Revision nr. 1

Dated 1/8/2020

First compilation

Page n. 1/15

Printed on 1/8/2020

C10522 - Chromic Acid 5% w/v Solution

Safety Data Sheet
According to U.S.A. Federal Hazcom 2012

## 1. Identification

1.1. Product identifier

Code: C10522

Product name Chromic Acid 5% w/v Solution

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

Intended use For laboratory use only.

1.3. Details of the supplier of the safety data sheet

Name EXAXOL CHEMICAL CORPORATION

Full address 14325 60 TH ST N

District and Country 33760 CLEARWATER - FLORIDA

US

Tel. 1-727-524-7732 Fax 1-727-532-8221

e-mail address

info@exaxol.com

1.4. Emergency telephone number

For urgent inquiries refer to 1-800-255-3924 ChemTel Inc.

## 2. Hazards identification

## 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). The product thus requires a safety datasheet.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Classification and Hazard Statement

Hazard pictograms:

Acute toxicity, category 4

Acute toxicity, category 4

Carcinogenicity, category 1A May cause cancer.

Germ cell mutagenicity, category 1B May cause genetic defects.

Reproductive toxicity, category 2 Suspected of damaging fertility or

the unborn child.
Harmful if swallowed.
Harmful if inhaled.

Specific target organ toxicity - repeated exposure, category 1 Causes damage to

organs through

Revision nr. 1

Dated 1/8/2020

First compilation

Printed on 1/8/2020

Page n. 2/15

## C10522 - Chromic Acid 5% w/v Solution

Skin corrosion, category 1

prolonged or repeated exposure. Causes severe skin burns and eye damage. Causes serious eve

Serious eye damage, category 1

damage.

Specific target organ toxicity - single exposure, category 3

May cause

Respiratory sensitization, category 1

respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if

inhaled.

May cause an allergic

skin reaction.

Skin sensitization, category 1







Signal words: Danger

#### Hazard statements:

H350 May cause cancer.

H340 May cause genetic defects.

H361 Suspected of damaging fertility or the unborn child.

H302+H332 Harmful if swallowed or if inhaled.

H372 Causes damage to organs through prolonged or repeated exposure.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

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

H317 May cause an allergic skin reaction.

## Precautionary statements:

Prevention:

P260 Do not breathe dust / fume / gas / mist / vapours / spray.

P202 Do not handle until all safety precautions have been read and understood.

Obtain special instructions before use. P201

P280 Wear protective gloves/ protective clothing / eye protection / face protection.

P270 Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. P271

Wash skin thoroughly after handling. P264

P272 Contaminated work clothing should not be allowed out of the workplace.

P284 [In case of inadequate ventilation] wear respiratory protection.

Response:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.

P310 Immediately call a POISON CENTER / doctor.

P304+P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.

P330 Rinse mouth.

P302+P352 IF ON SKIN: wash with plenty of water. P363 Wash contaminated clothing before reuse.

Storage:

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

Revision nr. 1

Dated 1/8/2020

First compilation

Printed on 1/8/2020

C10522 - Chromic Acid 5% w/v Solution

Dispose of contents / container to an approved waste disposal plant.

Page n. 3/15

2.2. Other hazards

P501

Environmental classification as for Reg. (EU) 1272/2008 (CLP):

The product is classified as hazardous for environment pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP).

Classification and Hazard Statement

Hazardous to the aquatic environment, chronic toxicity, category 2

Toxic to aquatic life with long lasting effects.

Hazard pictograms:



Hazard statements:

**H411** Toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:

**P273** Avoid release to the environment. Response:

P391 Collect spillage.

