Safety data sheet according to U.S.A. Federal Hazcom 2012 and Canadian Regulation SOR/88-66

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

1.1. Product identifier.

Code.	**HI709-11B**
Product name.	**Manganese HR Certified Standard Cuvette - B**

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

Intended use.	**Certified Color Standard for Validation of HI 709 Colorimeters.**

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

Name.	**Hanna Instruments S.R.L.**
Full address.	**str. Hanna Nr 1**
District and Country.	**457260 loc. Nusfalau (Salaj)** **Romania** **Tel. (+40) 260607700** **Fax. (+40) 260607700**
e-mail address of the competent person. responsible for the Safety Data Sheet.	**sds@hannainst.com**
Product distribution by:	**Hanna Intruments, Inc - 584 Park East, Woonsochet, Rhode Island, USA 02895 - Technical Service Contact Information: +1-800-426-6287**

1.4. Emergency telephone number.

For urgent inquiries refer to.	**USA Emergency Contact Information: +1-800-424-9300 - CHEMTREC 24 hours/365 days - International Emergency Contact Information: +1-703-527-3887 - CHEMTREC 24hours/365 days**

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.

Substance or mixture corrosive to metals, category 1	May be corrosive to metals.
Carcinogenicity, category 1B	May cause cancer.
Germ cell mutagenicity, category 2	Suspected of causing genetic defects.
Reproductive toxicity, category 1B	May damage fertility or the unborn child.
Skin corrosion, category 1B	Causes severe skin burns and eye damage.
Serious eye damage, category 1	Causes serious eye damage.
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.

Hazard pictograms:

Signal words: Danger

Hazard statements:

H290	May be corrosive to metals.
H350	May cause cancer.
H341	Suspected of causing genetic defects.

SECTION 2. Hazards identification. ... / >>

H360	May damage fertility or the unborn child.
H314	Causes severe skin burns and eye damage.
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.
P260	Do not breathe dust, fume, gas, mist, vapours, spray.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, eye protection and face protection.

Response:

P302+P352	IF ON SKIN: Wash with plenty of water and soap.
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.
P308+P313	IF exposed or concerned: Get medical advice / attention.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
P391	Collect spillage.

Storage:

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Disposal:

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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, 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:

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Response:

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Storage:

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Disposal:

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Additional hazards.
Information not available.

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

SECTION 3. Composition/information on ingredients. ... / >>

3.2. Mixtures.

Contains:

Identification.	x = Conc. %.	Classification:
COBALT (II) CHLORIDE HEXAHYDRATE 24,79% - metallic element		
CAS. 7791-13-1	3 ≤ x < 5	Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 2 H341, Reproductive toxicity, category 1B H360F, Acute toxicity, category 4 H302, Acute toxicity, category 4 H332, Serious eye damage, category 1 H318, Respiratory sensitization, category 1 H334, Skin sensitization, category 1 H317, Hazardous to the aquatic environment, acute toxicity, category 1 H400 M=10, Hazardous to the aquatic environment, chronic toxicity, category 1 H410 M=1
EC. 231-589-4		
INDEX. 027-004-00-5		
HYDROCHLORIC ACID		
CAS. 7647-01-0	1 ≤ x < 3	Substance or mixture corrosive to metals, category 1 H290, Skin corrosion, category 1B H314, Specific target organ toxicity - single exposure, category 3 H335
EC. 231-595-7		
INDEX. 017-002-01-X		
Reg. no. 01-2119484862-26		

* There is a batch to batch variation.

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

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.

HYDROCHLORIC ACID
HYDROCHLORIC ACID 37%: Irritation and corrosion, Cough, Shortness of breath, cardiovascular disorders, Risk of blindness!

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

Specific information on symptoms and effects caused by the product are unknown.
For symptoms and effects caused by the contained substances, see chap. 11.

COBALT (II) CHLORIDE HEXAHYDRATE
Allergic reactions, irritant effects, Diarrhoea, Tremors, Symptoms of an acute cobalt intoxication: diarrhoea, loss of appetite, drop in body temperature, drop in blood pressure. Toxic effect on kidneys (proteinuria, anuria), heart, and pancreas.

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
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.

HYDROCHLORIC ACID
HYDROCHLORIC ACID 37%: Not combustible. Ambient fire may liberate hazardous vapours. Fire may cause evolution of: Hydrogen chloride gas.

SECTION 5. Firefighting measures. ... / >>

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).

SECTION 6. Accidental release measures.

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. If the product is flammable, use explosion-proof equipment. 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.

