

# Chromic Acid

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Date of issue: 10/18/2013 Version: 1.0

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

#### 1.1. Product identifier

Product form : Substance  
Substance name : Chromic Acid  
CAS No : 1333-82-0  
Product code : LC13090  
Formula : CrO<sub>3</sub>  
Synonyms : chromia / chromium (VI) oxide / chromic anhydride / chromic trioxide / chromium anhydride / chromium oxide, red / monochromium oxide / red oxide of chromium  
BIG no : 10064

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

Use of the substance/mixture : Oxidant  
Reagent

#### 1.3. Details of the supplier of the safety data sheet

LabChem Inc  
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court  
Zelienople, PA 16063 - USA  
T 412-826-5230 - F 724-473-0647  
[info@labchem.com](mailto:info@labchem.com) - [www.labchem.com](http://www.labchem.com)

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Ox. Sol. 1 H271  
Acute Tox. 3 (Oral) H301  
Acute Tox. 3 (Dermal) H311  
Acute Tox. 2 (Inhalation) H330  
Skin Corr. 1A H314  
Resp. Sens. 1 H334  
Skin Sens. 1 H317  
Muta. 1B H340  
Carc. 1A H350  
Repr. 2 H361  
STOT RE 1 H372  
Aquatic Acute 1 H400  
Aquatic Chronic 1 H410

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS03



GHS05



GHS06



GHS07



GHS08



GHS09

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :

- H271 - May cause fire or explosion; strong oxidiser
- H301+H311 - Toxic if swallowed or 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 (Inhalation)
- H361 - Suspected of damaging fertility or the unborn child
- H372 - Causes damage to organs (kidneys, liver, respiratory system, Skin, eye) through prolonged or repeated exposure
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use

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P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from heat, sparks, open flames. - No smoking  
P220 - Keep/Store away from clothing, combustible materials  
P221 - Take any precaution to avoid mixing with combustibles  
P260 - Do not breathe dust  
P264 - Wash exposed skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P271 - Use only outdoors or in a well-ventilated area  
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  
P283 - Wear fire/flammable resistant/retardant clothing  
P284 - [In case of inadequate ventilation] wear respiratory protection  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P306+P360 - If on clothing: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P310 - Immediately call a POISON CENTER or doctor/physician  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...  
P363 - Wash contaminated clothing before reuse  
P370+P378 - In case of fire: Use carbon dioxide (CO<sub>2</sub>), powder, alcohol-resistant foam for extinction  
P371+P380+P375 - In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion  
P391 - Collect spillage  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up  
P501 - Dispose of contents/container to comply with local, state and federal regulations

### 2.3. Other hazards

Other hazards not contributing to the classification : None.

### 2.4. Unknown acute toxicity (GHS-US)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Chromic Acid (Main constituent)	(CAS No) 1333-82-0	100	Ox. Sol. 1, H271 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation), H330 Skin Corr. 1A, H314 Resp. Sens. 1, H334 Skin Sens. 1, H317 Muta. 1B, H340 Carc. 1A, H350 Repr. 2, H361 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

First-aid measures after inhalation : Remove the victim into fresh air. Immediately consult a doctor/medical service.

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First-aid measures after skin contact	: Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.
First-aid measures after eye contact	: Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take victim to an ophthalmologist.
First-aid measures after ingestion	: Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Immediately consult a doctor/medical service. Call Poison Information Centre ( <a href="http://www.big.be/antigif.htm">www.big.be/antigif.htm</a> ). Take the container/vomit to the doctor/hospital. Ingestion of large quantities: immediately to hospital. Do not give chemical antidote.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Dry/sore throat. Coughing. Corrosion of the upper respiratory tract. Runny nose. Respiratory difficulties. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible laryngeal spasm/oedema. Risk of lung oedema.
Symptoms/injuries after skin contact	: Caustic burns/corrosion of the skin.
Symptoms/injuries after eye contact	: Corrosion of the eye tissue. Inflammation/damage of the eye tissue.
Symptoms/injuries after ingestion	: Nausea. Burns to the gastric/intestinal mucosa. Abdominal pain. Blood in vomit. Blood in stool. Shock. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Change in urine output. Affection of the renal tissue. Enlargement/affection of the liver. Change in the haemogramme/blood composition.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation. Affection of the nasal septum. Nosebleeding. Respiratory difficulties. Possible inflammation of the respiratory tract. Risk of pneumonia. Lung tissue affection/degeneration. Inflammation/damage of the eye tissue. Enlargement/affection of the liver.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: EXTINGUISHING MEDIA FOR SURROUNDING FIRES: All extinguishing media allowed.
Unsuitable extinguishing media	: No unsuitable extinguishing media known.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: DIRECT FIRE HAZARD. Non combustible. INDIRECT FIRE HAZARD. Promotes combustion. Reactions involving a fire hazard: see "Reactivity Hazard".
Explosion hazard	: INDIRECT EXPLOSION HAZARD. Reactions with explosion hazards: see "Reactivity Hazard".
Reactivity	: Reacts on exposure to water (moisture) with (some) metals. Reacts violently on exposure to water (moisture) with (some) bases. When decomposing on exposure to temperature rise: oxidation which increases fire hazard. Risk of explosion with combustible materials. Reacts with organic material: risk of spontaneous ignition. Reacts violently with many compounds e.g.: with (strong) reducers, with (some) acids and with oils/fats: (increased) risk of fire/explosion.

