

Section 1: Chemical Product and Company Information

1.1 Product Identifier

Common Name: Aqueous Cleaning Solution

Trade Name: Microclear System Cleanse

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

Product Use: Cleaning

Uses Advised Against: None identified

1.3 Details of the Supplier of the Substance or Mixture

Micro Abrasives Corporation

720 Southampton Road

P.O. Box 669

Westfield, MA 01085

Tel: 413-562-3641

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Micro Abrasives Europe GmbH

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D-25451 Quickborn

Germany

Contact:

Holger Brandt

Phone: +49 (0)4106 626 98 55

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1.4 Emergency Telephone Number

1-866-213-4266

Email: SDS@microgrit.com

Website: www.microgrit.com

SDS Date of Preparation/Revision: January 09, 2017

Section 2: Hazards Identification

2.1 Classification of the Substance or Mixture

EU CLP Classification (1272/2008): Eye Damage Category 1

EU Classification (1999/45/EC): Irritant (Xi) R36

GHS Classification: Eye Damage Category 1

US OSHA Classification (29CFR1910.1200): Eye Damage Category 1

Refer to Section 16 for Full Text of EU Classes and R Phrases

2.2 Label Elements:

Danger!



Hazard statement(s)

H318 Causes severe eye damage.

Precautionary statement(s)

P280 Wear eye protection and face 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.

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2.3 Other Hazards: None identified

Section 3: Composition/Information on Ingredients

3.1 Substance

Component	CAS Number/ EINECS Number.	Amount	EU/GHS Classification (1272/2008)
Aluminum nitrate	7784-27-2 / 236-751-8	1-5%	Eye Dam 1 (H318) Xi R41

Refer to Section 16 for Full Text of EU/GHS Classes and R Phrases/H Statements if applicable

Section 4: First Aid Measures

4.1 Description of First Aid Measures

First Aid

Eyes: Remove contact lenses if present and easy to do. Flush eyes thoroughly with large amounts of water for 15 minutes, holding eyelids open. Get immediate medical attention.

Skin: Wash skin with soap and water. If irritation or other symptoms develop, seek medical attention.

Ingestion: Do not induce vomiting. Rinse mouth with water. Seek medical attention if large amount is swallowed or if you feel unwell.

Inhalation: Move person to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Seek medical attention if irritation or other symptoms persist.

See Section 11 for more detailed information on health effects.

4.2 Most Important symptoms and effects, both acute and delayed: Causes severe eye irritation with possible eye damage.

4.3 Indication of any immediate medical attention and special treatment needed: If eye contact occurs, get immediate medical attention.

Section 5: Fire Fighting Measures

5.1 Extinguishing Media: Use any media that is suitable for the surrounding fire. .

5.2 Special Hazards Arising from the Substance or Mixture: This product is not flammable or combustible; however, consideration must be given to the potential fire/explosion hazards from the base material being processed. Many materials create flammable/explosive dusts or turnings when machined or ground.

5.3 Advice for Fire-Fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires involving chemicals.

Section 6: Accidental Release Measures

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6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate respirator and protective clothing as needed to prevent eye contact.

6.2 Environmental Precautions: Avoid contamination of water supplies and environmental releases. Report spills as required to authorities.

6.3 Methods and Material for Containment and Cleaning Up: Collect with an absorbent material and place into an appropriate container for disposal.

6.4 Reference to Other Sections:

Refer to Section 13 for disposal information and Section 8 for protective equipment.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling:

Prevent contact with the eyes. Avoid contact with skin and clothing. Wear suitable gloves, eye protection and appropriate protective clothing according to the operation. Wash thoroughly after handling. Consider potential exposure to components of the materials or coatings being processed.