Storage:

Disposal:

**P501** Dispose of contents / container to an approved waste disposal plant.

Additional hazards

Information not available

## 3. Composition/information on ingredients

#### 3.2. Mixtures

Contains:

Identification Conc. % Classification:

WATER

CAS 7732-18-5 95

EC 231-791-2

INDEX -

**CHROMIUM TRIOXIDE** 

CAS 1333-82-0 5 Oxidising solid, category 1 H271, Carcinogenicity, category 1A H350, Germ

cell mutagenicity, category 1B H340, Reproductive toxicity, category 2 H361, Acute toxicity, category 2 H330, Acute toxicity, category 3 H301, Acute toxicity, category 3 H311, Specific target organ toxicity - repeated exposure, category 1 H372, Skin corrosion, category 1A H314, Serious eye damage, category 1 H318, Specific target organ toxicity - single exposure, category 3

Revision nr. 1

Dated 1/8/2020

First compilation

Printed on 1/8/2020

Page n. 4/15

C10522 - Chromic Acid 5% w/v Solution

H335, Respiratory sensitization, category 1 H334, Skin sensitization, category 1 H317, Hazardous to the aquatic environment, acute toxicity, category 1 H400 M=1, Hazardous to the aquatic environment, chronic toxicity, category 1 H410 M=1

EC 215-607-8 INDEX 024-001-00-0

The full wording of hazard (H) phrases is given in section 16 of the sheet.

#### 4. First-aid measures

#### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

## 5. Fire-fighting measures

## 5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products.

#### 5.3. Advice for firefighters

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## 6. Accidental release measures

Revision nr. 1

Dated 1/8/2020

First compilation

Printed on 1/8/2020

Page n. 5/15

# C10522 - Chromic Acid 5% w/v Solution

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

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

#### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

### 7. Handling and storage

#### 7.1. Precautions for safe handling

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

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

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

#### 7.3. Specific end use(s)

Information not available

### 8. Exposure controls/personal protection

#### 8.1. Control parameters

Regulatory References:

USA NIOSH-REL NIOSH publication No. 2005-149, 3th printing, 2007.

USA OSHA-PEL Occupational Exposure Limits - Limits for Air Contaminants TABLE Z-1-1910.1000. FU OFL FU

Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive

2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.

TLV-ACGIH **ACGIH 2018** 

CHD	<b>OMIUM</b>	TPIO	YIDE

Threshold Limit Value					
Туре	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm

Revision nr. 1
Dated 1/8/2020

Dated 1/6/2020

First compilation

Printed on 1/8/2020
Page n. 6/15

C10522 - Chromic Acid 5% w/v Solution

TLV-ACGIH	-	0.0002	0.0005	SKIN	
OEL	EU	0.1			
OSHA	USA		0,1 (C)		
NIOSH	USA	0.001			

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must comply with current regulations.

#### HAND PROTECTION

Protect hands with category III work gloves (OSHA 29 CFR 1910.138).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

## RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a NIOSH certified filter, whose class must be chosen according to the limit of use concentration (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84, OSHA 29 CFR 1910.134.

#### **ENVIRONMENTAL EXPOSURE CONTROLS**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

## 9. Physical and chemical properties

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

Appearance liquid Colour Not available Odour Not available Odour threshold Not available Not available Melting point / freezing point Not available Initial boiling point Not available Boiling range Not available Flash point > 93 °C

Revision nr. 1

Dated 1/8/2020

First compilation
Printed on 1/8/2020

Page n. 7/15

## C10522 - Chromic Acid 5% w/v Solution

Not available **Evaporation Rate** Flammability of solids and gases Not available Lower inflammability limit Not available Upper inflammability limit Not available Lower explosive limit Not available Upper explosive limit Not available Vapour pressure Not available Vapour density Not available Relative density 1.03 Solubility Not available Partition coefficient: n-octanol/water Not available

Solubility
Partition coefficient: n-octanol/water
Auto-ignition temperature
Decomposition temperature
Viscosity
Explosive properties
Oxidising properties
Not available
Not available
Not available
Not available
Not available

#### 9.2. Other information

Information not available

## 10. Stability and reactivity

#### 10.1. Reactivity

CHROMIUM TRIOXIDE

Decomposes above 250°C/482°F. The aqueous solutions act as: acids, strong oxidising agents.

#### 10.2. Chemical stability

Information not available

#### 10.3. Possibility of hazardous reactions

The product may react violently with water.

CHROMIUM TRIOXIDE

Reacts violently with: combustible substances, reducing agents. Fire hazard. Possibility of explosion.

In water attacks metals.

