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SECTION 1: Product and company identification

Product name	:	Residue Rinse
Use of the substance/mixture	:	Acid
Product code	:	0710
Company	:	Quality Chemical Co. Inc. Midwest PO Box 1265 Maryland Heights, MO 63043 - USA T (314) 872-7778
Emergency number	:	(314) 872-7778

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Corr. 1C H314

Full text of H-phrases: see section 16

GHS-US labeling	
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 mist, spray Wash thoroughly after handling Wear eye protection, face protection, protective clothing, protective gloves If swallowed: rinse mouth. Do NOT induce vomiting If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower If inhaled: Remove person to fresh air and keep comfortable for breathing If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a doctor, a POISON CENTER Specific treatment (see First aid measures on this label) Wash contaminated clothing before reuse Store locked up 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	%	Classification (GHS-US)
sulfamic acid	(CAS No) 5329-14-6	3.0 - 7.0	Skin Irrit. 2, H315 Eye Irrit. 2A, H319

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SECTION 4: First aid measures	
4.1. Description of first aid measures	3
First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.
4.2. Most important symptoms and e	
Symptoms/injuries	: Causes severe skin burns and eye damage.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Caustic burns/corrosion of the skin.
Symptoms/injuries after eye contact	: Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.
Symptoms/injuries after ingestion	: Harmful if swallowed. Burns to the gastric/intestinal mucosa.
4.3. Indication of any immediate med No additional information available	lical attention and special treatment needed
SECTION 5: Firefighting measu	ires
5.1. Extinguishing media	
Suitable extinguishing media	: All extinguishing media allowed.
5.2. Special hazards arising from the	substance or mixture
Reactivity	: Upon combustion: CO and CO2 are formed.
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	
SECTION 6: Accidental release	measures
SECTION 6: Accidental release	
SECTION 6: Accidental release 6.1. Personal precautions, protective General measures	e measures e equipment and emergency procedures
SECTION 6: Accidental release 6.1. Personal precautions, protective General measures 6.1.1. For non-emergency personnel	e measures e equipment and emergency procedures : Isolate from fire, if possible, without unnecessary risk.
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SECTION 6: Accidental release 6.1. Personal precautions, protective General measures 6.1.1. For non-emergency personnel Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Avoid release to the environment. Prever 6.3. Methods and material for contain For containment Methods for cleaning up 6.4. Reference to other sections No additional information available SECTION 7: Handling and stora 7.1. Precautions for safe handling	e measures e equipment and emergency procedures : Isolate from fire, if possible, without unnecessary risk. : Gloves. Protective goggles. Protective clothing. : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area. : Equip cleanup crew with proper protection. : Stop leak if safe to do so. Stop release. Ventilate area. nt soil and water pollution. mment and cleaning up : Contain released substance, pump into suitable containers. : This material and its container must be disposed of in a safe way, and as per local legislation. age : Comply with the legal requirements. Do not handle until all safety precautions have been read and

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7.2. Conditions for safe storage	e, including any incompatibilities
Technical measures	 Comply with applicable regulations. Add ALLWAYS product to water for dilution/mixture. Never add water to this product.
Storage conditions	: Keep container closed when not in use. Store in original container.
Incompatible products	: strong acids.
Storage area	: Keep only in the original container. Store in a dry area. Store in a cool area.
Special rules on packaging	: meet the legal requirements.

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. Gloves. Safety glasses. Protective clothing.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Dhysical state	: Liquid
Physical state	
Appearance	: Clear, colorless liquid.
Odor	: Cherry
Odor threshold	: No data available
рН	: 2
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 200 °F
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 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

Upon combustion: CO and CO2 are formed.

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10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	:	Not classified
sulfamic acid (5329-14-6)		
LD50 oral rat		3160 mg/kg (Rat; Literature study)
LD50 dermal rat		> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
Skin corrosion/irritation	:	Causes severe skin burns and eye damage.
		pH: 2
Serious eye damage/irritation	:	Not classified
		pH: 2
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	1	Not classified
Aspiration hazard		: Not classified
Symptoms/injuries after inhalation		: May cause respiratory irritation.
Symptoms/injuries after skin contact		: Caustic burns/corrosion of the skin.
Symptoms/injuries after eye contact		: Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.
Symptoms/injuries after ingestion		: Harmful if swallowed. Burns to the gastric/intestinal mucosa.

SECTION 12: Ecological information

2.1. Toxicity	
sulfamic acid (5329-14-6)	
LC50 fish 1	> 14.2 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	1.6 mg/l (48 h; Daphnia magna; GLP)
EC50 other aquatic organisms 1	>= 1000 mg/l (16 h; Pseudomonas putida)
LC50 fish 2	70.3 mg/l (96 h; Pimephales promelas)
Threshold limit algae 1	48 mg/l (72 h; Desmodesmus subspicatus; GLP)
2.2. Persistence and degradability	
sulfamic acid (5329-14-6)	
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

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12.3. Bioaccumulative potential	
sulfamic acid (5329-14-6)	
Log Pow	0.10 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
SECTION 13: Disposal consideration	tions
13.1. Waste treatment methods	
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
SECTION 14: Transport informati	on
Department of Transportation (DOT)	
Transport document description	: UN2967 Sulfamic acid solution, 8, III
UN-No.(DOT)	: UN2967
Proper Shipping Name (DOT)	: Sulfamic acid
	solution
Transport hazard class(es) (DOT)	: 8 - Class 8 - Corrosive material 49 CFR 173.136
Hazard labels (DOT)	: 8 - Corrosive
	8
Packing group (DOT)	: III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 213
DOT Packaging Bulk (49 CFR 173.xxx)	: 240
DOT Special Provisions (49 CFR 172.102)	: IB8,IP3,T1,TP33
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 25 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 100 kg
DOT Vessel Stowage Location	: A
Additional information	
Other information	: No supplementary information available.
ADR	
No additional information available	
Transport by sea	
No additional information available	
Air transport	
No additional information available	

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.

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

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SECTION 16: Other information

Training advice

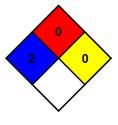
: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation

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	:	0 - Materials that will not burn.

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



Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.