

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name Zinc Inspection Solution

CAS number See Section 3

Synonyms No information available

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

Identified uses Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC
12501 Pauls Valley Road
Austin, Texas 78737
U.S.A.

Telephone 512-668-9918

Fax 512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification


2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute Toxicity - Oral Category 4
Skin Corrosion / Irritation Category 1
Eye Damage / Irritation Category 1
Germ Cell Mutagenicity Category 2

Carcinogenicity Category 1
 Reproductive Toxicity Category 2
 Specific Target Organs/Systemic Toxicity Following Repeated Exposure Category 1
 Corrosive to Metals Category 1
 Hazardous to the Aquatic Environment (Acute) Category 2
 Hazardous to the Aquatic Environment (Chronic) Category 2

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	<p> May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Suspected of causing genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects. </p>
Precautionary statements	<p> Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep only in original container. </p>

Keep only in original container.
 Do not breathe fumes, mist, vapors, or spray.
 Wash arms, hands and face thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Avoid release to the environment.
 Wear protective gloves and eye protection.
 IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.
 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
 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.
 IF exposed or concerned: Get medical attention.
 Immediately call a POISON CENTER or physician.
 Get medical attention if you feel unwell.
 Specific treatment (Wash areas of contact with water).
 Rinse mouth.
 Wash contaminated clothing before reuse.
 Absorb spillage to prevent material damage.
 Collect spillage.
 Store locked up.
 Store in corrosive resistant container with a resistant inner liner.
 Dispose of contents in accordance with local, state, federal and international regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Data not available.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	No information available	7732-18-5	87.09%
Cadmium Sulfate	No information available	7790-84-3	4.00%
Hydrochloric Acid	No information available	7647-01-0	1.50%
Proprietary	No information available	N/A	0-3.0%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled IF INHALED: Remove person to fresh air and keep comfortable for breathing.

In case of skin contact IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. May cause irritation, redness, and pain.

In case of eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, and tearing.

If swallowed IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Dilute immediately with water or milk. Induce vomiting. Call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Suspected of causing genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. **WARNING!** Hazardous liquid. Contains a known carcinogen. Avoid ingestion and contact with skin, eyes, or clothing. If ingested, dilute immediately with water or milk and induce vomiting. Call a physician. Wash areas of contact with plenty of water. For eyes, get medical attention. **EYE CONTACT:** May cause irritation, redness, pain, and tearing. **SKIN CONTACT:** May cause irritation, redness, and pain. **CHRONIC EFFECTS / CARCINOGENICITY:** Chronic exposure may affect kidneys and liver.

4.3 Indication of any immediate medical attention and special treatment needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute immediately with water or milk. Induce vomiting. Call a physician.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use any means suitable for extinguishing surrounding fire.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

Not considered to be a fire or explosion hazard.

5.3 Special protective equipment and precautions for firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

5.4 Further information

Flash Point No information available.

Autoignition Temperature No information available.

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
2	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective gloves and eye protection.

6.2 Environmental precautions

No information available.

6.3 Methods and materials for containment and cleaning up

Absorb with suitable inert material (vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal. Do not flush to sewer. Dispose of in accordance with local regulations.

6.4 Reference to other sections

No information available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Store in corrosive resistant container with a resistant inner liner. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin.

Hygiene measures

No information available.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Protect from freezing and physical damage.

Incompatibilities

See Section 10.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
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Hydrochloric Acid (7647-01-0)	PEL-Ceiling	5 ppm Ceiling; 7 mg/m ³ Ceiling
Cadmium Sulfate Hydrate (7790-84-3)	PEL	"5 µg/m ³ TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m ³ Action Level (as Cd)" As Cadmium compounds

US. ACGIH Threshold Limit Values

Component	Type	Value
Hydrochloric Acid (7647-01-0)	TLV-Ceiling	2 ppm Ceiling
Cadmium Sulfate Hydrate (7790-84-3)	TLV-TWA	"0.01 mg/m ³ TWA (as Cd); 0.002 mg/m ³ TWA (respirable particulate matter, as Cd)" As Cadmium compounds

US. NIOSH: Pocket Guide to Chemical Hazards

No information available.

