



SAFETY DATA SHEET

ProChemOnline.com



SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Gadolinium, Powder**

PRODUCT NUMBER: 1804

CAS NUMBER: 7440-54-2

MANUFACTURER:

Prochem, Inc.
826 Roosevelt Road
Rockford, IL 61109

PHONE: 815-398-1788
FAX: 815-398-1810
TOLL FREE: 800-795-8788

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC: 1-800-424-9300

SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

Danger

Hazard Statements

H228	Flammable solid.
H260	In contact with water releases flammable gases which may ignite spontaneously.

Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces.
P231+P232	Handle under inert gas. Protect from moisture.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P402+P404	Store in a dry place. Store in a closed container.

HMIS CLASSIFICATION:

Health: 1 Fire: 3 Reactivity Hazard: 2

NFPA RATING:

Health: 1 Flammability: 3 Reactivity Hazard: 2 Specific Hazard: W

EYE CONTACT: May cause slight to mild irritation of the eyes.

SKIN CONTACT: May cause slight to mild irritation of the skin.

INHALATION: May be irritating to the nasal cavity, mucous membranes, and respiratory tract.

INGESTION: No specific information on the physiological effects of ingestion.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: Gd

Molecular Weight: 157.25

CHEMICAL NAME	CAS#	%
Gadolinium	7440-54-2	100

SECTION 4 FIRST AID MEASURES

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

SKIN EXPOSURE: Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

INGESTION: Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

SECTION 5 FIREFIGHTING MEASURES

FLASH POINT: Not available

AUTO IGNITION TEMPERATURE: Not available

EXPLOSION LIMITS: Not available

EXTINGUISHING MEDIUM: Special powder for metal fires. Do not use water. Contact with water liberates extremely flammable gases.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Gadolinium oxides

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid the formation of dust. Avoid breathing vapors, mist, gas, or dust. Keep away from ignition sources

ENVIRONMENTAL PRECAUTIONS: Prevent spillage from entering drains or allowing to be released into the environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Cover spill with sodium carbonate or dolomite. Sweep up and place in suitable container for proper disposal.

SECTION 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Avoid formation of dusts and aerosols.

CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Store under dry inert gas. This product is moisture sensitive, protect from humidity and water. This product is air sensitive, keep container tightly sealed. Contact with water released flammable gases.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS: Contains no substances with occupational exposure limit values.

EYE PROTECTION: Wear chemical safety glasses or goggles and face shield.

SKIN PROTECTION: Wear nitrile or rubber gloves, and a complete suit protecting against chemicals.

VENTILATION: Provide local exhaust, preferably mechanical.

RESPIRATOR: Use an approved respirator.

ADDITIONAL PROTECTION: Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Light gray solid

ODOR: None

MOLECULAR WEIGHT: 157.25

BOILING POINT: 3273° C

MELTING POINT: 1312° C

SPECIFIC GRAVITY: 7.886 gm/ml

VAPOR DENSITY: No data available

SOLUBILITY: Reacts violently with water

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Air and moisture sensitive.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Contact with hot water, mixtures of fire dust with air

INCOMPATIBILITY: Air, oxidizing agents, water, and moisture.

DECOMPOSITION PRODUCTS: Gadolinium oxides

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY: Implant (mouse); TDLo: 25gm/kg. Tumorigenic.

CARCINOGENIC EFFECTS: No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen.

MUTAGENIC EFFECTS: Not available

TETRAOGENIC EFFECTS: Not available

CHRONIC TOXICITY: Not available

RTECS: LW3850000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12 ECOLOGICAL DATA

No information available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

SECTION 14 TRANSPORTATION DATA

UN3208

Metallic substance, water-reactive, n.o.s.

(Gadolinium)

CLASS 4.3

PG III

Marine Pollutant: No

SECTION 15 REGULATORY INFORMATION

TSCA: Listed in the TSCA inventory

SARA 302/304: Not Listed

SARA 311/312: Reactivity Hazard

SECTION 15 REGULATORY INFORMATION (Cont.)

SARA (TITLE 313): Not Listed

CALIFORNIA PROP. 65: Not Listed

MASSACHUSETTS RIGHT TO KNOW COMPONENTS: No components are subject to the Massachusetts Right to Know Act.

NEW JERSEY RIGHT TO KNOW COMPONENTS: Gadolinium

PENNSYLVANIA RIGHT TO KNOW COMPONENTS: Gadolinium

SECTION 16 OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

DATE PREPARED: 06/15

SDS DEPT.