



Safety Data Sheet

Safety Data Sheet (in compliance with 29 CFR Part 1200 and 29 CFR Part 1020)

Document Number: SDS 025.003
Date Revised: 03/05/24

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier:

Trade Name (as labeled): Alpha-Dent® Metal Conditioner
Part/Item Number: 543-0100-002

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:

Recommended Use: Metal Conditioner
Restrictions on Use: For Professional Use Only

1.3 Details of the Supplier of the Safety Data Sheet:

Manufacturer/Supplier Name: Dental Technologies, Inc.
Manufacturer/Supplier Address: 6901 N. Hamlin Avenue
Lincolnwood, IL 60712
Manufacturer/Supplier Telephone Number: 800-835-0885 or 847-677-5500 (Product Information)
Email address: info@dentaltech.com

1.4 Emergency Telephone Number:

Emergency Contact Telephone Number: Chemtrec
800-424-9300 (USA)
001-703-527-3887 (Outside USA)

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

GHS Classification:		
Health	Environmental	Physical
Skin Irritant Category 2 (H315) Skin Sensitizer Category 1 (H317) Specific Target Organ Toxicity, Single Exposure; Respiratory Tract Category 3 (H335)	Acute Aquatic Toxicity Category 3 (H402)	Flammable Liquid Category 2 (H225)

2.2 Label Elements:



Signal Word: Danger, Warning

Hazard Phrases	Precautionary Phrases
H315 Causes skin irritation H317 May cause an allergic skin reaction H335 May cause respiratory irritation H402 Harmful to aquatic life H225 Highly Flammable liquid and vapor	P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse SKIN with water/shower. P304+P340+P312 IF INHALED Remove person to fresh air and keep comfortable for breathing. P333+P313 IF SKIN irritation or rash occurs: Get medical advice/attention. P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. P403+P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/container to an approved waste disposal plant. P302+P352 IF ON SKIN: wash with plenty of water. P321 Specific treatment in Section 4 of this document. P332+P313 IF SKIN irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing. P363 Wash contaminated clothing before reuse. P312 Call a POISON CENTER or doctor if you feel unwell. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other Hazards: None known.

2.3 Unknown acute toxicity (GHS-US): No data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture:

Hazardous Components	C.A.S. #	Classification	WT %
mono-2-(Methacryloyloxy)ethyl phthalate	27697-00-3	Serious eye damage, Category 1, H318 Skin irritation, Category 2, H315 Specific target organ toxicity – single exposure, Category 3, H335	1-10%

Methyl Methacrylate	80-62-6	Flammable Liquid, Category 2, H225 Skin Irritant, Category 2, H315 Skin Sensitizer, Category 1, H317 Specific target organ toxicity – single exposure, Category 3, H335 Acute aquatic toxicity, Category 3, H402	75-100%
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The exact concentration is being withheld as a trade secret.

Refer to Section 16 for the full text of the GHS Classifications.

4. FIRST AID MEASURES

4.1 Description of First Aid Measures:

Eye	Immediately flush victim's eyes with large quantities of water for 15 minutes, holding the eyelids apart. Have eyes examined and tested by medical personnel.
Skin	Wash skin with soap and water. If irritation persists, consult a physician.
Inhalation	Move victim to fresh air. Give artificial respirator if breathing has stopped. Seek medical attention.
Ingestion	Rinse out mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious or drowsy person. Get immediate medical attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed:

Inhalation of vapor or mist can cause irritation of the nose and throat. Repeated exposure can cause headache, nausea, drowsiness, and unconsciousness. Eye contact may cause irritation and burning. Skin contact can cause moderate irritation while repeated exposure can cause allergic reaction.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed:

Not applicable.

Note to Physicians (Treatment, Testing, and Monitoring): Treat Symptomatically.

5. FIRE-FIGHTING MEASURES





5.1 Extinguishing Media: Foam, carbon dioxide, dry chemicals, water spray.

5.2 Special Hazards Arising from the Substance or Mixture:

Uncontrolled polymerization may produce a rapid release of energy with the potential for an explosion of unvented closed containers. Vapors are heavier than air and may travel to sources of ignition.

5.3 Advice for Fire-Fighters:



Fire Fighting Procedures:	General: Evacuate all personnel; use protective equipment for firefighting. Fight advanced fires from a protected location. Use water spray to cool containers exposed to fire.
Precautions for Fire Fighters:	Firefighters should wear full emergency equipment and approved positive pressure self-containing breathing apparatus.

Recommended Protective Equipment for Fire Fighters:			
EYES/FACE	HANDS	RESPIRATORY	THERMAL
			

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid contact with skin, eyes or clothing. Wear appropriate protective clothing as described in Section 8.

Recommended Personal Protective Equipment for Containment and Clean-up:			
EYES/FACE	HANDS	RESPIRATORY	SKIN
			

6.2 Environmental Precautions:

Prevent entry into sewers and waterways. Report releases as required by local, state, and national authorities. Avoid contact with skin, eyes or clothing. Wear appropriate protective clothing as described in Section 8.

6.3 Methods and Material for Containment and Cleaning up:

Clean up with absorbent material and remove residue with alcohol damp wipe. Rinse spill area with water.

6.4 Reference to Other Sections:

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Avoid contact with the eyes, skin and clothing. Wear protective clothing and equipment as described in Section 8. Wash thoroughly after handling. See product labeling.

