

Part Number: 1461

**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](http://www.newcomersupply.com)
**Email:** [newly@newcomersupply.com](mailto: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
- 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.
- Use only outdoors or in a well-ventilated area.

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- In case of inadequate ventilation wear respiratory protection.
- Response:**
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Wash contaminated clothing before reuse.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- Specific treatment is urgent: see first aid measures in section 4.
- Immediately call a POISON CENTER or doctor/physician.

**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. Wash contaminated clothing before reuse. 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.

**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

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**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 <sup>3</sup>
		NIOSH REL	TWA	0.001 mg/m <sup>3</sup>
		ACGIH TLV	TWA	0.05 mg/m <sup>3</sup>

Component	CAS-No.	Regulatory	Value	Parameters
Zinc Chloride	7646-85-7	OSHA PEL	TWA	1 mg/m <sup>3</sup>
		NIOSH REL	TWA	1 mg/m <sup>3</sup>
		NIOSH REL	STEL	2 mg/m <sup>3</sup>
		ACGIH TLV	TWA	1 mg/m <sup>3</sup>
		ACGIH TLV	STEL	2 mg/m <sup>3</sup>

**8.2 Exposure Controls**
**Appropriate engineering controls**

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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**

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

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**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**

Potassium dichromate may damage the liver and kidneys.

**Aspiration hazard**

No data available

**Acute toxicity**

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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)**

<b>UN-Number</b>	No data available
<b>Proper shipping name</b>	No data available
<b>Hazard class</b>	No data available
<b>Packing group</b>	No data available
<b>Environmental hazards</b>	No data available

**15. REGULATORY INFORMATION**
**15.1** No data available

**16. OTHER INFORMATION**

Preparation Information  
 Newcomer Supply Inc.

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800-383-7799

[www.newcomersupply.com](http://www.newcomersupply.com)

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