

# Diversified Chemical Products, Inc. 60 Germay Drive Wilmington, Del. 19804

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

# **SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION**

Product Name: Tartar & Stain Remover/Denture Cleaner

**Product Number: DP3100** 

Contact:

DIVERSIFIED CHEMICAL PRODUCTS, INC.

**60 GERMAY DRIVE** 

WILMINGTON, DEL. 19804

Email: www.diversifiedchemical.com

**Tel**: 302-656-5293 **Fax**: 302-656-1533

# **SECTION 2 - HAZARD(S) INDENTIFICATION**

Classification of the substance or mixture



Corrosion

Causes serious eye damage.



Harmful if swallowed.

Causes skin irritation.

Label elements

**GHS** label elements

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

Hazard pictograms





GHS05

H319

Signal word: Danger

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Hazard statements (Continued of page 1)

Causes severe skin burns and eye damage.

#### **Precautionary statements**

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

If on skin: Wash with plenty of water.

If skin irritation occurs: Get medical advice/attention.

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 it before reuse.

# 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	% Range GHS-US c	lassification
CAS: 77-92-9	Citric acid	80-95% <b>(1)</b> Eye Irrit. 2, H3	319
CAS: 5329-14-6	Sulfamic acid	10-20% ♦ Skin burn, H3 ♦ Eye damage, ♦ Aquatic Chron	H314
CAS: NA	Surfactants	<1-5%	315; Eye Irrit. 2A,
CAS: 532-32-1	Sodium Benzoate	<1-5%	

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#### **SECTION 4 - FIRST AID INFORMATION**

#### **Description of first aid measures**

### **General information:**

Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.

## After inhalation:

Take affected persons into fresh air and keep quiet.

If having difficulty breathing, contact emergency personnel immediately.

In case of unconsciousness place patient stably in 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.

Seek medical treatment.

#### After swallowina:

Give large amounts of water.

Do not induce vomiting and call for medical help.

# Most important symptoms and effects, both acute and delayed

No further relevant information available.

# Information for doctor:

No further relevant information available.

### 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:

Use firefighting measures that suit the environment.

# Special hazards arising from the substance or mixture

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. Fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.

#### 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.

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# **SECTION 7 - HANDLING AND STORAGE**

## Precautions for safe handling:

Avoid contact with skin, eyes and clothing.

# Information about protection against explosions and fires:

Avoid dust formation and control ignition sources.

# 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.

Do not store in aluminum, carbon steel, copper, copper alloys, fiberglass, brass, zinc, nickel or galvanized containers.

# Information about storage in one common storage facility:

Not required.

# Further information about storage conditions:

Use PET, HDPE and/or related plastics for suitable packaging.

#### 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.

## **Control parameters**

## Components with occupational exposure limits:

Federal guidelines suggest to treat the ingredient in this product as a nuisance dust, as no product specific guidelines have been issued for exposure.

Particulates Not Otherwise Regulated: OSHA (PEL/TWA): 10 mg/m3 (total dust); 5 mg/mg3 (resp fraction)

#### **Additional information:**

The lists that were valid during the creation were used as basis.

#### **Exposure controls**

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Where acceptable concentrations cannot be maintained by general mechanical ventilation, local exhaust ventilation is recommended.

# 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 eyes and skin.

#### **Breathing equipment:** Not required

For nuisance exposure use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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**Protection of hands:** (Continued of page 4)



**Protective Gloves** 



## Protective goggles

The glove material should 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. 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 should be determined and observed by the manufacturer of the protective gloves.

### Eye protection:

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: Powder Color (dry): White to yellow

Odor: No significant odor Color (in solution): Yellow

pH-value @  $20^{\circ}$  C ( $68^{\circ}$  F):  $2.0 \pm 0.5$  Odor threshold: Not determined

Change in condition: Flash point: Not applicable

Melting point/Melting range: Not determined 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 determined

Solubility in / Miscibility with Water: >10%

Partition coefficient (n-octanol/water): Not determined

Viscosity:

Dynamic: Not applicable Kinematic: Not applicable

Other information No further relevant information available.

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# **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:

No decomposition if used according to specifications.

#### Conditions to avoid:

Avoid heat, moisture and other incompatible materials as stated above.

# Incompatible materials:

Metal nitrates (potentially explosive reaction), alkali carbonates and bicarbonates, potassium tartrate, strong oxidizers, nitric acid and chlorine. Will corrode copper, zinc, aluminum and their alloys. Solutions of this material are strong acids and react violently with bases.

# Hazardous decomposition products:

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

Sulfamic acid may emit ammonia, oxides of sulfur, oxides of nitrogen and oxides of carbon.

