DENTSPLY
RINN

Safety Data Sheet

Safety Data Sheet (in compliance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 453/2010), US 29CFR1910.1200, Canada Hazardous Products Regulation

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

1.1 Product Identifier:

Trade Name (as labeled):	**Rinn® Rapid Process Fixer**
Part/Item Number:	**520604; 520600R**

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

Recommended Use:	**Professional dental photographic processing solution (fixer).**
Restrictions on Use:	**For Professional Use Only**

1.3 Details of the Supplier of the Safety Data Sheet:

Supplier Name:	**DENTSPLY RINN**
Supplier Address:	**1301 Smile Way** **York, PA 17404**
Supplier Telephone Number:	**(800) 531-3481 (Product Information)**
Email address:	**ElginIL-CustService@dentsply.com**

1.4 Emergency Transportation Telephone Number:

Emergency Transportation Contact Telephone Number:	**800-424-9300 Chemtrec**

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

GHS Classification:

Health	Environmental	Physical
Eye Damage Category 1 (H318)	Not hazardous	Not hazardous

2.2 Label Elements:

Signal Word: Danger!
Contains: Acetic acid and Sodium metabisulfite

Hazard Phrases	Precautionary Phrases
H318 Causes serious eye damage.	P280 Wear eye 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 or doctor.

2.3 Other Hazards: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture:

Hazardous Components	C.A.S. #	EINECS # / REACH Registration #	Classification	WT %
Ammonium Thiosulfate	7783-18-8	231-982-0	Not Applicable	20-25
Acetic Acid	64-19-7	200-580-7	Flam Liq 3 (H226), Skin Corr 1A (H314), Eye Dam 1 (H318)	1-3
Sodium Metabisulfite	7681-57-4	231-673-0	Acute Tox 4 (H302), Eye Dam 1	1-3

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 eyes with plenty of water for at least 20 minutes. Get immediate medical attention.
Skin	Wash skin with soap and water. Seek medical attention if irritation develops or persists. Launder contaminated clothing before re-use.
Inhalation	Remove victim to fresh air. Get medical attention if irritation develops.
Ingestion	Rinse out mouth with water. Do not induce vomiting unless directed to do so by a medical professional. Get medical attention if you feel unwell.
4.2 Most Important Symptoms and Effects, Both Acute and Delayed:	
May cause serious eye damage and corneal injury. Prolonged skin contact may cause mild skin irritation.	
4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed:	
Immediate medical attention is required for eye contact.	

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media:	Use media appropriate for the surrounding area.
5.2 Special Hazards Arising from the Substance or Mixture:	
Mixture contains a strong reducing agent. Dried product residue can act as a reducing agent. Hazardous decomposition may yield ammonia, chloramines and oxides of sulfur.	
5.3 Advice for Fire-Fighters:	
Fire Fighting Procedures/Precautions for Fire Fighters:	Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus. Use water spray to cool fire-exposed containers. Use water to cool exposed containers and structures.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:
Evacuate spill area and keep unprotected personnel away. Ventilate area. Wear appropriate protective clothing as described in Section 8. Avoid contact with skin, eyes or clothing.
6.2 Environmental Precautions:
Report releases as required by local and national authorities.
6.3 Methods and Material for Containment and Cleaning up:
Stop leak if it can be done safely. Absorb or cover with dry earth, sand or other non -combustible material and transfer to containers. For large spills: Dike far ahead of liquid spill for later disposal.
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 Handing:
Avoid contact with the eyes, skin and clothing. Avoid breathing mists. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Empty containers retain product residues and contaminants that and can be hazardous. Follow all SDS precautions when handling empty containers.
7.2 Conditions for Safe Storage, Including Any Incompatibilities: Store in a container in a cool, well-ventilated location away from incompatible materials. Keep containers closed when not in use.
7.3 Specific End Use (s): For professional use only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Occupational Exposure Limits:

Ammonium Thiosulfate	None Established
Acetic Acid	10 ppm TWA ACGIH TLV, 15 ppm STEL 10 ppm TWA OSHA PEL, 15 ppm STEL
	10 ppm TWA DFG MAK, 20 ppm STEL
	10 ppm TWA EU OEL
	Belgium: 10 ppm TWA, 20 ppm STEL
Sodium Metabisulfite	5 ppm TWA ACGIH TLV

Biological Exposure Limits: None Established

8.2 Exposure Controls:

Appropriate Engineering Controls: Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits.

Individual Protection Measures (PPE):

Specific Eye/Face Protection: Chemical safety goggles recommended.
Specific Skin Protection: Impervious gloves recommended for prolonged use.
Specific Respiratory Protection: None should be needed during normal conditions. For operations where the occupational exposure limit is exceeded an approved organic vapor respirator appropriate for the form and concentration of the contaminants should be used. Respirator selection and use should be based on contaminant type, form and concentration. Use in accordance with applicable regulations and good Industrial Hygiene practice.
Specific Thermal Hazards: None required.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

Appearance:	Light yellow liquid	**Explosive Limits:**	**LEL:** Not applicable **UEL:** Not applicable
Odor:	Ammonia odor	**Vapor Pressure (mmHg):**	Not available
Odor Threshold:	Not available	**Vapor Density:**	Not available
pH:	4.34	**Relative Density:**	1.11
Melting/Freezing Point:	Not available	**Solubility:**	Not available
Initial Boiling Point and Range:	> 100°C(> 212°F)	**Partition Coefficient: n-octanol/water:**	Not available
Flash Point:	Not flammable	**Auto-Ignition Temperature:**	Not available

