

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name CGCR(6)1

Product Description 1000 µg/mL Chromium(6)
 Contains Ammonium bichromate

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company
 Inorganic Ventures
 300 Technology Drive
 Christiansburg, VA 24073
 web: www.inorganicventures.com

E-mail Address info@inorganicventures.com

1.4. Emergency telephone number

Chemtrec 1-800-424-9300 (North America)
 Chemtrec +1 703-741-5970 (International)

Europe	See above
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

GHS

Respiratory sensitization	Category 1 - (H334)
Skin sensitization	Category 1 - (H317)
Germ cell mutagenicity	Category 1B - (H340)
Carcinogenicity	Category 1B - (H350)

2.2. Label Elements

Product identifier
 Contains Ammonium bichromate



Signal word
 Danger

Hazard statements

H317 - May cause an allergic skin reaction

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H340 - May cause genetic defects

H350 - May cause cancer May produce an allergic reaction

Precautionary Statements - EU (§28, 1272/2008)

P201 - Obtain special instructions before use

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P280 - Wear eye protection/ face protection

P281 - Use personal protective equipment as required

P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

2.3. Other information

May cause heritable genetic damage

SECTION 3: Composition/information on ingredients**3.1 Substances**

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No
Ammonium bichromate	EEC No. Present	7789-09-5	0.24	Acute Tox. 2 (H330) Acute Tox. 3 (H301) Acute Tox. 4 (H312) Skin Corr. 1B (H314) Ox. Sol. 2 (H272) Repr. 1B (H360FD) STOT RE 1 (H372) Muta. 1B (H340) Carc. 1B (H350) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available

Full text of H- and EUH-phrases: see section 16**SECTION 4: First aid measures****4.1. Description of first aid measures****General Advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Inhalation

Immediate medical attention is required. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, give oxygen. If breathing is irregular or stopped, administer artificial respiration.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Eye Contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Do not rub

affected area. If symptoms persist, call a physician.

Ingestion

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

4.2. Most important symptoms and effects, both acute and delayed**Most Important Symptoms and Effects**

Difficulty in breathing.

4.3. Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Treat symptomatically

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****Personal Precautions**

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing.

Advice for emergency responders

Ensure adequate ventilation.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up**Methods for Containment**

Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

SECTION 7: Handling and storage**7.1. Precautions for Safe Handling**

Advice on safe handling

Ensure adequate ventilation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities**Storage Conditions**

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

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

Chemical name	EU	United Kingdom	France	Spain	Germany	
Ammonium bichromate 7789-09-5		TWA: 0.05 mg/m³	TWA: 0.001 mg/m³ STEL: 0.005 mg/m³	TWA: 0.05 mg/m³	Skin	
Chemical name	Italy	Portugal	The Netherlands	Finland	Denmark	
Ammonium bichromate 7789-09-5		TWA: 0.5 mg/m³ TWA: 0.05 mg/m³	TWA: 0.001 mg/m³	TWA: 0.005 mg/m³	TWA: 0.005 mg/m³	
Chemical name	Sweden	Austria	Switzerland	Poland	Norway	Ireland
Ammonium bichromate 7789-09-5			Skin TWA: 0.005 mg/m³	TWA: 0.01 mg/m³	STEL: 0.015 mg/m³	TWA: 0.05 mg/m³ TWA: 0.01 mg/m³ STEL: 0.15 mg/m³ STEL: 0.03 mg/m³

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment**Eye/Face Protection**

Wear safety glasses with side shields (or goggles).

Hand Protection

Impervious gloves.

Skin and Body Protection

Impervious clothing. Boots. Chemical resistant apron.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Environmental Exposure Controls No information available.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties****Physical state**

Liquid

Appearance

clear / Orange

Odor

Odorless

Property**Values****pH - VALUE 1**

No data available

Melting point / melting range

No data available

Boiling point / boiling range

100 °C / 212 °F

Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapor pressure @20 °C (kPa)	No data available
Vapor density	No data available
Relative Density	No data available
Specific gravity - VALUE 1	No data available
Water solubility	Miscible
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Dynamic viscosity - VALUE 1	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available
Other information	
VOC Content (%)	No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical Stability

Stable under normal conditions.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

10.3. Possibility of Hazardous Reactions

Hazardous Polymerization

None under normal processing.

