

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** Zenker Fixative, Modified, Zinc Chloride
Part Number: 1461
CAS-No.: Not applicable
SDS Number: 4690
- 1.2 Recommended Use:** Laboratory Chemicals
- 1.3 Company:** Newcomer Supply
 2505 Parview Road
 Middleton, WI 53562 USA
- Telephone:** 1-800-383-7799
Fax: 1-608-831-0866
Website: www.newcomersupply.com
Email: newly@newcomersupply.com

24 HOUR EMERGENCY CONTACT
 CALL CHEMTREC: 1-800-424-9300
 Contact CHEMTREC only in the event of an emergency involving a chemical spill, leak, fire, exposure or other accident.

2. HAZARD(S) IDENTIFICATION

- 2.1 Classification of the substance or mixture**
 GHS Classification, (in accordance with 29 CFR1910.1200)
 Acute toxicity (oral), Category 2
 Acute toxicity (inhalation), Category 2
 Acute toxicity (dermal), Category 1
 Skin corrosion, Category 1
 Serious eye damage, Category 1
 Respiratory sensitization, Category 1
 Germ cell mutagenicity, Category 1B
 Carcinogenicity, Category 1B
 Reproductive toxicity, Category 1B
 Specific Target Organ Toxicity – Repeated exposure, Category 1

2.2 GHS Label elements

Signal Word DANGER

Pictogram



Hazard Statement(s):

- Fatal if swallowed
- Fatal if inhaled
- Fatal in contact with skin
- Causes severe skin burns and eye damage
- Causes serious eye damage
- May cause allergy or asthma symptoms or breathing difficulties if inhaled
- May cause genetic defects
- May cause cancer
- May damage fertility or the unborn child
- May cause damage to organs through prolonged or repeated exposure

Precautionary Statement(s):

Prevention:

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Wash skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not breathe dust/fume/gas/mist/vapours/spray
- Do not get in eyes, on skin, or on clothing

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- Use only outdoors or in a well-ventilated area
- In case of inadequate ventilation wear respiratory protection
- Response:**
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- Rinse mouth
- Specific treatment is urgent: see first aid measures in section 4
- Specific treatment: see first aid measures in section 4
- IF ON SKIN: Gently wash with plenty of soap and water
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Take off contaminated clothing and wash before reuse
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position 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 POISON CENTER or doctor/physician
- Get medical advice/attention if you feel unwell
- IF exposed or concerned: Get medical advice/attention
- Storage:**
- Store in a well ventilated place. Keep container tightly closed.
- Store locked up
- Disposal:**
- Dispose of contents/ container to an approved waste disposal plant.

- 2.3 Description of any hazards not otherwise classified** None
- 2.4 >1% of mixture with unknown acute toxicity** None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture
Hazardous Components

Component		Concentration
Name	Potassium Dichromate	
CAS-No.	7778-50-9	3%
Name	Zinc Chloride	
CAS-No.	7646-85-7	5%

4. FIRST-AID MEASURES

4.1 Description of necessary measures

Inhalation (breathing)

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.

Skin Contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

Eye Contact

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 doctor/physician.

Ingestion (swallowed)

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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4.2 Most important symptoms and or effects, acute and delayed

The most important symptoms/effects are presented in Section 2 and or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES
5.1 Suitable extinguishing media

Carbon dioxide, dry chemical, water spray, alcohol-resistant foam.

5.2 Specific hazards arising from the substance or mixture

No data available

5.3 Protective equipment and precautions for fire-fighters

Wear a positive-pressure self-contained breathing apparatus if necessary. Wear chemical resistant clothing as recommended by clothing manufacturer.

NFPA Rating

Health	Fire	Reactivity
hazard: 2	hazard: 0	hazard: 0

6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures

Apply personal protective equipment (see Section 8). Use in a properly ventilated area. Avoid breathing vapors. Avoid skin contact. Avoid eye contact. Wash hands after use. In case of large spill, remove personnel to a safe area.

6.2 Methods and material for containment and cleaning up

Apply personal protective equipment (see Section 8). Contain spill. Prevent further leakage if possible and safe to do so. Ensure proper ventilation. For small amounts, wipe or absorb spill using inert material and dispose of according to local regulations. For large amounts, evacuate area and limit access. Prevent entry of material into sewage drains and confined areas. Dispose of any contaminated materials according to local regulations.

7. HANDLING AND STORAGE
7.1 Precautions for safe handling

Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing.

