

Safety data sheet according to U.S.A. Federal Hazcom 2012

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

1.1. Product identifier

Code:	S6577
Product name	Sodium Dichromate ACS
INDEX number	024-004-00-7
EC number	234-190-3
CAS number	10588-01-9

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.
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SECTION 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.

Oxidising solid, category 2	May intensify fire; oxidiser.
Carcinogenicity, category 1B	May cause cancer.
Germ cell mutagenicity, category 1B	May cause genetic defects.
Reproductive toxicity, category 1B	May damage fertility. Suspected of damaging the unborn child.
Acute toxicity, category 2	Fatal if inhaled.
Acute toxicity, category 3	Toxic if swallowed.
Acute toxicity, category 4	Harmful in contact with skin.
Specific target organ toxicity - repeated exposure, category 1	Causes damage to organs through prolonged or repeated exposure.
Skin corrosion, category 1B	Causes severe skin burns and eye damage.
Serious eye damage, category 1	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	May cause respiratory irritation.
Respiratory sensitization, category 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization, category 1	May cause an allergic skin reaction.

S6577 - Sodium Dichromate ACS

Signal words: Danger

Hazard statements:

H272 May intensify fire; oxidiser.
H350 May cause cancer.
H340 May cause genetic defects.
H360FD May damage fertility. Suspected of damaging the unborn child.
H330 Fatal if inhaled.
H301 Toxic if swallowed.
H312 Harmful in contact with skin.
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:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 Keep / Store away from clothing combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P260 Do not breathe dust / fume / gas / mist / vapours / spray.
P264 Wash 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.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P284 In case of inadequate ventilation wear respiratory protection.

Response:

P301+P330+P331 IF SWALLOWED: rinse mouth. Do not induce vomiting.
P302+P352 IF ON SKIN: wash with plenty of water.
P303+P361+P353 IF ON SKIN (or hair): take off immediately all contaminated clothing. Rinse skin with water / shower.
P304+P340 IF INHALED: remove person to fresh air and keep 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.
P310 Immediately call a POISON CENTER / doctor.
P320 Specific treatment is urgent (see label).
P330 Rinse mouth.
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:

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

2.2. Other hazards.

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, acute toxicity, category 1
 Hazardous to the aquatic environment, chronic toxicity, category 1

Very toxic to aquatic life.
 Very toxic to aquatic life with long lasting effects.



Signal words: Warning

Hazard statements:

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

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Storage:

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Disposal:

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

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Additional hazards.

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Contains:

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

Identification.	Conc. %.	Classification:
SODIUM DICHROMATE (34.89% - metallic element) CAS. 10588-01-9	100	Oxidising solid, category 2 H272, Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 1B H340, Reproductive toxicity, category 1B H360FD, Acute toxicity, category 2 H330, Acute toxicity, category 3 H301, Acute toxicity, category 4 H312, Specific target organ toxicity - repeated exposure, category 1 H372, Skin corrosion, category 1B H314,

Specific target organ toxicity -
single exposure, category 3
H335, Respiratory
sensitization, category 1
H334, Skin sensitization,
category 1 H317, Hazardous
to the aquatic environment,
acute toxicity, category 1
H400 M=100, Hazardous to
the aquatic environment,
chronic toxicity, category 1
H410 M=100

3.2. Mixtures.

3.2. Mixtures.

Information not relevant.

SECTION 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.

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide and chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water.

Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If large quantities of the product are involved in a fire, they can make it considerably worse. Do not breathe combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION

In the case of fire, use jets of water to cool the containers to prevent the risk of explosions (product decomposition and excess pressure) and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Remove all containers containing the product from the fire, if it is safe to do so.

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).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

If there are no contraindications, spray powder with water to prevent the formation of dust. Avoid breathing vapours/mists/gases. 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.

Use spark-proof mechanical equipment to collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. 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.

SECTION 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.