Hazardous Reactions

None under normal processing.

10.4. Conditions to Avoid

None known.

10.5. Incompatible materials

No information available

10.6. Hazardous Decomposition Products

No information available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Product Information	Harmful by inhalation. Contains a known or suspected carcinogen. May cause cancer.
Inhalation	Harmful by inhalation.
Eye Contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 41,666.70 mg/kg ppm
ATEmix (inhalation-dust/mist) 83.30 mg/l
Unknown acute toxicity
 0 % of the mixture consists of ingredient(s) of unknown toxicity.
 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Sensitization	No information available.
Mutagenic Effects	Contains a known or suspected mutagen. May cause heritable genetic damage.

Carcinogenic effects

Chemical name	EU Annex I Carcinogen Information
Ammonium bichromate	Carc. 1B

Reproductive Toxicity May cause heritable genetic damage.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organ Effects Respiratory system.

Aspiration hazard No information available.

SECTION 12: Ecological information

12.1. Toxicity

Contains 0 % of components with unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ammonium bichromate		136: 96 h Gambusia affinis mg/L LC50	

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil**Mobility in soil**

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods**Waste from Residues/Unused Products**

Dispose of in accordance with federal, state and local regulations.

Contaminated Packaging

Do not reuse empty containers.

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG

14.1. UN-No	UN1439
14.2. Proper shipping name	Ammonium Dichromate
14.3. Transport hazard class(es)	5.1
14.4. Packing Group	II
Description	Not applicable
14.5. Marine Pollutant	None
14.6. Special Provisions	None
No information available Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

RID

14.1. UN-No	UN1439
14.2. Proper shipping name	Ammonium Dichromate
14.3. Hazard Class	5.1
14.4. Packing Group	II
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None

ADR

14.1. UN-No	UN1439
14.2. Proper shipping name	Ammonium Dichromate
14.3. Hazard Class	5.1

14.4. Packing Group	II
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None
ICAO	
14.1. UN-No	UN1439
14.2. Proper Shipping Name	Ammonium Dichromate
14.3. Hazard Class	5.1
14.4. Packing Group	II
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None
IATA-DGR	
14.1. UN-No	UN1439
14.2. Proper shipping name	Ammonium Dichromate
14.3. Transport hazard class(es)	5.1
14.4. Packing Group	II
Description	Not applicable
14.5. Environmental hazard	None
14.6. Special Provisions	None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

All of the components in the product are on the following Inventory lists: U.S.A. (TSCA), Europe (EINECS/ELINCS/NLP), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), China (IECSC), Australia (AICS), Korea (ECL).

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies
AICS	Complies
KECL	Complies

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No information available

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

R34 - Causes burns

R45 - May cause cancer

R49 - May cause cancer by inhalation
R2 - Risk of explosion by shock, friction, fire or other sources of ignition
R46 - May cause heritable genetic damage
R8 - Contact with combustible material may cause fire
R43 - May cause sensitization by skin contact
R61 - May cause harm to the unborn child
R60 - May impair fertility
R26 - Also very toxic by inhalation
R25 - Also toxic if swallowed
R21 - Also harmful in contact with skin
R20 - Also harmful by inhalation
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R42/43 - May cause sensitization by inhalation and skin contact
R48/23 - Also toxic: danger of serious damage to health by prolonged exposure through inhalation

Full text of H-Statements referred to under section 3

H272 - May intensify fire; oxidizer
H301 - Toxic if swallowed
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H330 - Fatal if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H340 - May cause genetic defects
H350 - May cause cancer
H360FD - May damage fertility. May damage the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Revision Date 13-May-2024

Reason for Revision Not applicable.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet