

A-R Aluminum & Coil Cleaner

Safety Data Sheet

SECTION 1: Product and company identification

Product name : A-R Aluminum & Coil Cleaner
Use of the substance/mixture : Cleaner
Product code : 0104
Company : Total Solutions
P.O. Box 240014
Milwaukee, WI 53224 - USA
T (414) 354-6417
Emergency number : Chemtec: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Met. Corr. 1 H290
Eye Irrit. 2A H319
Repr. 1B H360
Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

GHS08

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : May be corrosive to metals
Causes serious eye irritation
May damage fertility or the unborn child
Precautionary statements (GHS-US) : Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep only in original container
Wash thoroughly after handling
Wear eye protection, protective clothing, protective gloves
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If exposed or concerned: Get medical advice/attention
If eye irritation persists: Get medical advice/attention
Absorb spillage to prevent material damage
Store locked up
Store in corrosive resistant container with a resistant inner liner
Dispose of contents/container to comply 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

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Organic acid salt mixture	(CAS No) HMIRA Reg Number 9207 Granted Date: 2014-08-20	10-20	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Repr. 1B, H360
Carbamide dihydrogen sulfate	(CAS No) 21351-39-3	3-8	Eye Irrit. 2A, H319
UNDECETH-5	(CAS No) 34398-01-1	1-5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove the victim into fresh air. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Rinse skin with water/shower.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth with water. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

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

Symptoms/injuries	: May damage fertility. May damage the unborn child.
Symptoms/injuries after inhalation	: None under normal use.
Symptoms/injuries after skin contact	: Contact during a long period may cause light irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Gastrointestinal complaints.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : All extinguishing media allowed.

5.2. Special hazards arising from the substance or mixture

Reactivity : Hydrogen gas may be released upon contact with certain metals at sustained temperatures about 140°F.

5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

Protective equipment : Protective goggles. Gloves. Protective clothing.
Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers.
Methods for cleaning up : Absorb spillage to prevent material damage. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Handle and open the container with care.
Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.
Storage conditions : Store in corrosive resistant container with a resistant inner liner. Keep container closed when not in use.
Incompatible products : Strong bases. Oxidizing agent. reducing agents.

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Incompatible materials	: Metals.
Heat-ignition	: heat sources.
Storage area	: Meet the legal requirements. Store in a cool area. Store in a well-ventilated place.
Special rules on packaging	: meet the legal requirements. Keep only in original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Safety glasses. Gloves. Protective clothing.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Odor	: Mild odor
Odor threshold	: No data available
pH	: < 1
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 200 °F Estimated
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1.08 g/ml
Solubility	: Soluble in water.
Log Pow	: No data available
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
VOC content	: < 0.5 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Hydrogen gas may be released upon contact with certain metals at sustained temperatures about 140°F.

10.2. Chemical stability

Metal contact may cause Hydrogen release.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

Open flame. Overheating.

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10.5. Incompatible materials

May be corrosive to metals. Do not mix with metal powders. Avoid contact with oxidizers or reducing agents, alkalis, chlorates, nitrates. Contact with hypochlorites will liberate toxic gases.

10.6. Hazardous decomposition products

Thermal decomposition may yield hydrofluoric acid and oxides of carbon, nitrogen, chlorine and sulfur. Hydrogen gas may be released upon contact with certain metals.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

UNDECETH-5 (34398-01-1)	
LD50 oral rat	> 1400 mg/kg

Organic acid salt mixture (HMIRA Reg Number 9207 Granted Date: 2014-08-20)	
LD50 oral rat	678.3 mg/kg
LD50 dermal rat	2109.4 mg/kg

Skin corrosion/irritation : Not classified
pH: < 1

Serious eye damage/irritation : Causes serious eye irritation.
pH: < 1

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : May damage fertility or the unborn child.

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : None under normal use.

Symptoms/injuries after skin contact : Contact during a long period may cause light irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Gastrointestinal complaints.

Likely routes of exposure : Skin and eyes contact

SECTION 12: Ecological information

12.1. Toxicity

UNDECETH-5 (34398-01-1)	
LC50 fish 1	< 10 mg/l
EC50 Daphnia 1	< 10 mg/l
ErC50 (algae)	< 10 mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

Additional information

Other information : When transported by ground, this product utilizes the exemption found under 49 CFR 173.154.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

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SECTION 15: Regulatory information

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

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

UNDECETH-5 (34398-01-1)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

California Proposition 65 - This product does not contain substances known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

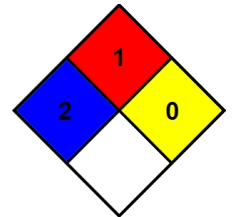
Full text of H-phrases:

H290	May be corrosive to metals
H302	Harmful if swallowed
H318	Causes serious eye damage
H319	Causes serious eye irritation
H360	May damage fertility or the unborn child

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Prepared by: Technical Department

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