#### 10.4. Conditions to avoid

Avoid overheating. Prevent moisture or water from penetrating inside the containers.

CHROMIUM TRIOXIDE

Avoid exposure to: sources of heat.

## 10.5. Incompatible materials

C10522 - Chromic Acid 5% w/v Solution

Revision nr. 1

Dated 1/8/2020

First compilation

Printed on 1/8/2020

Page n. 8/15

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Incompatible with: organic substances,reducing substances,acetaldehyde,acetic acid,acetic anhydride,diethyl ether,phosphorus,arsenic,sodium,potassium,selenium,metal powders.

#### 10.6. Hazardous decomposition products

CHROMIUM TRIOXIDE

May develop: chromium oxide.

## 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

#### 11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

CHROMIUM TRIOXIDE

LD50 (Oral) 55 mg/kg Rat

LC50 (Inhalation) 0,217 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Corrosive for the skin

Revision nr. 1

Dated 1/8/2020

First compilation

Printed on 1/8/2020

Page n. 9/15

# C10522 - Chromic Acid 5% w/v Solution

## SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

#### RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Sensitising for the respiratory system

#### GERM CELL MUTAGENICITY

May cause genetic defects

#### CARCINOGENICITY

May cause cancer

Carcinogenicity Assessment: 1333-82-0CHROMIUM TRIOXIDE

ACGIH:: A1

#### REPRODUCTIVE TOXICITY

Suspected of damaging fertility or the unborn child

## STOT - SINGLE EXPOSURE

May cause respiratory irritation

## STOT - REPEATED EXPOSURE

Causes damage to organs

## ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment. 12.1. Toxicity

CHROMIUM TRIOXIDE

LC50 - for Fish EC50 - for Crustacea 49 mg/l/96h Channa punctata

0,15 mg/l/48h Daphnia magna

## 12.2. Persistence and degradability

#### CHROMIUM TRIOXIDE

In anaerobic conditions the Chromium IV reduces to Chromium III in soil. In the atmosphere Chromium VI reduces to Chromium III.

C10522 - Chromic Acid 5% w/v Solution

Revision nr. 1

Dated 1/8/2020

First compilation

Printed on 1/8/2020

Page n. 10/15

CHROMIUM TRIOXIDE

Solubility in water > 10000 mg/l

Degradability: information not available

#### 12.3. Bioaccumulative potential

Information not available

#### 12.4. Mobility in soil

Information not available

#### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

#### 12.6. Other adverse effects

Information not available

## 13. Disposal considerations

## 13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## 14. Transport information

#### 14.1. UN number

ADR / RID, IMDG, 3264

IATA:

#### 14.2. UN proper shipping name

ADR / RID: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CHROMIUM TRIOXIDE)
IMDG: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CHROMIUM TRIOXIDE)
IATA: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CHROMIUM TRIOXIDE)

#### 14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8

IMDG: Class: 8 Label: 8



Revision nr. 1 Dated 1/8/2020

First compilation

Printed on 1/8/2020

Page n. 11/15

## C10522 - Chromic Acid 5% w/v Solution

Class: 8 IATA: Label: 8

#### 14.4. Packing group

ADR / RID, IMDG,

IATA:

Ш

#### 14.5. Environmental hazards

ADR / RID: Environmentally

Hazardous

IMDG: Marine Pollutant

IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

Pass.:

### 14.6. Special precautions for user

ADR / RID: HIN - Kemler: 80 Limited Tunnel

Quantities: 1 restriction code: (E)

Special Provision: -

IMDG: EMS: F-A, S-B Limited

Quantities: 1

IATA: Cargo:

Maximum quantity: 30 L

Maximum

instructions:

855 Packaging

851

Packaging

instructions:

quantity: 1 L

Special Instructions: A3, A803

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

## 15. Regulatory information

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

#### U.S. Federal Regulations

TSCA:

All components are listed on TSCA Inventory.