7.2 Conditions for safe storage, including any incompatibilities

Refer to Section 2.2 for proper storage temperature. Store the tightly closed container in a cool, dry, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control Parameters

Components with limit values that require monitoring at the workplace

Component	CAS-No.	Regulatory	Value	Parameters
Potassium Dichromate	7778-50-9	OSHA PEL	TWA	0.005 mg/m ³
		NIOSH REL	TWA	0.001 mg/m ³
		ACGIH TLV	TWA	0.05 mg/m ³

Component	CAS-No.	Regulatory	Value	Parameters
Zinc Chloride	7646-85-7	OSHA PEL	TWA	1 mg/m ³
		NIOSH REL	TWA	1 mg/m ³

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		NIOSH REL	STEL	2 mg/m ³
		ACGIH TLV	TWA	1 mg/m ³
		ACGIH TLV	STEL	2 mg/m ³

8.2 Exposure Controls
Appropriate engineering controls

Use in a properly ventilated area. Remove/wash before reuse contaminated clothing. Wash hands upon exiting work premises.

8.3 Personal Protective Equipment
Eye/Face protection

Wear chemical safety goggles and/or a full face shield if splashing is possible. Keep eye wash fountain nearby.

Skin Protection

Wear chemical-resistant gloves. Gloves should be resistant to components of product. Refer to glove manufacturer for appropriate type and glove thickness.

Body Protection

No data available

Respiratory Protection

Respirators should only be used if the employer has a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing, and medical exams as described in the OSHA Respiratory Protection Standard (29 CFR 1910.134).

In case of emergency, entry into or escape from unknown concentrations, select the highest level approved respiratory protection available.

Other Information

None

9. PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties

Physical state	Orange liquid
Odor	Odorless
Odor threshold	No data available
pH	No data available
Melting point/freezing point	ca. 0°C (ca. 32°F)
Initial boiling point and boiling range	ca. 100°C (ca. 32°F)
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper flammability or explosive limits	No data available
Lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	Water soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY
10.1 Reactivity

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No data available

10.2 Chemical stability

Stable in a closed container within label-specified storage temperature and expiration date.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Potassium dichromate reacts violently with hydrazine; anhydrous hydroxylamine; ethylene glycol; and mixtures of sulfuric acid and acetone. Combinations of potassium dichromate with boron and silicon, iron or tungsten form explosive pyrotechnic mixtures. Potassium dichromate is not compatible with oxidizing agents (such as perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, bromine and fluorine); strong acids (such as hydrochloric, sulfuric and nitric); and metals. Zinc chloride may react violently or explosively with potassium. Zinc chloride is not compatible with cyanides; sulfides; oxidizing agents (such as perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, bromine and fluorine); and strong bases (such as sodium hydroxide and potassium hydroxide). Zinc chloride is corrosive to metals.

10.6 Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects
Inhalation exposure

No data available

Oral exposure

No data available

Dermal exposure

No data available

Skin corrosion/irritation

Contact with potassium dichromate and zinc chloride can irritate and burn the skin.

Serious eye damage/irritation

Contact with potassium dichromate and zinc chloride can irritate and burn the eyes with possible eye damage.

Respiratory or skin sensitization

Potassium dichromate may cause an asthma-like allergy. Future exposure can cause asthma attacks with shortness of breath, wheezing, coughing, and/or chest tightness.

Germ Cell mutagenicity

Potassium dichromate can cause change in the genetic material in a body cell leading to birth defects, miscarriages, or cancer.

Reproductive toxicity

There is limited evidence that potassium dichromate may damage the developing fetus in animals.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

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Potassium dichromate may damage the liver and kidneys.

Aspiration hazard

No data available

Acute toxicity

Potassium Dichromate:

LD50 rat oral 25 mg/kg

LD50 rat dermal 14 mg/kg

LD50 rat inhalation 0.088 mg/l/4 hours

Zinc Chloride:

LD50 rat oral 350 mg/kg

Carcinogenicity

IARC: Potassium Dichromate: Group 1 - Carcinogenic to humans

NTP: Potassium Dichromate: Known to be a human carcinogen

OSHA: Potassium Dichromate: Specifically regulated carcinogen

Additional information

RTECS: No data available

12. ECOLOGICAL INFORMATION
12.1 Ecotoxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS
13.1 Waste disposal methods
Contents

Dispose of contents in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of packaging in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION
14.1 DOT (US)

UN-Number No data available

Proper shipping name No data available

Hazard class No data available

Packing group No data available

Environmental hazards No data available

15. REGULATORY INFORMATION

Version 1.0

15.1 No data available**16. OTHER INFORMATION**

Preparation Information

Newcomer Supply Inc.

800-383-7799

www.newcomersupply.com

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