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

Regulatory References:

EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2014

SODIUM DICHROMATE**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU	2			
TLV-ACGIH	-	0.05			

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.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must comply with current regulations.

HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (OSHA 29 CFR 1910.138).

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

RESPIRATORY PROTECTION

None required, unless indicated otherwise in the chemical risk assessment.

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.

SECTION 9. Physical and chemical properties.**9.1. Information on basic physical and chemical properties.**

Appearance	Not available.
Colour	Not available.
Odour	Not available.
Odour threshold.	Not available.
pH.	Not available.
Melting point / freezing point.	Not available.
Initial boiling point.	Not applicable.
Boiling range.	Not available.
Flash point.	Not applicable.
Evaporation Rate	Not available.
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.	2.520 Kg/l
Solubility	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information.

Information not available.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

Information not available.

10.2. Chemical stability.

Information not available.

10.3. Possibility of hazardous reactions.

The product may react violently with water.

10.4. Conditions to avoid.

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

10.5. Incompatible materials.

Information not available.

10.6. Hazardous decomposition products.

Information not available.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

This product should be considered carcinogenic for human beings. Currently available data suggest that human exposure to the substance contained in this product may give rise to cancer development.

This product may have a mutagenic effect on human beings. Currently available data may suggest that human exposure to the substance contained in this product may give rise to the development of hereditary gene alterations.

This product has a teratogenic effect on human beings: damages fertility and has toxic effects on fetus development.

There is sufficient evidence to make us believe that the substance contained in the product is likely to affect the embryo-fetal development and the fetus development.

Acute effects: this product is highly toxic and causes rapid poisoning by inhalation.

Poisoning by inhalation may give rise to a series of symptoms, which may include: stinging and irritated eyes, mouth, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness. In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema, chemical pneumonia and pulmonary edema, reduction or increase of heart-beat, copious salivation, blood sputum, loss of consciousness, behavioral disorders (depression or euphoria).

Acute effects: this product is toxic and causes poisoning by ingestion.

Ingestion of even small amounts of product may cause serious health disorders, which may include: mouth and throat lesions or burns, nausea, stomach pain, sickness, diarrhoea, sudoresis, loss of consciousness, convulsions.

Acute effects: cutaneous absorption of this product is harmful. Upon contact with skin, this product may irritate it, causing an increase in skin temperature, swelling and itchiness.

This product may cause functional disorders or morphological mutations after repeated or prolonged exposure and/or may accumulate inside the human body and is thus graded as dangerous.

This product is corrosive and causes serious burns and vesicles on the skin, which can arise even after exposure. Burns are very stinging and painful. Upon contact with eyes, it may cause serious harm, such as cornea opacity, iris lesions, irreversible eye coloration. The vapors and/or powders are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours.

Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness.

If swallowed, it may cause mouth, throat and oesophagus burns, sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

Acute effects: inhalation of this product may irritate the lower and upper respiratory tract and cause cough and respiratory disorders; at higher concentrations it can also cause pulmonary edema. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Inhalation of this product causes sensitization, which may then give rise to a series of inflammatory episodes, most of all characterized by obstruction and affecting the respiratory system. Sometimes, sensitization phenomena arise together with evident rhinitis and asthma. Damages to the respiratory system depend on the inhaled quantity, on the product concentration in the working environment and on the exposure time.

Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurries, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas. Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

SODIUM DICHROMATE

LD50 (Oral).51 mg/kg Rat

LD50 (Dermal).> 2000 mg/kg Rabbit

LC50 (Inhalation).0.094 mg/l/4h Rat

SECTION 12. Ecological information.

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

12.1. Toxicity.

SODIUM DICHROMATE

LC50 - for Fish.

43.3 mg/l/96h Pimepahles promelas

EC50 - for Crustacea.

0.006 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic
Plants.

1.2 mg/l/72h Scenedesmus quadricauda

12.2. Persistence and degradability.

SODIUM DICHROMATE

Solubility in water.

> 10000 mg/l

Biodegradability: 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.

SECTION 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.