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:

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.
USA	CAL/OSHA-PEL	California Division of Occupational Safety and Health (Cal-OSHA) Permissible Exposure Limits (PELs).
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2016

COBALT (II) CHLORIDE HEXAHYDRATE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH	-	0.02			

SECTION 8. Exposure controls/personal protection. ... / >>

HYDROCHLORIC ACID

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH	-				2 (C)
OEL	EU	8	5	15	10
OSHA	USA			7 (C)	5 (C)
CAL/OSHA	USA	7	5		
NIOSH	USA			7 (C)	5 (C)

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

HYDROCHLORIC ACID
Methods for measurement of the workplace atmosphere have to correspond to the requirements of norm NIOSH 7903.
COBALT (II) CHLORIDE HEXAHYDRATE
Co - Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms ISO 15202 - Biological Values, ACGIH: 15 µg/L Cobalt in urine (End of shift at end of workweek), DEU: 15 µg/L Cobalin Urin, Luft Cobalt 0.025 mg/Kubikmeter (Expositionsende bzw. Schichtende; bei Langzeitexposition: nach mehreren vorangegangenen Schichten), ESP: 15 µg/L Cobalto en orina (Final de la semana laboral).

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 (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
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 and 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.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance		liquid		
Colour		red		
Odour		odourless		
Odour threshold.		Not available.		
pH.		0.5		
Melting point / freezing point.		Not available.		
Initial boiling point.		Not available.		
Boiling range.		Not available.		
Flash point.	>	93	°C.	(199,4 °F)
Evaporation rate		Not available.		
Flammability (solid, gas)		Not available.		
Lower inflammability limit.		Not available.		
Upper inflammability limit.		Not available.		
Lower explosive limit.		Not available.		

SECTION 9. Physical and chemical properties. ... / >>

Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	1.000
Solubility	soluble in water
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.

Total solids (250°C / 482°F)	4,90 %

SECTION 10. Stability and reactivity.

10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

HYDROCHLORIC ACID
HYDROCHLORIC ACID 37%: Corrosive in contact with metals.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

COBALT (II) CHLORIDE HEXAHYDRATE
Risk of explosion with: Alkali metals.

HYDROCHLORIC ACID
HYDROCHLORIC ACID 37%: Exothermic reaction with: Amines, potassium permanganate, salts of oxyhalogenic acids, semimetallic oxides, semimetallic hydrogen compounds, Aldehydes, vinylmethyl ether, Risk of ignition or formation of inflammable gases or vapours with: carbides, lithium silicide, Fluorine, Generates dangerous gases or fumes in contact with: Aluminium, hydrides, formaldehyde, Metals, strong alkalis, Sulphides. Risk of explosion with: Alkali metals, conc. sulfuric acid.

10.4. Conditions to avoid.

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials.

HYDROCHLORIC ACID
HYDROCHLORIC ACID 37%: Alkalis, organic substances, strong oxidants and metals.

10.6. Hazardous decomposition products.

HYDROCHLORIC ACID
HYDROCHLORIC ACID 37%: Above decomposition temperature hydrochloric acid fumes may develop.

SECTION 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.

HYDROCHLORIC ACID
HYDROCHLORIC ACID 37% - Mixture - Acute oral toxicity, Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach - Acute inhalation toxicity, Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract - Skin irritation, Mixture causes burns. - Eye irritation, Mixture causes serious eye damage. Risk of blindness! - Specific target organ toxicity, single exposure, Target Organs: Respiratory system, Mixture may cause respiratory irritation.

SECTION 11. Toxicological information. ... / >>

COBALT (II) CHLORIDE HEXAHYDRATE
Acute oral toxicity, absorption, Symptoms: Tremors, Diarrhoea - Acute inhalation toxicity, absorption, Symptoms: Irritation symptoms in the respiratory tract - Acute dermal toxicity, absorption, Skin irritation, Possible damages: slight irritation - Eye irritation, Possible damages: slight irritation - Sensitisation, May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction - CMR effects, Carcinogenicity: May cause cancer by inhalation - Mutagenicity: Suspected of causing genetic defects - Reproductive toxicity: May damage fertility.

ACUTE TOXICITY.

LC50 (Inhalation - vapours) of the mixture:	Not classified (no significant component).
LC50 (Inhalation - mists / powders) of the mixture:	121,017 mg/l
LD50 (Oral) of the mixture:	61799,160 mg/kg
LD50 (Dermal) of the mixture:	Not classified (no significant component).

HYDROCHLORIC ACID
LC50 (Inhalation). 4.74 mg/l/1h Rat

COBALT (II) CHLORIDE HEXAHYDRATE
LD50 (Oral). 766 mg/kg Rat

Carcinogenicity Assessment:
7647-01-0 HYDROCHLORIC ACID
IARC:3

SKIN CORROSION / IRRITATION.
Corrosive for the skin.

SERIOUS EYE DAMAGE / IRRITATION.
Causes serious eye damage.

RESPIRATORY OR SKIN SENSITISATION.
Sensitising for the skin.

GERM CELL MUTAGENICITY.
Suspected of causing genetic defects.

