64-02-8)

LD50 oral rate	>2000 mg/kg (rat)
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Sodium carbonate (CAS: 497-19-8)

LD50 oral rate	4090 mg/kg (rat)
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Bacterial protease (CAS: 9014-01-1)

LD50 oral rate	2000 mg/kg (rat)
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Primary irritant effect:

On the skin:

Irritant to skin and mucous membranes.

On the eye:

Strong irritant with the danger of severe eye injury.

Sensitization:

Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA (Occupational Safety & Health Administration)

None of the ingredients is listed.

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity:

Toxic to aquatic life

Persistence and degradability

No further relevant information available.

Bioaccumulative potential

No further relevant information available.

Mobility in soil

No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 2 (Self-assessment):

hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment

PBT:

Not applicable

vPvB:

Not applicable

Other adverse effects

No further relevant information available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste disposal methods

Waste disposal recommendation Observe all federal, state and local environmental regulations when disposing of this material.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Un-cleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary, with cleansing agents.

SECTION 14 – TRANSPORT INFORMATION

UN-Number

DOT, ADR, ADN, IMDG, IATA

Non-Regulated Material

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA

Non-Regulated Material

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class

Non-Regulated Material

Packing group

DOT, ADR, IMDG, IATA

Non-Regulated Material

Environmental hazards:

Marine pollutant:

No

Special precautions for user

Not applicable

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

Not applicable

UN "Model Regulation":

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SECTION 15 – REGULATORY INFORMATION

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

Sara

Section 355 (extremely hazardous substance)

None of the ingredients is listed.

Section 313 (specific toxic chemical listings)

CAS: 7758-29-4

Pentasodium triphosphate

TSCA (Toxic Substances Control Act):

CAS: 7758-29-4

Pentasodium triphosphate

CAS: 64-02-8

Tetrasodium ethylenediaminetetraacetate

CAS: 497-19-8

Sodium carbonate

CAS: 9014-01-1

Bacterial protease

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

GHS label elements

The product is classified and labeled according to the Global Harmonized System (GHS).

Hazard pictograms

GHS07

Signal word: Danger

National Regulations

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

State Right to Know

CAS No.	Description	GHS-US classification
CAS: 7732-18-5	Water	Hazard Classification: None Risk Phrases: None
CAS: 7758-29-4	Pentasodium triphosphate	<div>⚠ Skin Irrit. 2, H315</div> <div>⚠ Eye Irrit. 2, H319</div>
CAS: 64-02-8	Tetrasodium ethylenediaminetetraacetate	<div>⚠ Eye Dam. 1, H318</div> <div>⚠ Acute Tox. 4, H302</div>
CAS: 497-19-8	Sodium carbonate	⚠ Eye Irrit. 2, H319
CAS: NA	Surfactants	⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319
CAS: 9014-01-1	Bacterial protease	⚠ Resp Irrit. 1, H334

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16 – OTHER INFORMATION**Abbreviations and acronyms:**

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG:	International Maritime Code for Dangerous Goods
DOT:	US Department of Transportation
IATA:	International Air Transport Association
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
LD50:	Lethal dose, 50 percent
Acute Tox. 4:	Acute toxicity, Hazard Category 4
Skin Irrit. 2:	Skin corrosion/irritation
Eye Dam. 1:	Serious eye damage/eye irritation
Eye Irrit. 2:	Severe skin irritation /eye irritation
Eye Irrit. 2A:	Severe skin irritation/eye irritation

Revision Summary Replaces Rev 6 issued on 25-June-2018. Complies with GHS OSHA requirements.

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