

Chemical Solutions, Inc.
3392 State Hwy 8
South New Berlin, NY 13843
607-859-2706 607-859-2917(Fax)

MATERIAL SAFETY DATA SHEET

HOLMIUM OXIDE WAVELENGTH CALIBRATION STANDARD

CHEMICAL NAME & SYNONYMS

holmium oxide Wavelength Calibration Standard
Holmium Perchlorate, solution

DOT CLASS

5.1
TSCA listed - No

SARA TITLE 313

No

FORMULA

REPORTABLE QUANTITY

F.W.

CAS#

Ho(ClO ₄) ₃	<5%	N/A	463.29	14017-54-0
HClO ₄	<5%	N/A	100.46	7601-90-3
H ₂ O	>90%	N/A	18.02	7732-18-5

PHYSICAL DATA

Density 1.57; Completely miscible with water.

APPEARANCE & ODOR

Pink, odorless liquid.

REACTIVITY & CONDITIONS TO AVOID

Stable. Becomes oxidizing on concentration and heating to above 150°C. Incompatible with organic matter and combustibles.

FIRE HAZARDS

May cause fire if allowed to dry out after contact with wood, paper, cloth, or other organic or combustible materials. Firefighters wear SCBA.

EXTINGUISHER

Water Spray

FLASHPOINT

N/A

LEL

N/A

UEL

N/A

HEALTH HAZARDS

May be irritating to skin and eyes. LD/TD no data. OSHA PEL/ACGIH TLV not established. No evidence of carcinogenicity. Toxic effects may include blood-clotting abnormalities. The perchlorate ion has been shown to interfere with iodine uptake by the thyroid in test animals. Studies on workers in plants where perchlorate salts are manufactured have shown no thyroid abnormalities. Thyroid effects on humans continues to be studied.

SPECIAL PRECAUTIONS

Use rubber gloves and goggles. This product is supplied SOLELY for use in RESEARCH AND DEVELOPMENT by or under the supervision of a TECHNICALLY QUALIFIED INDIVIDUAL, Who should be FULLY COGNIZANT of the procedures for working with chemical products of this type as described at 40 CFR 720.36.

FIRST AID

Wash contact area thoroughly with water. If eye irritation persists, get medical attention. If swallowed, give water or milk and get medical attention.

SPILLS & LEAKS

Wash up with water. Disposal of neutralized solution to sanitary drain with plenty of water. Paper, cloth or wood which has come in contact with this product should be rinsed thoroughly with water and then incinerated.

HANDLING AND STORAGE

Precautions for safe handling

Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

TRANSPORTATION INFORMATION

DOT (US)

UN number: 3211 Class: 5.1

Packing group: II Proper shipping name: Perchlorates, inorganic, aqueous solution, n.o.s.

Reportable Quantity (RQ): Marine Pollutant: No Poison Inhalation Hazard: No

IMDG

UN number: 3211 Class: 5.1 Packing group: II

EMS-No: F-H, S-Q Proper shipping name: PERCHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S. Marine

Pollutant: No

IATA

UN number: 3211 Class: 5.1 Packing group: II Proper shipping name: Perchlorates, inorganic, aqueous solution, n.o.s.

REGULATORY INFORMATION

OSHA Hazards Oxidizer

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards Reactivity Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

CAS-No.Revision Date

Water

14017-54-0

7732-18-5 Holmium(3+) perchlorate

New Jersey Right To Know Components

CAS-No.Revision Date

Water

14017-54-0

7732-18-5 Holmium(3+) perchlorate

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

CATALOG #**PREPARED BY****DATE**

PQAHOX01

RH

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