SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product identifier

1.1.1 Commercial Product Name

Sodium dichromate

1.1.2 Product code

Substance name: Sodium dichromate
CAS-No.: 10588-01-9
EINECS-No.: 234-190-3

REACH Registration Number

01-2119435525-40-0005

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

1.2.1 Recommended use

Use as an intermediate under Strictly Controlled Conditions (Metal surface treatment products, Manufacture of leather tanning chemicals, Leather tanning, Tanning salt manufacture)

1.3 Details of the supplier of the safety data sheet

1.3.1 Supplier

	REACHLaw Ltd. (Only Representative)
Street address	Vänrikinkuja 3 JK 21
Postcode and post office	02600 Espoo Finland
Telephone	+358(0) 9 412 3055
Telefax	+358(0) 9 412 3049
Email	SDS@reachlaw.fi , webpage: www.reachlaw.fi

1.3.3 Identification of the non-community manufacturer

Joint Stock Company "Novotroitsk Plant of Chromium Compounds"
Promyshlennaya str. 49
462353 Novotroitsk, Orenburg Area
Russian Federation
Telephone: +7 3537 60 22 00, 60 22 68, 60 22 80
Email: post@nzhs.ru

1.4 Emergency telephone number

1.4.1 Telephone number, name and address

See section 16.6 for the list of telephone numbers of poison centers in the European Economic Area.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

1272/2008 (CLP)

Ox. Sol. 2, H272
Acute Tox. 3, H301
Acute Tox. 4, H312
Skin Corr. 1B, H314
Resp. Sens. 1, H334
Acute Tox. 2, H330
Skin Sens. 1, H317
Repr. 1B, H360

Muta. 1B, H340
Carc. 1B, H350
STOT RE 1, H372
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

2.2 Label elements **(*)**

Specific concentration limits:
STOT SE 3a: C>=5.0%
Resp. Sens.1 and Skin Sens.1: C>= 0.2%
Skin Sens. 1; H317: C 0,2%

Notes: Note 3

1272/2008 (CLP)

GHS09 - GHS08 - GHS06 - GHS05 - GHS03
Signal word **Danger**

Hazard Statements

H272	May intensify fire; oxidiser.
H301	Toxic if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H330	Fatal if inhaled.
H317	May cause an allergic skin reaction.
H360	May damage fertility or the unborn child.
H340	May cause genetic defects.
H350	May cause cancer.
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.

Precautionary Statements

P220	Keep/Store away from clothing/[ ]/combustible materials.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash hands thoroughly after handling.
P270	Do no eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
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.

2.3 Other hazards

The substance does not fulfil the PBT criteria (not PBT) nor the vPvB criteria (not vPvB)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Mono-constituent substance.

CAS	EINECS	Chemical name of the substance	Concentration	Classification
10588-01-9	234-190-3	Sodium dichromate	>98.8 %	**CLP:** Oxid. Solid 2; H272, Acute Tox.3; H301, Acute Tox.4; H312, Acute Tox.2; H330, Skin Corr.1B; H314, Reps. Sens.1; H334, Skin Sens.1; H317, Repr.1B; H360, Muta.1B; H340, Carc.1B; H350, STOT RE1; H372, Aquatic Chronic 1; H410, H400

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

4.1.2 Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation as the inhaled material is toxic and corrosive. Seek immediate medical attention.

4.1.3 Skin contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Get medical attention immediately.

4.1.4 Eye contact

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

4.1.5 Ingestion

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Toxic if swallowed. Harmful in contact with skin. Fatal if inhaled. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

4.3 Indication of immediate medical attention and special treatment needed

If exposed or concerned: Get medical advice immediately.

SECTION 5. FIREFIGHTING MEASURES

The substance is non-flammable but may ignite combustible material on contact.

5.1 Extinguishing media

5.1.1 Suitable extinguishing media

Water spray, Foam, Carbon dioxide (CO2), Dry powder.

5.1.2 Extinguishing media which must not be used for safety reasons
None known.

5.2 Special hazards arising from the substance or mixture
May ignite combustible material on contact.

5.3 Advice for firefighters
Wear self-contained breathing apparatus as toxic oxide fumes may be generated

5.4 Specific methods
None known.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

6.2 Environmental precautions
Do not empty into drains.

6.3 Methods and materials for containment and cleaning up
Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.
Large Spill: Oxidizing material. Poisonous solid. Stop leak if without risk. Do not get water inside container. Avoid contact with a combustible material (wood, paper, oil, clothing). Keep substance damp using water spray. Do not touch spilled material. Use water spray to reduce vapours. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate.

