

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 870.10

Revision Date: December 18, 2013

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Zirconyl Chloride

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Zirconyl chloride	13520-92-8	$\text{ZrOCl}_2 \cdot 8\text{H}_2\text{O}$	322.25	
Synonyms: Zirconium oxychloride, octahydrate; basic zirconium chloride				

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

If inhaled: Remove victim to fresh air in a position comfortable for breathing (P304+P340). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If on skin:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363). **If swallowed:** Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

SECTION 5 — FIRE FIGHTING MEASURES

Not flammable or combustible.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

Exposure limits: 5 mg/m³ (PEL as Zr, OSHA); 10 mg/m³ (STEL as Zr, ACGIH)

NFPA CODE
None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Do not allow solid to become airborne. Ventilate area. Wipe up, place in sealed bag or container and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Do not breathe dust or fumes (P260).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling (P264).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White solid. Odorless.

Soluble: Water

Melting point: 400 °C (decomposes)

pH: acidic

Specific gravity: 1.91

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with heat, strong oxidizers, strong acids, strong bases.

Shelf life: Poor, hygroscopic. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Corrosive to skin, eyes, mucous membranes and digestive tract.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD₅₀: 2950 mg/kg (as ZrOCl₂)

IHL-RAT LC₅₀: N.A.

SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #24b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Corrosive solid, acidic, inorganic, n.o.s. (Zirconium dichloride oxide). Hazard class: 8. UN number: 3260.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

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Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.