### 5.3. Advice for firefighters

Precautionary measures fire	: Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.
Firefighting instructions	: Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.
Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment	: Gloves. Face-shield. Corrosion-proof suit. Dust cloud production: compressed air/oxygen apparatus. Dust cloud production: dust-tight suit.
Emergency procedures	: Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Corrosion-proof appliances. Keep containers closed. Wash contaminated clothes. In case of reactivity hazard: consider evacuation.
Measures in case of dust release	: In case of dust production: keep upwind. In case of dust production: consider evacuation. Dust production: have neighbourhood close doors and windows.

#### 6.1.2. For emergency responders

Protective equipment	: Do not breathe dust. Equip cleanup crew with proper protection.
Emergency procedures	: If a major spill occurs, all personnel should be immediately evacuated and the area ventilated. Stop leak if safe to do so. Ventilate area.

### 6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

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### 6.3. Methods and material for containment and cleaning up

- For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray. Take account of toxic/corrosive precipitation water.
- Methods for cleaning up : Spill must not return in its original container. Prevent dispersion by covering with dry sand/earth. Do not take up in combustible material such as: saw dust. Wetted substance: mix with dry sand or powdered limestone. Scoop solid spill into closing containers. See "Material-handling" for suitable container materials. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Pulverization rapidly increases toxic concentration.
- Precautions for safe handling : Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Use corrosionproof equipment. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid raising dust. Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

- Incompatible products : aluminium. combustible materials. metals. Strong oxidizers. Strong reducing agents.
- Incompatible materials : Moisture.
- Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources.
- Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: combustible materials. reducing agents. (strong) bases. oils-fats. metals. halogens. organic materials. alcohols. (strong) acids.
- Storage area : Store in a dry area. Store in a dark area. Keep container in a well-ventilated place. Fireproof storeroom. Keep locked up. Unauthorized persons are not admitted. Detached building. Keep only in the original container. Meet the legal requirements.
- Special rules on packaging : SPECIAL REQUIREMENTS: hermetical. watertight. corrosion-proof. dry. clean. shock-absorbing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
- Packaging materials : MATERIAL TO AVOID: paper. wood. steel. aluminium. iron. copper. nickel. bronze. plastics.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Chromic Acid (1333-82-0)		
USA ACGIH	ACGIH TWA (mg/m³)	0.05 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	0.005 mg/m³

### 8.2. Exposure controls

- Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.
- Materials for protective clothing : GIVE GOOD RESISTANCE: butyl rubber. PVC.
- Hand protection : Gloves.
- Eye protection : Face shield. In case of dust production: protective goggles.
- Skin and body protection : Corrosion-proof clothing. In case of dust production: head/neck protection.
- Respiratory protection : Dust production: dust mask with filter type P3. High dust production: self-contained breathing apparatus.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Appearance : Crystalline solid. Crystalline powder. Needles. Flakes.
- Molecular mass : 99.99 g/mol
- Colour : Dark red to red-violet.
- Odour : Odourless.

