



Magnesium Chromate Hydrate		Pricing >
Linear Formula	MgCrO ₄ • xH ₂ O	
Pubchem CID	516851	
MDL Number	MFCD00673717 / MFCD00036269 / MFCD00801009	
EC No.	236-540-0	
IUPAC Name	magnesium; dioxido(dioxo)chromium; hydrate	
Beilstein/Reaxys No.	N/A	
SMILES	O.[O-][Cr](=O)(=O)[O-].[Mg+2]	
Inchl Identifier	InChI=1S/Cr.Mg.3H2O.2O/h;;3*1H2;;/q+2;;;;;;/p-2	
Inchl Key	BWDANDPWLRGULC-UHFFFAOYSA-N	
Signal Word	Danger	
Hazard Statements	H317-H350i-H410	
Hazard Codes	Xn, N	
Precautionary Statements	P201-P273-P280-P308 + P313-P333 + P313-P501	
Risk Codes	N/A	
Safety Statements	N/A	
Transport Information	UN 3077 9 / PGIII	
WGK Germany	1	
GHS Pictograms	<p>GHS07 Exclamation Point</p>  <p>GHS09 Environment</p> 	

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SAFETY DATA SHEET

Date Accessed: 05/19/2024

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #23371-94-0

Relevant identified uses of the substance:
Scientific research and development

Supplier details:
American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351

Emergency telephone number:
Domestic, North America +1 800-424-9300
International +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Skin sensitisation (Category 1), H317
Carcinogenicity (Category 1B), H350
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

2.2 GHS Label elements, including precautionary statements



Pictogram
Signal word Danger
Hazard statement(s)
H317 May cause an allergic skin reaction.
H350 May cause cancer.
H410 Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have

been read and understood.
P261 Avoid breathing dust/ fume/ gas/ mist/ Vapors/ spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Formula : $\text{CrMgO}_4 \cdot x\text{H}_2\text{O}$
Molecular weight : 140.30 g/mol
CAS-No. : 23371-94-0
EC-No. : 236-540-0
Index-No. : 024-017-00-8
Hazardous components
Component Classification Concentration
Magnesium chromate hydrate
Skin Sens. 1; Carc. 1B;
Aquatic Acute 1; Aquatic
Chronic 1; H317, H350, H410
≤ 100 %

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures
General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Magnesium oxide, Chromium oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing Vapors, mist or gas.

Ensure adequate

ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment

must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust.

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration

before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials

causing chronic effects

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component CAS-No. Value Control parameters

Basis

Remarks Substance listed; for more information see OSHA document

1910.1026

Magnesium

chromate hydrate

23371-94-0 CEIL 1.000000mg/10 m3

USA. Occupational Exposure Limits (OSHA) - Table Z-2

Z37.7-1971

This standard applies to any operations or sectors for

which the
exposure limit in the Chromium (VI) standard, Sec.
1910.1026, is
stayed or is otherwise not in effect.
TWA 0.010000
mg/m³
USA. ACGIH Threshold Limit Values
(TLV)
Lung cancer
Confirmed human carcinogen
varies
TWA 0.001000
mg/m³
USA. NIOSH Recommended
Exposure Limits
Potential Occupational Carcinogen
See Appendix C
See Appendix A
See Table Z-2 for the exposure limit for any
operations or sectors
where the exposure limit in § 1910.1026 is stayed or
is otherwise not
in effect
Substance listed; for more information see OSHA
document
1910.1026
CEIL 1mg/10m³ USA. Occupational Exposure Limits
(OSHA) - Table Z-2
Z37.7-1971
This standard applies to any operations or sectors for
which the
exposure limit in the Chromium (VI) standard, Sec.
1910.1026, is
stayed or is otherwise not in effect.
TWA 0.01 mg/m³ USA. ACGIH Threshold Limit
Values
(TLV)
Lung cancer
Confirmed human carcinogen
varies
TWA 0.05 mg/m³ USA. ACGIH Threshold Limit
Values
(TLV)
Upper Respiratory Tract irritation
Cancer
Substances for which there is a Biological Exposure
Index or Indices
(see BEI® section)
Confirmed human carcinogen
varies
PEL 0.005 mg/m³ OSHA Specifically Regulated
Chemicals/Carcinogens
1910.1026
This standard applies to occupational exposures to
chromium (VI) in

all forms and compounds in general industry, except:

(a) Exposures that occur in the application of pesticides regulated by the Environmental Protection Agency or another Federal government agency (e.g., the treatment of wood with preservatives); (b) Exposures to portland cement; or (c) Where the employer has objective data demonstrating that a material containing chromium or a specific process, operation, or activity involving chromium cannot release dusts, fumes, or mists of chromium (VI) in concentrations at or above 0.5 µgm/m³ as an 8-hour time-weighted average (TWA) under any expected conditions of use.