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

No specific controls are needed. Normal room ventilation is adequate.

Personal protective equipment

Eye/face protection

Wear protective gloves and eye protection. Safety glasses or goggles.

Skin protection

Wear protective gloves and eye protection. Chemical resistant gloves.

Body Protection

Wear appropriate PPE.

Respiratory protection

Normal room ventilation is adequate.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless liquid
Odor	Data not available.
Odor Threshold	Data not available.
pH	Acidic
Melting Point/Range	Data not available.
Boiling Point/Range	Data not available.
Evaporation Rate	Data not available.
Flammability (solid)	Data not available.
Flammability or explosive limit	Data not available.
Upper	Data not available.
Lower	Data not available.
Vapor Pressure	Data not available.
Vapor Density	Data not available.
Density	1.1
Solubility	Miscible
Partition coefficient; n-octanol/water	Data not available.
Autoignition Temp	Data not available.
Decomposition Temp	Data not available.
Viscosity	Data not available.
Molecular Formula	Data not available.
Molecular Weight	Data not available.
VOC Content(%)	Data not available.
Oxidizing properties	Data not available.

9.2 Other safety information Data not available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions of use and storage.

10.2 Chemical stability

Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

Data not available.

10.4 Conditions to avoid

Keep only in original container. Avoid incompatible materials.

10.5 Incompatible materials

Oxidizers (such as perchlorates, peroxides, permanganates, chlorates, and nitrates), metals, hydrogen azide, selenium, tellurium, zinc.

10.6 Hazardous decomposition products

Will not occur.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cadmium Sulfate	Rat: 280 mg/kg	Not listed	Not listed

Skin corrosion/irritation

Causes severe skin burns and eye damage. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Serious eye damage/eye irritation

Causes serious eye damage. Wear protective gloves and eye protection. 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 or physician.

Respiratory or skin sensitization

Not applicable.

Germ cell mutagenicity

Suspected of causing genetic defects. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Carcinogenicity

May cause cancer. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific target organ toxicity - single exposure

Not applicable.

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

Reproductive toxicity

Suspected of damaging fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Chronic effects

Data not available.

11.2 Additional Information

Harmful if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Dispose of contents in accordance with local, state, federal and international regulations.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations. Toxic to aquatic life with long lasting effects. Avoid release to the environment. Collect spillage. Dispose of contents in accordance with local, state, federal and international regulations.

12.2 Persistence and degradability

Data not available.

12.3 Bio accumulative potential

Data not available.

12.4 Mobility in soil

Data not available.

12.5 Results of PBT and vPvB assessment

Data not available.

12.6 Endocrine disrupting properties

Data not available.

12.7 Other adverse effects

Data not available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Data not available.

SECTION 14: Transport information

DOT (US)

UN Number	UN2922
Proper Shipping name	Corrosive liquid, toxic, n.o.s. (Hydrochloric Acid, Cadmium Sulfate)
Hazard Class	8 (6.1)
Packaging Group	III

IMDG

UN Number	UN2922
Proper Shipping name	Corrosive liquid, toxic, n.o.s. (Hydrochloric Acid, Cadmium Sulfate)
Hazard Class	8 (6.1)
Packaging Group	III

IATA Not regulated according to IATA Dangerous Goods Regulations.

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Hydrochloric Acid (CAS # 7647-01-0): "Present (ACTIVE)" As Hydrochloric acid [7647-01-0]

Water (CAS # 7732-18-5): "Present [XU] (ACTIVE)" As Water [7732-18-5]

Cadmium Sulfate Hydrate (CAS # 7790-84-3): "Present (ACTIVE)" As Sulfuric acid, cadmium salt (1:1) [10124-36-4]

CERCLA Hazardous Substance List (40 CFR 302.4)

No information available.