7.2 Conditions for Safe Storage, Including any Incompatibilities: No special storage required.

7.3 Specific end use(s):

Industrial uses: Polishing Compound

Professional uses: Polishing Compound

Section 8: Exposure Controls / Personal Protection

8.1 Control Parameters:

Chemical Name	US OEL	EU IOEL	Belgium OEL	German OEL	China OEL	Biological Limit Value
Aluminum Nitrate	5 mg/m ³ TWA (respirable), 15 mg/m ³ TWA (total dust) OSHA PEL None Established ACGIH TLV	None Established	None Established	None Established	None Established	None Established

Note: Consider also components of base materials and coatings being processed.

DNEL:

None Established

PNEC:

None Established

8.2 Exposure Controls:

Recommended Monitoring Procedures: None identified.

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

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Personal Protective Measurers

Respiratory Protection: Not necessary unless workplace concentrations of hazardous constituents exceed the exposure limits. If the exposure levels are excessive and irritation or other symptoms are experienced, an approved respirator should be worn. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134 and ANSI Z88.2 or other applicable regulations and standards and good Industrial Hygiene practice.

Eye Protection: Use chemical safety goggles to prevent eye contact.

Skin Protection: Protective gloves recommended to avoid skin abrasion when handling. Wear protective clothing as required to avoid skin contact when handling.

Other protection: Hearing protection recommended if operation is noisy.

Section 9: Physical and Chemical Properties

9.1 Information on basic Physical and Chemical Properties:

Appearance and Odor: White liquid

Solubility in Water:	Completely	Boiling Point:	100°C (212°F) (water)
Odor Threshold:	Not available	Partition Coefficient:	Not applicable
pH:	2.4-3.5	Melting Point:	0°C (32°F) (water)
Specific Gravity:	1.01@ 25°C	Vapor Density:	Not available
Evaporation Rate:	Not available	Vapor Pressure:	Not available
Flammability(solid/gas):	Not applicable	Flash Point:	Not flammable
Explosive Limits:	Not available	Autoignition Temperature:	Not available
Decomposition Temperature:	Not available	Viscosity:	Not available
Explosive Properties:	None	Oxidizing Properties:	None

9.2 Other Information: None

Section 10: Stability and Reactivity

10.1 **Reactivity:** Not reactive under normal conditions of use and storage.

10.2 **Chemical Stability:** Stable.

10.3 **Possibility of Hazardous Reactions:** None known.

10.4 **Conditions to Avoid:** Avoid excessive heat and freezing temperatures.

10.5 **Incompatible Materials:** Strong bases and oxidizing agents.

10.6 **Hazardous Decomposition Products:** Thermal decomposition may produce carbon, aluminum, phosphorous and nitrogen oxides.

Section 11: Toxicological Information

11.1 Information on Toxicological Effects:

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Potential Health Hazards

Inhalation: Inhalation of mists may cause irritation to the nose, throat and upper respiratory tract.

Skin Contact: May cause skin irritation.

Eye Contact: May severe eye irritation with redness, tearing and pain. Permanent damage may occur.

Ingestion: Not toxic. Swallowing may cause gastrointestinal disturbances.

Chronic Health Effects: None known.

Acute Toxicity Values: Estimated Acute Toxicity (ATE): 28,087 mg/kg
Aluminum Nitrate: Oral rat LD50 3622 mg/kg

Skin corrosion/irritation: None of the components have been shown to cause skin irritation in animal studies. Prolonged skin contact may result in abrasive injury.

Eye damage/ irritation: Aluminum nitrate has been shown to cause irreversible eye damage in rabbit eyes.

Respiratory Irritation: No chemical irritation expected.

Skin Sensitization: None of the components have been shown to cause sensitization animals or humans.

Respiratory Sensitization: Not expected to be a respiratory sensitizer based on human experience.

Germ Cell Mutagenicity: None of the components have not been shown to cause mutagenic activity.

Carcinogenicity: None of the components are listed as a carcinogen by ACGIH, IARC, NTP, OSHA.

Developmental / Reproductive Toxicity: No specific data is available; however, this product is not expected to present a risk of adverse reproductive or developmental toxicity.

Specific Target Organ Toxicity (Single Exposure): No specific data is available.