6.4 Reference to other sections
See also section 8.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling
This substance is handled under Strictly Controlled Conditions in accordance with REACH regulation Article 17(3) for on-site isolated intermediates and, in case the substance is transported to other sites for further processing, the substance should be handled at these sites under the Strictly Controlled Conditions as specified in REACH regulation Article 18(4). Site documentation to support safe handling arrangements including the selection of engineering, administrative and personal protective equipment controls in accordance with risk-based management systems should be available at each Downstream User site.
Written confirmation of application of Strictly Controlled Conditions has been received from every affected Distributor and Downstream Manufacturer/User of the Registrant's intermediate

7.2 Conditions for safe storage, including any incompatibilities
Store tightly closed. Store away from combustible materials and sources of ignition and heat. Keep locked up or in an area accessible only to qualified or authorised persons.

7.3 Specific end use(s)
This substance is used as an intermediate under Strictly Controlled Conditions. No exposure scenarios are needed for this substance.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Threshold limits

10588-01-9	Sodium dichromate	0,05 mg/m^3 (8 h) CrO4

8.1.2 Other information on limit values
No data available

8.1.3 Limit values in other countries
No data available.

8.1.4 DNELs
DN(M)ELs for workers:
Long-term - local effects, DMEL: 0.01 mg/m3 (Cr VI), 0.025 mg/m3 [Na2Cr2O7]. Most sensitive endpoint: Carcinogenicity.
Values for acute effects or long-term-systemic effects were not derived.

8.1.5 PNECs
PNEC aqua (freshwater): 0.00047 mg/L (as Cr (VI). Determined by using extrapolation method. Based on the lowest NOEC 4.7 µg/L, for reproduction of the cladoceran *Ceriodaphnia dubia*. Assessment factor AF 10.
PNEC aqua (marine water): 0.00047 mg/L. In saltwater, chromium (VI) would be expected to be less toxic than indicated by the freshwater values, except perhaps at very low salinities.
PNEC aqua (intermittent releases): 0.00047 mg/L. A separate PNEC for intermittent releases is not required.

PNEC sediment: 0.15 (Cr (VI) mg/kg sediment dw. For chromium (VI), PNECsediment = 1.5 mg/kg wet weight for acid conditions, and 0.15 mg/kg wet weight for other conditions based on the equilibrium partitioning method and a PNECaquatic of 3.4 µg/L.

PNEC soil 0.035 mg/kg. Based on the lowest NOEC of 0.35 mg/kg dry weight of soil for plants. Assessment factor AF 10.
PNEC STP 0.21 Cr (VI) mg/l. Based on the lowest NOEC = 0.21 for *Microregma heterostoma*. Assessment factor AF 1.

8.2 Exposure controls

8.2.1 Appropriate engineering controls
This substance is handled under Strictly Controlled Conditions in accordance with REACH regulation Article 17(3) for on-site isolated intermediates and, in case the substance is transported to other sites for further processing, the substance should be handled at these sites under the Strictly Controlled Conditions as specified in REACH regulation Article 18(4). Site documentation to support safe handling arrangements including the selection of engineering, administrative and personal protective equipment controls in accordance with risk-based management systems should be available at each Downstream User site.
Written confirmation of application of Strictly Controlled Conditions has been received from every affected Distributor and Downstream Manufacturer/User of the Registrant's intermediate

8.2.2 Individual protection measures

8.2.2.1 Respiratory protection
In case of insufficient ventilation wear suitable respiratory equipment.

8.2.2.2 Hand protection
Nitrile rubber gloves.

8.2.2.3 Eye/face protection
Tightly fitting safety goggles.

8.2.2.4 Skin protection
Apply preventive skin protection.

8.2.3 Environmental exposure controls
Avoid release to the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1	**Important Health Safety and Environmental Information**	
9.1.1	**Appearance** Reddish to bright orange crystalline solid.	
9.1.2	**Odour**	No data available.
9.1.3	**Odour threshold**	No data available.
9.1.4	**pH**	Not applicable for solids.
9.1.5	**Melting point/freezing point**	357°C.
9.1.6	**Initial boiling point and boiling range**	Sodium dichromate decomposes at temperatures above 400°C
9.1.7	**Flash point**	Not applicable to an inorganic substance.
9.1.8	**Evaporation rate**	No data available.
9.1.9	**Flammability (solid, gas)**	Non-flammable solid.
9.1.10	**Explosive properties**	
9.1.10.1	**Lower explosion limit**	No data available.
9.1.10.2	**Upper explosion limit**	No data available.
9.1.11	**Vapour pressure**	Not applicable for a high melting point solid.
9.1.12	**Vapour density**	Not applicable.
9.1.13	**Relative density**	2.5
9.1.14	**Solubility(ies)**	
9.1.14.1	**Water solubility**	2355 g/L
9.1.14.2	**Fat solubility (solvent - oil to be specified)**	Not applicable for an inorganic substance
9.1.15	**Partition coefficient: n-octanol/water**	Not applicable for an inorganic substance
9.1.16	**Auto-ignition temperature**	Does not undergo spontaneous combustion.
9.1.17	**Decomposition temperature**	Sodium dichromate decomposes at temperatures above 400°C
9.1.18	**Viscosity**	Not applicable for a solid material
9.1.19	**Explosive properties**	On the basis of theoretical evaluation of structure, there are no chemical groups that are considered to be explosive.
9.1.20	**Oxidising properties**	Oxidising.