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Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 196 °C
Freezing point	: No data available
Boiling point	: Not applicable
Flash point	: Not applicable
Self ignition temperature	: Not applicable
Decomposition temperature	: > 196 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: < 0.1 hPa
Relative vapour density at 20 °C	: No data available
Relative density	: 2.70
Density	: 2700 kg/m <sup>3</sup>
Solubility	: Exothermically soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acids. Soluble in nitric acid. Soluble in sulfuric acid. Water: 62 g/100ml
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: May cause fire or explosion; strong oxidiser.
Oxidising properties	: May cause fire or explosion; strong oxidiser.
Explosive limits	: No data available

### 9.2. Other information

SADT	: Not applicable
VOC content	: Not applicable
Other properties	: Hygroscopic. Substance has acid reaction.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts on exposure to water (moisture) with (some) metals. Reacts violently on exposure to water (moisture) with (some) bases. When decomposing on exposure to temperature rise: oxidation which increases fire hazard. Risk of explosion with combustible materials. Reacts with organic material: risk of spontaneous ignition. Reacts violently with many compounds e.g.: with (strong) reducers, with (some) acids and with oils/fats: (increased) risk of fire/explosion.

### 10.2. Chemical stability

Unstable on exposure to moisture.

### 10.3. Possibility of hazardous reactions

May react violently with reducing agents.

### 10.4. Conditions to avoid

Avoid dust formation. Finely divided metals. Incompatible materials. Moisture.

### 10.5. Incompatible materials

alcohols. Aldehydes. aluminium. combustible materials. metals. Strong reducing agents. Strong bases.

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Toxic if swallowed. Toxic in contact with skin. Fatal if inhaled.

Chromic Acid ( 1f )1333-82-0	
LD50 oral rat	50 mg/kg (Rat)
LD50 dermal rat	55 mg/kg (Rat)
LD50 dermal rabbit	57 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	0.217 mg/l/4h (Rat)

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Not classified

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Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer (Inhalation).

Chromic Acid (1333-82-0)	
IARC group	3

Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	: Not classified

Specific target organ toxicity (repeated exposure)	: Causes damage to organs (kidneys, liver, respiratory system, Skin, eye) through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: Dry/sore throat. Coughing. Corrosion of the upper respiratory tract. Runny nose. Respiratory difficulties. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible laryngeal spasm/oedema. Risk of lung oedema.
Symptoms/injuries after skin contact	: Caustic burns/corrosion of the skin.
Symptoms/injuries after eye contact	: Corrosion of the eye tissue. Inflammation/damage of the eye tissue.
Symptoms/injuries after ingestion	: Nausea. Burns to the gastric/intestinal mucosa. Abdominal pain. Blood in vomit. Blood in stool. Shock. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Change in urine output. Affection of the renal tissue. Enlargement/affection of the liver. Change in the haemogramme/blood composition.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation. Affection of the nasal septum. Nosebleeding. Respiratory difficulties. Possible inflammation of the respiratory tract. Risk of pneumonia. Lung tissue affection/degeneration. Inflammation/damage of the eye tissue. Enlargement/affection of the liver.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Dangerous for the environment.
Ecology - air	: TA-Luft Klasse 5.2.7.1.1/I.
Ecology - water	: Severe water pollutant (surface water). Maximum concentration in drinking water: 0.050 mg/l (chromium) (Directive 98/83/EC). Highly toxic to aquatic organisms. pH shift.

Chromic Acid (1333-82-0)	
LC50 fishes 1	40 mg/l (96 h; Colisa fasciatus)
EC50 Daphnia 1	10 - 100 mg/l (48 h; Daphnia magna)

### 12.2. Persistence and degradability

Chromic Acid (1333-82-0)	
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

### 12.3. Bioaccumulative potential

Chromic Acid (1333-82-0)	
BCF fish 1	4.6 - 72 (Cyprinus carpio; Test duration: 6 weeks)
BCF fish 2	16 (Pisces)
BCF other aquatic organisms 1	192 (Mytilidae; Chrome)
BCF other aquatic organisms 2	125 (Ostreidae; Chrome)
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available



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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Remove for physico-chemical/biological treatment. Remove to an authorized dump (Class I). Treat using the best available techniques before discharge into drains or the aquatic environment.

Additional information : LWCA (the Netherlands): KGA category 06. Hazardous waste according to Directive 2008/98/EC.