Waste transportation may be subject to dangerous goods transport regulations.

CONTAMINATED PACKAGING

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

SECTION 14. Transport information.

14.1. UN number.

ADR / RID, IMDG,
IATA:

UN: 3086

14.2. UN proper shipping name.

ADR / RID: TOXIC SOLID,
OXIDIZING,
N.O.S. (SODIUM
DICHROMATE)

S6577 - Sodium Dichromate ACS

IMDG: TOXIC SOLID,
OXIDIZING,
N.O.S. (SODIUM
DICHROMATE)

IATA:

14.3. Transport hazard class(es).

ADR / RID: Class: 6.1 Label: 6.1 (5.1)



IMDG: Class: 6.1 Label: 6.1 (5.1)



IATA: Class: 6.1 Label: 6.1 (5.1)

**14.4. Packing group.**

ADR / RID, IMDG, IATA: II

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.

14.6. Special precautions for user.

ADR / RID:	Nr. Kemler: 65	Limited Quantity 0,5 kg	Tunnel restriction code (D/E)
	Special Provision: -		
IMDG:	EMS: F-A, S-Q	Limited Quantity 0,5 kg	
IATA:	Cargo:	Maximum quantity: 25 Kg	Packaging instructions: 674
	Pass.:	Maximum quantity: 5 Kg	Packaging instructions: 667
	Special Instructions:	A5	

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

SECTION 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):

10588-01-9

SODIUM DICHROMATE
(Bichromates)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:

10588-01-9

SODIUM DICHROMATE
(Bichromates)DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

DEA List II Chemicals (Essential Chemicals):

No component(s) listed.

EPA List of Lists:

313 Category Code:

10588-01-9

SODIUM DICHROMATE
(Bichromates)

EPCRA 302 EHS TPQ:

No component(s) listed.

EPCRA 304 EHS RQ:

No component(s) listed.

CERCLA RQ:

10588-01-9

SODIUM DICHROMATE
(Bichromates)

S6577 - Sodium Dichromate ACS**EPCRA 313 TRI:**

10588-01-9

SODIUM DICHROMATE
(Bichromates)**RCRA Code:**

No component(s) listed.

CAA 112 (r) RMP TQ:

No component(s) listed.

State Regulations.Massachussetts:

10588-01-9

SODIUM DICHROMATE
(Bichromates)Minnesota:

10588-01-9

SODIUM DICHROMATE
(Bichromates)New Jersey:

10588-01-9

SODIUM DICHROMATE
(Bichromates)New York:

10588-01-9

SODIUM DICHROMATE
(Bichromates)Pennsylvania:

10588-01-9

SODIUM DICHROMATE
(Bichromates)California:

10588-01-9

SODIUM DICHROMATE
(Bichromates)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:

None.

Candadian WHMIS.

Information not available.

SECTION 16. Other information.

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

Ox. Sol. 2	Oxidising solid, category 2
Carc. 1B	Carcinogenicity, category 1B
Muta. 1B	Germ cell mutagenicity, category 1B
Repr. 1B	Reproductive toxicity, category 1B
Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
STOT RE 1	Specific target organ toxicity - repeated exposure, category 1
Skin Corr. 1B	Skin corrosion, category 1B
Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Resp. Sens. 1	Respiratory sensitization, category 1
Skin Sens. 1	Skin sensitization, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
Aquatic Chronic 4	Hazardous to the aquatic environment, chronic toxicity, category 4
H272	May intensify fire; oxidiser.
H350	May cause cancer.
H340	May cause genetic defects.
H360FD	May damage fertility. Suspected of damaging the unborn child.
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H312	Harmful in contact with skin.
H372	Causes damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

LEGEND:

- 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
- REL: Recommended exposure limit
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TSCA: Toxic Substances Control Act
- 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
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website
- Hazard Communication 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
- Massachusetts 105 CMR Department of public health 670.000: "Right to Know"
- Minnesota Chapter 5206 Department 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.