7.2 Conditions for Safe Storage, Including Any Incompatibilities:

Store in a cool-dry place. See product labeling.

7.3 Specific End Use (s): Metal conditioner.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters: Not determined.

8.2 Exposure Controls:

Individual Protection Measures (PPE)



Specific Eye/face Protection: Chemical safety goggles should be worn if needed to avoid eye contact.

Specific Skin Protection: Wear impervious gloves such as natural rubber or neoprene if needed to avoid skin contact. Consult glove supplier for thickness and breakthrough times.

Specific Respiratory Protection: None should be needed under normal use. Good ventilation should be sufficient.

Specific Thermal Protection: None Required.

Recommended Personal Protective Equipment

EYES/FACE	HANDS	RESPIRATORY	SKIN
			

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

Physical state:	Liquid	Relative density:	0.92 – 0.95 g/mL
Appearance:	Clear Liquid	Explosive limits:	Not Determined
Odor:	Not Determined	Vapor pressure (mmHg):	Not Determined
Odor threshold:	Not Determined	Vapor density:	Not Determined
pH:	Not Determined	Solubility(ies):	Soluble in water; Miscible with most organic solvents
Melting/freezing point:	Not Determined	Partition coefficient: n-octanol/water:	Not Determined
Initial boiling point and boiling range:	Not Determined	Auto-ignition temperature:	Not Determined
Flash point:	9°C	Decomposition temperature:	Not Determined
Evaporation rate:	Not Determined	Viscosity:	Not Determined
Flammability (solid, gas):	Flammable liquid	Oxidizing Properties:	Not Determined
Explosive Properties:	Not Determined		

9.2 Other Information: None available

10. STABILITY AND REACTIVITY

10.1 Reactivity: Highly flammable liquid and vapor.

10.2 Chemical Stability: Stable at standard temperature and pressure

10.3 Possibility of Hazardous Reactions: No dangerous reactions known under normal conditions of use.

10.4 Conditions to Avoid: Keep away from heat, sparks, flames, and other sources of ignition.

10.5 Incompatible materials: High temperatures, visible sight sources, strong oxidizing agents. Keep away from UV light and open flames.

10.6 Hazardous Decomposition Products: Oxides of carbon when burned.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

STOT (SE) Respiratory Tract 3, H335 mono-2-(Methacryloyloxy)ethyl phthalate	
LD50 inhalation – rat – 4 h	>12.2 mg/L
LD50 oral – rat	>2,000 mg/kg
LD50 dermal – rabbit	>10,000 mg/kg

STOT (SE) Respiratory Tract 3, H335 Methyl Methacrylate	
LD50 inhalation – rat – 4 h	78,000 mg/m ³
LD50 oral – rat	7,900 mg/kg
LD50 dermal – rabbit – male	>5,000 mg/kg

12. ECOLOGICAL INFORMATION

12.1 Toxicity: Not Determined.

Acute Aquatic Tox. 3, H402 Methyl Methacrylate:

Static test LC50 – *Lepomis macrochirus* – 283mg/L – 96h

Flow through test EC50 – *Daphnia magna* – 69mg/L – 48h

Static test EC50 – *Pseuokirchneriella subcapitata* - >110mg/L – 72h

12.2 Persistence and Degradability: Not Determined.

Methyl Methacrylate:

Biodegradability: aerobic – exposure time 14d; Result: 94% - readily biodegradable (OECD Test Guideline 301C)

12.3 Bio-accumulative Potential: Not Determined.

12.4 Mobility in Soil: Not Determined.

12.5 Results of PBT and vPvB Assessment: Not Determined.

12.6 Other Adverse Effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Regulations: Dispose in accordance with all national and local regulations.

Properties (Physical/Chemical) Affecting Disposal: None currently know.

Waste Treatment Recommendations: Dispose in accordance with national and local regulations.

14. TRANSPORT INFORMATION

14.1. UN number

UN1993

14.2. UN proper shipping name

Flammable Liquids, N.O.S.

14.3. Transport hazard class(es)

3 (Flammable)

14.4. Packing group

II

14.5. Environmental hazards

Harmful to aquatic life

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture: Please refer to Medical Device Directive 93/42/EEC.

15.2 Chemical Safety Assessment: None required.

16. OTHER INFORMATION

HMIS Hazard Rating:

Health: 1	Flammability: 3	Reactivity: 1
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Full text of Classification abbreviations used in Section 2 and 3:

H315	Skin Irritant Category 2
H317	Skin Sensitizer Category 1
H335	Specific Target Organ Toxicity, Single Exposure; Respiratory Tract Category 3
H402	Acute Aquatic Toxicity Category 3
H225	Flammable Liquid Category 2
H318	Serious Eye Damage Category 1

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Data Sources: US NLM ChemID Plus and HSDB, Substance SDS for components, IUCLID Dataset EU Chemical Bureau, ESIS, Country websites for occupational exposure limits.

Manufacturer disclaimer:
FOR DENTAL USE ONLY. The information and recommendations are taken from sources (raw material MSDS(s), SDS(s) and manufacturers knowledge) believed to be accurate; however, the manufacturer makes no warranty with respect to the accuracy of the information or the suitability of the recommendation and assumes no liability to any user thereof. Each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.