### SECTION 14: Transport information

In accordance with DOT

#### 14.1. UN number

UN-No.(DOT) : 1463  
DOT NA no. UN1463

#### 14.2. UN proper shipping name

DOT Proper Shipping Name : Chromium trioxide, anhydrous

Hazard labels (DOT) : 5.1 - Oxidizing substances  
6.1 - Toxic substances  
8 - Corrosive substances



Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) : IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).  
IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.  
IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner.  
T3 - 2.65 178.274(d)(2) Normal..... 178.275(d)(2)  
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) : None

DOT Packaging Non Bulk (49 CFR 173.xxx) : 212

DOT Packaging Bulk (49 CFR 173.xxx) : 242

Marine pollutant : P



#### 14.3. Additional information

Other information : No supplementary information available.

State during transport (ADR-RID) : as solid.

#### Overland transport

Packing group (ADR) : II

Class (ADR) : 5.1 - Oxidizing substances

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Hazard identification number (Kemler No.) : 568  
Classification code (ADR) : OTC  
Danger labels (ADR) : 5.1 - Oxidizing substances  
6.1 - Toxic substances  
8 - Corrosive substances



Orange plates :

Tunnel restriction code : E

### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.  
DOT Vessel Stowage Other : 66 - Stow "separated from" flammable solids, 90 - Stow "separated from" radioactive materials  
Subsidiary risk (IMDG) : 6.1/8  
EmS-No. (1) : F-A  
EmS-No. (2) : S-Q

### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5 kg  
(49 CFR 173.27)  
DOT Quantity Limitations Cargo aircraft only (49 : 25 kg  
CFR 175.75)  
Subsidiary risk (IATA) : 6.1/8

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Chromic Acid (1333-82-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Listed on SARA Section 313 (Specific toxic chemical listings)

RQ (Reportable quantity, section 304 of EPA's List of Lists) :	10 lb
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### 15.2. International regulations

#### CANADA

#### Chromic Acid (1333-82-0)

WHMIS Classification	Class C - Oxidizing Material Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class E - Corrosive Material
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### EU-Regulations

No additional information available

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Ox. Sol. 1	H271
Carc. 1A	H350
Muta. 1B	H340
Repr. 2	H361f
Acute Tox. 2 (Inhalation)	H330
Acute Tox. 3 (Dermal)	H311
Acute Tox. 3 (Oral)	H301
STOT RE 1	H372
Skin Corr. 1A	H314
Resp. Sens. 1	H334
Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410



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Full text of H-phrases: see section 16

### Classification according to Directive 67/548/EEC or 1999/45/EC

O; R9  
Carc.Cat.1; R45  
Muta.Cat.2; R46  
Repr.Cat.3; R62  
T+; R26  
T; R24/25  
T; R48/23  
C; R35  
Xn; R42  
Xi; R43  
N; R50/53

Full text of R-phrases: see section 16

### 15.2.2. National regulations

No additional information available

### 15.3. US State regulations

Chromic Acid(1333-82-0)	
U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Yes
No significance risk level (NSRL)	0.001 µg/day

## SECTION 16: Other information

Full text of H-phrases: see section 16:

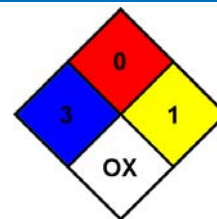
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — AcuteHazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Carc. 1A	Carcinogenicity, Category 1A
Muta. 1B	Germ cell mutagenicity, Category 1B
Ox. Sol. 1	Oxidising Solids, Category 1
Repr. 2	Reproductive toxicity, Category 2
Resp. Sens. 1	Sensitisation — Respiratory, category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Sens. 1	Sensitisation — Skin, category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H271	May cause fire or explosion; strong oxidiser
H301	Toxic if swallowed
H311	Toxic 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
H361	Suspected of damaging fertility or 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

# Chromic Acid

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- |                      |   |
|----------------------|---|
| NFPA health hazard   | : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.   |
| NFPA fire hazard     | : 0 - Materials that will not burn.   |
| NFPA reactivity      | : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently. |
| NFPA specific hazard | : OX - This denotes an oxidizer, a chemical which can greatly increase the rate of combustion/fire.   |



### HMIS III Rating

- |                     |   |
|---------------------|---|
| Health              | : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given |
| Flammability        | : 0 Minimal Hazard  |
| Physical            | : 1 Slight Hazard   |
| Personal Protection | : J   |

SDS US (GHS HazCom 2012)

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