Evaporation Rate:	Not available	**Decomposition Temperature:**	Not available
Flammability:	Not flammable	**Viscosity:**	Not available
Explosive Properties:	Not explosive	**Oxidizing Properties:**	Not an oxidizer

9.2 Other Information: None available

10. STABILITY AND REACTIVITY

10.1 Reactivity: None known.

10.2 Chemical Stability: Stable under normal storage and handling conditions.

10.3 Possibility of Hazardous Reactions: None known.

10.4 Conditions to Avoid: Avoid excessive heat.

10.5 Incompatible materials: Strong oxidizing agents, strong acids, sodium hypochlorite (bleach), halogenated compounds, strong bases. Contact with sodium hypochlorite (bleach) may form chloramines (toxic gas). Contact with strong acids liberates sulfur dioxide. Contact with base liberates ammonia. Contact with base liberates flammable material.

10.6 Hazardous Decomposition Products: Decomposition may release ammonia, chloramines, and oxides of sulfur.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Potential Health Effects:

Eyes: Direct contact may cause serious eye damage and corneal injury.

Skin: May cause mild skin irritation with prolonged contact.

Ingestion: No adverse effects expected. Swallowing large amounts may cause gastrointestinal irritation and nausea.

Inhalation: No adverse expected under normal use.

Chronic Health Effects: No adverse effects expected under normal use.

Irritation: This product is expected to cause serious eye irritation and damage.

Corrosivity: No data available. This product is not expected to be corrosive.

Sensitization: This product is not classified as a sensitizer.

Carcinogenicity: None of the components of this product are listed as carcinogens by OSHA, IARC, NTP, or the EU CLP.

Mutagenicity: This product is not classified as a germ cell mutagen.

Acute Toxicity Data:

Product ATE: Oral: 6443 mg/kg

Ammonium thiosulfate: Oral rat LD50 > 2000 mg/kg, inhalation rat LC50 > 5.5 mg/L, dermal rabbit LD50 > 2000 mg/kg

Acetic acid: Oral rat LD50: 3310 mg/kg Sodium metabisulfite: Oral rat LD50: 1420 mg/kg, inhalation rat LC50 > 5.5 mg/L, dermal rat LD50 > 2000 mg/kg
Reproductive Toxicity Data: No data available. This product is not classified as a reproductive toxin.
Specific Target Organ Toxicity Single Exposure (STOT-SE): No data available.
Specific Target Organ Toxicity Repeated Exposure (STOT-RE): No data available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity: Ammonium Thiosulfate: Oncorhynchus mykiss LC50 > 1000 mg/L/96hr Acetic Acid: Oncorhynchus mykiss LC50 > 1000 mg/L/96hr Sodium Metabisulfite: Oncorhynchus mykiss LC50: 147 - 215 mg/L/96hr
12.2 Persistence and Degradability: No data available.
12.3 Bio-accumulative Potential: No data available.
12.4 Mobility in Soil: No data available.
12.5 Results of PBT and vPvB Assessment: Not required
12.6 Other Adverse Effects: None known.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

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

14. TRANSPORT INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
DOT	None	Not Regulated	None	None	None
ADR/RID	None	Not Regulated	None	None	None
IMDG	None	Not Regulated	None	None	None
IATA/ICAO	None	Not Regulated	None	None	None

14.6 Special Precautions for User: Not applicable.

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

U.S. Federal Regulations

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act (TSCA): All of the components of this product are listed on the TSCA inventory.

Clean Water Act (CWA): This material is not regulated under the Clean Water Act.

Clean Air Act (CAA): This material is not regulated under the Clean Air Act.

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA Section 311/312 (40 CFR 370) Hazard Categories: Acute Health

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372): None.

State Regulations

California: This product contains the following substances known to the state of California to cause cancer and/or reproductive toxicity: None known

International Regulations

Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL).

European Inventory of Existing Chemicals (EINECS): All of the components in this product are listed on the EINECS inventory.

EU REACH: All components requiring registration have been pre-registered.

Australian Inventory of Chemical Substances: All of the components in this product are listed on the AICS for Australia.

China Inventory of Existing Chemicals and Chemical Substances: All of the components in this product are listed on the IECSC for China.

Korean Existing Chemicals List: All of the components in this product are listed on the KECL for Korea.

Philippine Inventory of Chemicals and Chemical Substances: All of the components in this product are listed on the PICCS.

15.2 Chemical Safety Assessment: None required.

16. OTHER INFORMATION

HMIS Hazard Rating:

Health: 3 Flammability: 1 Physical Hazard: 0

Full Text of Hazard Statements and Abbreviations used In Section 3:

Flam Liq 3	Flammable Liquid Category 3
Eye Dam 1	Eye Damage Category 1
Acute Tox 4	Acute Toxicity Category 4
Skin Corr 1A	Skin Corrosion Category 1A
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

Supersedes: New SDA
Date Updated: 7/22/ 2015
Revision Summary: New document.

Data Sources: US NLM ChemID Plus and HSDB, Substance SDS for components, ECHA REACH Registration Website, Country websites for occupational exposure limits.