SARA 304 Emergency release notification

No information available.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Cadmium Sulfate Hydrate (CAS # 7790-84-3): "5 µg/m³ TWA (See 29 CFR 1910.1027, as Cd)
Cadmium Sulfate Hydrate (CAS # 7790-84-3): 2.5 µg/m³ Action Level (as Cd)" As
Cadmium compounds [RR-00559-4]

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302

Hydrochloric Acid (CAS # 7647-01-0): "500 lb TPQ (gas only)" As Hydrogen chloride [7647-01-0]
Hydrochloric Acid (CAS # 7647-01-0): "5000 lb EPCRA RQ (gas only)" As Hydrogen chloride [7647-01-0]

SARA

Hydrochloric Acid (CAS # 7647-01-0): 2270 kg final RQ" As Hydrochloric acid [7647-01-0]
Hydrochloric Acid (CAS # 7647-01-0): 5000 lb final RQ

SARA 313 (TRI reporting)

Hydrochloric Acid (CAS # 7647-01-0): "1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)" As Hydrochloric acid [7647-01-0]
Cadmium Sulfate Hydrate (CAS # 7790-84-3): "0.1 % de minimis concentration (includes any unique chemical substance that contains Cadmium as part of that chemical's infrastructure, listed under Chemical Category N078)" As Cadmium compounds [RR-00559-4]

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

No information available.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

No information available.

Safe Drinking Water Act

No information available.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

No information available.

US state regulations

US. Massachusetts RTK - Substance List

Hydrochloric Acid (CAS # 7647-01-0): "Extraordinarily hazardous" As Hydrochloric acid [7647-01-0]
Cadmium Sulfate Hydrate (CAS # 7790-84-3): Carcinogen and Extraordinarily Hazardous

US. New Jersey Worker and Community Right-to-Know Act

Hydrochloric Acid (CAS # 7647-01-0): "corrosive" As Hydrogen chloride [7647-01-0]
Hydrochloric Acid (CAS # 7647-01-0): "SN 1012 500 lb TPQ
Hydrochloric Acid (CAS # 7647-01-0): SN 2909 500 lb TPQ (gas only)" As Hydrogen chloride [7647-01-0]
Cadmium Sulfate Hydrate (CAS # 7790-84-3): "carcinogen" As Cadmium compounds [RR-00559-4]
Cadmium Sulfate Hydrate (CAS # 7790-84-3): "sn 2199" As Cadmium compounds [RR-00559-4]
Cadmium Sulfate Hydrate (CAS # 7790-84-3): "SN 2199 500 lb TPQ (Category Code N078. Includes any unique chemical substance that contains the named metal as part of that chemical structure)" As Cadmium compounds [RR-00559-4]
Cadmium Sulfate Hydrate (CAS # 7790-84-3): "sn 3073" As Cadmium sulfate [10124-36-4]
Cadmium Sulfate Hydrate (CAS # 7790-84-3): mutagen" As Cadmium sulfate [10124-36-4]

US. Pennsylvania Worker and Community Right-to-Know Law

Hydrochloric Acid (CAS # 7647-01-0): "Environmental hazard" As Hydrochloric acid [7647-01-0]
Water (CAS # 7732-18-5): "Present" As Ethyl alcohol and water [RR-00802-6]
Cadmium Sulfate Hydrate (CAS # 7790-84-3): "Environmental hazard" As Cadmium compounds [RR-00559-4]
Cadmium Sulfate Hydrate (CAS # 7790-84-3): "Environmental hazard" As Sulfuric acid, cadmium salt (1:1) [10124-36-4]
Cadmium Sulfate Hydrate (CAS # 7790-84-3): "Special hazardous substance" As Sulfuric acid, cadmium salt (1:1) [10124-36-4]

California Proposition 65

Cadmium Sulfate Hydrate (CAS # 7790-84-3): "carcinogen, 10/1/1987" As Cadmium compounds [RR-00559-4]

SECTION 16: Other information

Date of Issue: 12/29/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.