SECTION 11 – TOXICOLOGICAL INFORMATION					
Information on toxicological effects					
Acute toxicity					
LD/LC50 values that are relevant for classification					
Citric acid (CAS: 77-92-9)					
5040 mg/kg (mouse)					
Sulfamic acid (CAS: 5329-14-6)					
3160 mg/kg (rat)					
Surfactants					
1080-1980 mg/kg (rat)					
Sodium Benzoate (CAS: 532-32-1)					
>2000 mg/kg (rat)					

# **Primary irritant effect:**

**On the skin:** Strong caustic effect on skin and mucous membranes.

On the eye: Corrosive effect.

#### Additional toxicological information:

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

Danger

Corrosive

Swallowing will lead to a corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**Carcinogenic categories** 

IARC (International Agency for Research on Cancer)
 NTP (National Toxicology Program)
 OSHA-Ca (Occupational Safety & Health Administration)
 None of the ingredients is listed.
 None of the ingredients is listed.

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**SECTION 12 – ECOLOGICAL INFORMATION** 

**Toxicity** 

**Aquatic toxicity:** Toxic to aquatic life.

Persistence and degradability

Bioaccumulative potential

Mobility in soil

No further relevant information available.

No further relevant information available.

No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): Hazardous for water. Must not reach bodies of water or drainage ditch undiluted or un-neutralized.

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 UN3260
ADR, IMDG, IATA UN2967

UN proper shipping name

DOT Corrosive solid, acidic, inorganic, n.o.s. (sulfamic acid)

ADR UN2967 sulfamic acid, mixture IMDG, IATA SULPHAMIC ACID, mixture

Transport hazard class(es)

DOT

Class 8 Corrosive substance

Label

IMDG, IATA



Class 8 (C2) Corrosive substance

Label 8

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Class 8 Corrosive substance

Label 8

Packing group

DOT, ADR, IMDG, IATA Non-Regulated Material

Environmental hazards:

Marine pollutant:

Special precautions for user Warning: Corrosive substances

Danger code (Kemler):80EMS Number:F-A, S-BSegregation groups:Acids

Transport in bulk according to Annex II of MARPOL 73/78

and the IBC Code:

Transport/Additional information:

DOT

Quantity limitations On passenger aircraft/rail: 25 kg

On cargo aircraft only: 100 kg

Not applicable

ADR

Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g

**IMDG** 

Limited quantities (LQ) 5 kg
Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g

UN "Model Regulation": UN2967, Sulfamic acid, mixture, 8, III

#### **SECTION 15 – REGULATORY INFORMATION**

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

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 311/312 (Hazard Classes):

Acute health hazard

TSCA (Toxic Substances Control Act):

All ingredients are listed.

**Proposition 65** 

Chemicals known to cause cancer:

Chemicals known to cause reproductive toxicity for females:
Chemicals known to cause reproductive toxicity for males:
Chemicals known to cause reproductive toxicity for males:
Chemicals known to cause developmental toxicity:

None of the ingredients is listed.
None of the ingredients is listed.

Carcinogenic categories

(Continued of page 8)

EPA (Environmental Protection Agency)

TLV (Threshold Limit Value established by ACGIH)

NIOSH-Ca (National Institute for Occupational Safety and

Health)

**GHS** label elements

None of the ingredients is listed. None of the ingredients is listed. None of the ingredients is listed.

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

# Hazard pictograms



GHS05



Signal word: Danger *Hazard statements* 

Causes serious skin burn and eye damage.

# **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

IF INHALED: Move victim to fresh air and keep at rest in a position comfortable for breathing.

Wash contaminated clothing before reuse.

If eye irritation persists: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Immediately call a POISON CENTER/doctor.

# **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	% Range	GHS-US classification
CAS: 77-92-9	Citric acid	75-95%	◆ Eye Irrit. 2, H319
CAS: 5329-14-6	Sulfamic acid	10-20%	<ul> <li>♦ Skin burn, H314</li> <li>♦ Eye damage, H314</li> <li>↑ Aquatic Chronic 3, H401</li> </ul>
CAS: NA	Surfactants	<1-5%	♦ Skin Irrit. 2, H315; Eye Irrit. 2A, H319
CAS: 532-32-1	Sodium Benzoate	<1-5%	<ul><li>♦ Skin Irrit. 2, H315</li><li>♦ Eye Irrit. 2, H319</li></ul>

All ingredients are listed.

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)

NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent Skin dam: Skin corrosion/irritation

Eye dam: Serious eye damage/eye irritation

Aquatic Chronic 3: Harmful to aquatic life with long lasting effects

Revision Summary Replaces Rev 7 issued on 19-August-2015. Complies with GHS OSHA requirements.

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