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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Minnclean AC
Product code : 3024997, 3024996

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Acidic Cleaning Compound

1.3. Details of the supplier of the safety data sheet

Mar Cor Purification 14550 28th Avenue N. Minneapolis, MN 55447 - USA T 1-800-633-3080; (484)-991-0220

1.4. Emergency telephone number

Emergency number : CHEMTREC 1 (800) 424-9300

CHEMTREC International +1 (703) 527-3887 24 hr

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corrosion 1C Serious Eye Damage 1

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



GHS05

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Causes severe skin burns and eye damage.

Precautionary statements (GHS-US)

: Do not breathe dusts or mists. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: rinse mouth. Do NOT induce verified Immediately call a poison contor/dector. If on skip (or hair). Take off

gloves/protective clothing/eye protection/face protection. If swallowed: rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS US)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

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3.2. Mixture

Name	Product identifier	%	GHS-US classification
Sulfamic acid	(CAS No) 5329-14-6	7 - 13	Skin Corr. 1C
Trade Secret	(CAS No) Proprietary	1 - 5	Acute Tox. 4 (Oral) Skin Irrit. 2 Eye Irrit. 2A

^{*} The specific chemical identity and exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

First-aid measures after ingestion

4.1. Description of first aid measures

First-aid measures after inhalation : If inhaled remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Wash contaminated clothing

before reuse. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to

do, remove contact lenses, if worn. Get medical attention immediately.

: If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious

person. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory tract irritation.

Symptoms/injuries after skin contact : Causes severe skin burns. Symptoms may include redness, pain, blisters.

Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and

tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Treat for surrounding material.

Unsuitable extinguishing media : Water spray may be ineffective.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Provide ventilation.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Do not breathe dusts or mists. Do not swallow.

Handle and open container with care. Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Use only in well-ventilated areas.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Keep out of the reach of children. Keep container tightly closed. Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sulfamic acid (5329-14-6)	
ACGIH	Not applicable
OSHA	Not applicable

Trade Secret (Proprietary)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls

: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Ensure that eyewash stations and safety showers are close to

the workstation location.

Hand protection

: Wear chemically resistant protective gloves.

Eye protection

: Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

: No data available

Skin and body protection

: Wear suitable protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

: Maintain levels below Community environmental protection thresholds.

Environmental exposure controls
Other information

Odour

: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Powder
Colour : White

Odour threshold : No data available pΗ : 2.5 (1% solution) 1.88 (10% solution) Melting point : No data available Freezing point : No data available Boiling point : No data available Flash point : No data available Relative evaporation rate (butylacetate=1) No data available : Not flammable Flammability (solid, gas) Explosive limits : No data available : No data available Explosive properties Oxidising properties : No data available Vapour pressure No data available : No data available Relative density : No data available Relative vapour density at 20 °C

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: No data available

: No data available

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Partition coefficient: n-octanol/water

Solubility

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Log Kow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents. Alkalis. Aluminum. Chlorides.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Thermal decomposition generates: Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

Minnclean AC	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	No data available
Sulfamic acid (5329-14-6)	
LD50 oral rat	3160 mg/kg
Trade Secret (Proprietary)	
LD50 oral rat	1310 mg/kg
Skin corrosion/irritation	: Causes severe skin burns
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: Causes severe skin burns. Symptoms may include redness, pain, blisters.
Symptoms/injuries after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Minnclean AC	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Minnclean AC	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

UN-No.(DOT) : UN2967
Proper Shipping Name (DOT) : Sulfamic acid

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : III

Hazard labels (DOT) :



Transport by sea

Transport document description (IMDG) : UN 2967 SULPHAMIC ACID, 8, III

UN-No. (IMDG) : 2967

Proper Shipping Name (IMDG) : SULPHAMIC ACID
Class (IMDG) : 8 - Corrosive substances

Packing group (IMDG) : III - substances presenting low danger

Air transport

Transport document description (IATA) : UN 2967 Sulphamic acid, 8, III

UN-No. (IATA) : 2967

Proper Shipping Name (IATA) : Sulphamic acid
Class (IATA) : 8 - Corrosives
Packing group (IATA) : III - Minor Danger

Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

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Trade Secret (Proprietary)	
EPA TSCA Regulatory Flag	S - S - indicates a substance that is identified in a proposed or final Significant New Uses Rule.

15.2. US State regulations

Minnclean AC	
State or local regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other information

Date of issue : 05/12/2015
Other information : None.

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