Specific Target Organ Toxicity (Repeated Exposure): No specific data is available.

Section 12: Ecological Information

12.1 Toxicity:

Aluminum Nitrate: 96 hr LC50 Danio rerio \geq 1000 mg/L; 48 hr EC50 daphnia magna 47.5 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 14 mg/L (structurally similar chemical)

12.2 Persistence and degradability: Biodegradation is not applicable to inorganic substances.

12.3 Bioaccumulative Potential: No data available.

12.4 Mobility in Soil: No data available.

12.5 Results of PVT and vPvB assessment: None required.

12.6 Other Adverse Effects: None known.

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Section 13: Disposal Considerations

13.1 Waste Treatment Methods:

Dispose in accordance with all local, state and national regulations. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations

Section 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
US DOT	None	Not Regulated	None	None	
Canadian TDG	None	Not Regulated	None	None	
EU ADR/RID	None	Not Regulated	None	None	
IMDG	None	Not Regulated	None	None	
IATA/ICAO	None	Not Regulated	None	None	

14.6 Special Precautions for User: None identified

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

Section 15: Regulatory Information

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

INTERNATIONAL INVENTORIES

US EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory or exempt.

Australia: All of the components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempt.

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

China: All of the components in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or exempt.

European Union: All the components in this product are listed on the EINECS inventory or exempt.

Japan: All of the components in this product are listed on the Japanese Existing and New Chemical Substances (ENCS) inventory or exempt.

Korea: All of the components in this product are listed on the Korean Existing Chemicals List (KECL) or exempt.

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New Zealand: All of the components in this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempt.

Philippines: All of the components of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or exempt.

Taiwan: All of the components of this product are listed on the National Existing Chemical Inventory (NECI) in Taiwan or exempt.

United States Regulations

EPA SARA Regulations:

SARA 311/312 Hazard Categories:

- N – Fire Hazard
- N – Sudden Release of Pressure
- N – Reactivity
- Y – Acute Health
- N – Chronic Health

SARA 313: This contains the following chemicals above de minimus concentrations subject to the notification or reporting requirements of SARA 313: None

CERCLA Section 103: This product is not subject to CERCLA release reporting. Many states have more stringent spill reporting requirements. Report spills in accordance with all applicable regulations.

RCRA Status: This product, as sold, is not regulated under RCRA as a hazardous waste.

State Requirements

California Proposition 65 – This product contains the following chemical known to the State of California to cause cancer: None

Connecticut Carcinogen Substances: None listed.

Florida Essential Chemical List: None listed

Maine Chemicals of High Concern: None listed

Massachusetts Right To Know List: None listed

Michigan Critical Materials List: None listed

Minnesota Hazardous Substances: None listed

New Jersey Right To Know Hazardous Substances List: None listed

New York List of Hazardous Substances: None listed

Ohio Extremely Hazardous Substances List: None listed

Pennsylvania RTK Hazardous Substance: None listed

Rhode Island Hazardous Substances List: None listed

Washington Persistent Bioaccumulative Toxins: None listed

Wyoming Process Safety Management – Highly Hazardous Chemicals: None listed

German Regulations

Substances Hazardous to Water (WGK): 1

European Union

Regulation (EC) 1907/2006 REACH Article 59(1), Candidate List: None listed

Section 16: Other Information

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NFPA RATING (NFPA 704) FIRE: 0 HEALTH: 3 INSTABILITY: 0
HMIS RATING FIRE: 0 HEALTH: 3* PHYSICAL HAZARD: 0
*indicates a chronic hazard

EU and GHS Classes and Risk Phrases and Hazard Statements for Reference (See Sections 2 and 3):

Xi Irritant

R41 Risk of serious damage to eyes.

R36 Irritating to eyes.

Eye Dam 1 Eye Damage Category 1

H319 Causes serious eye irritation

SDS Revision History: Converted to GHS format. All sections revised.

SDS Date of Preparation: 03/02/15

Date of last revision: 01/09/17

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. MicroAbrasives Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.