Clean Air Act Section 112(b):

CHROMIUM TRIOXIDE (Chromium 1333-82-0 compounds, Chromic acid and

chromates as CrO(3), Chromium VI

Revision nr. 1

Dated 1/8/2020

First compilation

Printed on 1/8/2020

Page n. 12/15

## C10522 - Chromic Acid 5% w/v Solution

soluble compounds)

Clean Air Act Section 602 Class I Substances:	
No component(s) listed.	
Clean Air Act Section 602 Class II Substances:	
No component(s) listed.	
Clean Water Act – Priority Pollutants:	
No component(s) listed.	
Clean Water Act — Toxic Pollutants:	
1333-82-0	CHROMIUM TRIOXIDE (Chromium compounds, Chromic acid and chromates as CrO(3), Chromium VI
DEA List I Chemicals (Precursor Chemicals):	soluble compounds)
No component(s) listed.	
DEA List II Chemicals (Essential Chemicals):	
No component(s) listed.	
EPA List of Lists:	
313 Category Code:	
1333-82-0	CHROMIUM TRIOXIDE (Chromium compounds, Chromic acid and chromates as CrO(3), Chromium VI
EPCRA 302 EHS TPQ:	soluble compounds)
No component(s) listed.	
EPCRA 304 EHS RQ:	
No component(s) listed.	
CERCLA RQ:	
No component(s) listed.	
EPCRA 313 TRI:	
1333-82-0	CHROMIUM TRIOXIDE (Chromium compounds, Chromic acid and chromates as CrO(3), Chromium VI soluble compounds)

Revision nr. 1 Dated 1/8/2020

First compilation
Printed on 1/8/2020

Page n. 13/15

## C10522 - Chromic Acid 5% w/v Solution

RCRA Code:

No component(s) listed.

CAA 112 (r) RMP TQ:

No component(s) listed.

State Regulations

Massachussetts:

1333-82-0 CHROMIUM TRIOXIDE (Chromium

compounds, Chromic acid and chromates as CrO(3), Chromium VI

soluble compounds)

Minnesota:

1333-82-0 CHROMIUM TRIOXIDE (Chromium

compounds, Chromic acid and chromates as CrO(3), Chromium VI

soluble compounds)

New Jersey:

1333-82-0 CHROMIUM TRIOXIDE (Chromium

compounds, Chromic acid and chromates as CrO(3), Chromium VI

soluble compounds)

New York:

No component(s) listed.

Pennsylvania:

1333-82-0 CHROMIUM TRIOXIDE (Chromium

compounds, Chromic acid and chromates as CrO(3), Chromium VI

soluble compounds)

California:

1333-82-0 CHROMIUM TRIOXIDE (Chromium

compounds, Chromic acid and chromates as CrO(3), Chromium VI

soluble compounds)

Proposition 65:

International Regulations

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

Revision nr. 1

Dated 1/8/2020

Page n. 14/15

First compilation

Printed on 1/8/2020

C10522 - Chromic Acid 5% w/v Solution

None

Candadian WHMIS

Information not available

#### 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

H271 May cause fire or explosion; strong oxidiser.

H350 May cause cancer.

H340 May cause genetic defects.

H361 Suspected of damaging fertility or the unborn child.

H330 Fatal if inhaled. H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H302+H332 Harmful if swallowed or if inhaled.

H372 Causes damage to organs through prolonged or repeated exposure.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. H335 May cause respiratory irritation.

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

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

## I EGEND.

- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAA 112 ® RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112®)
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: EC Regulation 1272/2008
- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule
- EPA: US Environmental Protection Agency
- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)
- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- RFI: Recommended exposure limit
- RID: Regulation concerning the international transport of dangerous goods by train

C10522 - Chromic Acid 5% w/v Solution

Revision nr. 1

Dated 1/8/2020

First compilation

Printed on 1/8/2020

Page n. 15/15

- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TSCA: Toxic Substances Control Act

TLV: Threshold Limit Value

- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

#### GENERAL BIBLIOGRAPHY:

- GHS rev. 3
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh Registry of Toxic Effects of Chemical Substances
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website
- Hazard Comunication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112® of the Clean Air Act
- Massachussetts 105 CMR Department of public health 670.000: "Right to Know"
- Minensota Chapter 5206 Departemnt Of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

## Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.