CARCINOGENICITY.
May cause cancer.

REPRODUCTIVE TOXICITY.
May damage fertility or the unborn child.

STOT - SINGLE EXPOSURE.
Does not meet the classification criteria for this hazard class.

STOT - REPEATED EXPOSURE.
Does not meet the classification criteria for this hazard class.

ASPIRATION HAZARD.
Does not meet the classification criteria for this hazard class.

SECTION 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.

HYDROCHLORIC ACID

LC50 - for Fish.	282 mg/l/96h
EC50 - for Crustacea.	0.00005 mg/l/48h

COBALT (II) CHLORIDE HEXAHYDRATE

LC50 - for Fish.	1.512 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea.	6.8 mg/l/48h Ceriodaphnia dubia
EC10 for Algae / Aquatic Plants.	0.023 mg/l/72h Pseudokirchnerella subcapitata
Chronic NOEC for Fish.	0.739 mg/l Pimephales promelas

SECTION 12. Ecological information. ... / >>

12.2. Persistence and degradability.

HYDROCHLORIC ACID
Solubility in water. > 10000 mg/l
Biodegradability: Information not available.

COBALT (II) CHLORIDE HEXAHYDRATE
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.
HYDROCHLORIC ACID
HYDROCHLORIC ACID 37%: Forms corrosive mixtures with water even if diluted. Harmful effect due to pH shift. Discharge into the environment must be avoided.

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: 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IATA dangerous goods regulations.

14.2. UN proper shipping name.

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (COBALT II CHLORIDE)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (COBALT II CHLORIDE)
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (COBALT II CHLORIDE)

SECTION 14. Transport information. ... / >>

14.3. Transport hazard class(es).

ADR / RID:	Class: 9	Label: 9	
IMDG:	Class: 9	Label: 9	
IATA:	Class: 9	Label: 9	

14.4. Packing group.

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards.

ADR / RID:	Environmentally Hazardous.	
IMDG:	Marine Pollutant.	
IATA:	Environmentally Hazardous.	

14.6. Special precautions for user.

ADR / RID:	HIN - Kemler: 90 Special Provision: -	Limited Quantities: 5 L	Tunnel restriction code: (E)
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Pass.:	Maximum quantity: 450 L	Packaging instructions: 964
	Special Instructions:	A97, A158, A197	

14.7. Transport in bulk according to Annex II of Marpol 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.

Clean Air Act Section 112(b):

7791-13-1	COBALT (II) CHLORIDE HEXAHYDRATE (Cobalt compounds)
7647-01-0	HYDROCHLORIC ACID

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.

SECTION 15. Regulatory information. ... / >>

Clean Water Act – Toxic Pollutants:
No component(s) listed.

DEA List I Chemicals (Precursor Chemicals):
No component(s) listed.

DEA List II Chemicals (Essential Chemicals):
7647-01-0 HYDROCHLORIC ACID

EPA List of Lists:
313 Category Code:
7647-01-0 HYDROCHLORIC ACID
7791-13-1 COBALT (II) CHLORIDE HEXAHYDRATE (Cobalt compounds)

EPCRA 302 EHS TPQ:
No component(s) listed.

EPCRA 304 EHS RQ:
No component(s) listed.

CERCLA RQ:
7647-01-0 HYDROCHLORIC ACID

EPCRA 313 TRI:
7647-01-0 HYDROCHLORIC ACID
7791-13-1 COBALT (II) CHLORIDE HEXAHYDRATE (Cobalt compounds)

RCRA Code:
No component(s) listed.

CAA 112 (r) RMP TQ:
7647-01-0 HYDROCHLORIC ACID

State Regulations.

Massachussetts:
7647-01-0 HYDROCHLORIC ACID

Minnesota:
7647-01-0 HYDROCHLORIC ACID

New Jersey:
7791-13-1 COBALT (II) CHLORIDE HEXAHYDRATE (Cobalt compounds)
7647-01-0 HYDROCHLORIC ACID

New York:
7647-01-0 HYDROCHLORIC ACID

Pennsylvania:
7791-13-1 COBALT (II) CHLORIDE HEXAHYDRATE (Cobalt compounds)
7647-01-0 HYDROCHLORIC ACID

California:
7647-01-0 HYDROCHLORIC ACID

Proposition 65:
This product does not contain any substances know to the State of California to cause cancer, reproductive harm or birth defects.

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:

Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Carc. 1B	Carcinogenicity, category 1B
Muta. 2	Germ cell mutagenicity, category 2
Repr. 1B	Reproductive toxicity, category 1B
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
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
H290	May be corrosive to metals.
H350	May cause cancer.
H341	Suspected of causing genetic defects.
H360	May damage fertility or the unborn child.
H360F	May damage fertility.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
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.

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

SECTION 16. Other information. ... / >>

- 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 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.