Chromium (VI) [hexavalent chromium or Cr(VI)] means chromium with a valence of positive six, in any form and in any compound

OSHA specifically regulated carcinogen
TWA 0.0002 mg/m³ USA. NIOSH Recommended Exposure Limits
Potential Occupational Carcinogen
See Appendix C
See Appendix A
Biological occupational exposure limits
Component CAS-No. Parameters Value Biological specimen
Basis
Magnesium chromate hydrate
23371-94-0 Total chromium
25.0000 µg/l
In urine ACGIH - Biological Exposure Indices (BEI)
Remarks End of shift at end of workweek
Total chromium
10.0000 µg/l
In urine ACGIH - Biological Exposure Indices (BEI)
Increase during shift
Total chromium
25 µg/l Urine ACGIH - Biological Exposure Indices

(BEI)
End of shift at end of workweek
Total
chromium
10 µg/l Urine ACGIH - Biological
Exposure Indices
(BEI)
Increase during shift
8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene
and safety practice. Wash hands before breaks and at
the end of
workday.
Personal protective equipment
Eye/face protection
Face shield and safety glasses Use equipment for eye
protection tested and approved under appropriate
government standards such as NIOSH (US) or EN
166(EU).
Skin protection
Handle with gloves. Gloves must be inspected prior to
use. Use proper glove removal technique (without
touching glove's outer surface) to avoid skin contact
with this product. Dispose of contaminated gloves
after
use in accordance with applicable laws and good
laboratory practices. Wash and dry hands.
Body Protection
Complete suit protecting against chemicals, The type
of protective equipment must be selected according to
the concentration and amount of the dangerous
substance at the specific workplace.
Respiratory protection
Where risk assessment shows air-purifying respirators
are appropriate use a full-face particle respirator type
N100 (US) or type P3 (EN 143) respirator cartridges
as a backup to engineering controls. If the respirator
is the
sole means of protection, use a full-face supplied air
respirator. Use respirators and components tested
and
approved under appropriate government standards
such as NIOSH (US) or CEN (EU).
Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do
not let product enter drains. Discharge into the
environment must be avoided.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical

properties

a) Appearance Form: powder

b) Odor No data available

c) Odor Threshold No data available

d) pH No data available

e) Melting point/freezing
point

No data available

f) Initial boiling point and
boiling range

No data available

g) Flash point N/A

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower

flammability or

explosive limits

k) Vapor pressure No data available

l) Vapor density No data available

m) Relative density No data available

n) Water solubility No data available

o) Partition coefficient: octanol/
water

No data available

p) Auto-ignition

temperature

No data available

q) Decomposition

temperature

No data available

r) Viscosity No data available

s) Explosive properties No data available

t) Oxidizing properties No data available

9.2 Other safety information

No data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat Avoid moisture.

10.5 Incompatible materials

Organic materials, Phosphorus, Powdered metals,

Hydrogen sulfide gas

10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Inhalation: No data available

Dermal: No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen

IARC: 1 - Group 1: Carcinogenic to humans
(Magnesium chromate hydrate)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: OSHA specifically regulated carcinogen
(Magnesium chromate hydrate)

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

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 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste

disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a

chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Magnesium chromate hydrate)

Marine pollutant:yes

IATA

UN number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Magnesium chromate hydrate)

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination

packagings containing

inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

SECTION 15. REGULATORY INFORMATION

SARA 302 Components

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

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Magnesium chromate hydrate

CAS-No.

23371-94-0

Revision Date

1993-04-24

SARA 311/312 Hazards

Chronic Health Hazard

Massachusetts Right To Know Components

Magnesium chromate hydrate

CAS-No.

23371-94-0

Revision Date

1993-04-24

Pennsylvania Right To Know Components

Magnesium chromate hydrate

CAS-No.

23371-94-0

Revision Date

1993-04-24

New Jersey Right To Know Components

Magnesium chromate hydrate

CAS-No.

23371-94-0

Revision Date

1993-04-24

California Prop. 65 Components

WARNING! This product contains a chemical known to the

State of California to cause cancer.

Magnesium chromate hydrate

CAS-No.

23371-94-0

Revision Date

2014-06-06

WARNING: This product contains a chemical known to the

State of California to cause birth defects or other reproductive harm.

Magnesium chromate hydrate

CAS-No.

23371-94-0

Revision Date

2014-06-06

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.