9.2 **Other information**
No other information available.

SECTION 10. STABILITY AND REACTIVITY

10.1 **Reactivity**
Substance is oxidising.

10.2 **Chemical stability**
The product is stable under normal conditions.

10.3 **Possibility of hazardous reactions**
Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 **Conditions to avoid**
Avoid exposure - obtain special instructions before use. Avoid release to the environment.

10.5 **Incompatible materials**
Readily oxidises combustible, organic or other readily oxidisable materials.

10.6 Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects **(*)**
Absorption: Dermal absorption of the water-soluble hexavalent chromium compounds in humans is likely to be negligible.
Distribution: Systemically absorbed chromium (VI) is distributed rapidly and widely, with only a small proportion initially remaining in the Cr (VI) state.
Metabolism: Cr (VI) is reduced to Cr (III) in the gastrointestinal tract, thereby markedly limiting its bioavailability. Studies *in vitro* have shown that this reduction is promoted by human saliva and gastric juice. Cr (III) is very poorly absorbed from the gastrointestinal tract. Once absorbed into the body, Cr (VI) is reduced to Cr (III) by glutathione and other endogenous molecules including ascorbate and cytochrome P450. In the bloodstream, absorbed Cr (VI) is also rapidly reduced to Cr (III) in the plasma. The glutathione-mediated reduction of Cr (VI) in the erythrocyte results in irreversible binding to haemoglobin for the lifespan of the cell.
Excretion: Chromium is rapidly cleared from the plasma and is excreted in urine and bile, but it may persist in erythrocytes for several weeks.

11.1.1 Acute toxicity
Oral, rat, LD50: 59 mg/kg bw (OECD Guideline 401)
Dermal, rabbit, LD50: > 2000 mg/kg (OECD Guideline 402)
Inhalation, rat, LD50: 200 mg/mi air (studies of various design)

The substance is classified under the CLP Regulation 1272/2008 with H301 (Toxic if swallowed), H312 (Harmful in contact with skin) and H330 (Fatal if inhaled).

11.1.2 Irritation and corrosion
Skin irritation / corrosion: corrosive
Eye irritation: corrosive
Respiratory irritation: irritating

In-vivo corrosivity screening studies are available for chromium (VI) trioxide. Non-standard *in vivo* studies of skin corrosivity and irritation are available for sodium chromate, sodium dichromate and potassium dichromate; the results of these studies are sufficient for classification.
The substance is classified under the CLP Regulation 1272/2008 with H314 (Causes severe skin burns and eye damage).

11.1.3 Sensitisation
The substance is classified under the CLP Regulation 1272/2008 with H317 (May cause an allergic skin reaction) and H334 (May cause allergy or asthma symptoms or breathing difficulties if inhaled).
No studies are available and testing of this group of compounds for skin sensitisation is not proposed, based on the low pH and classification as corrosive. Data from human exposure indicate that the water-soluble Cr (VI) compounds are skin sensitisers, therefore testing is not required.

11.1.4 Subacute, subchronic and prolonged toxicity

Repeated dose toxicity:
Oral, LOAEL: 1.7 mg/kg bw/d, Target organs: cardiovascular / haematological: haematopoiesis.
Inhalation, LOAEC: 1.81 mg/mi. Target organs: respiratory: other.
The substance is classified under the CLP Regulation 1272/2008 with H372 (Causes damage to organs through prolonged or repeated exposure).

Mutagenicity:
Genetic toxicity: positive.
No proprietary studies are available, however there is a very large body of evidence available in the published literature for various water soluble hexavalent chromium compounds. This comprehensive dataset indicates that the Cr (VI) compounds in this group are mutagenic *in vitro* and *in vivo*.
The substance is classified under the CLP Regulation 1272/2008 with classification as H340 (May cause genetic defects).

Carcinogenicity:
The substance is classified under CLP Regulation 1272/2008 with classification as H350 (May cause cancer). Target organs: respiratory: other.
This classification is based on the results of studies in animals and the genotoxicity of chromium (VI) compounds.

Toxicity for reproduction:
Effects on fertility: Oral, NOAEL: 40 mg/kg bw/d.
Developmental toxicity: Oral, LOAEL: 20 mg/kg bw/d.
The substance is classified under the CLP Regulation 1272/2008 with classification as H360 (May damage fertility or the unborn child)

Neurotoxicity:
The toxicity of the water-soluble Cr (VI) compounds has been comprehensively investigated and is well documented in the published scientific literature. There is no evidence of neurotoxicity or neuropathology. No further specific investigations of the neurotoxic potential of this group of compounds are therefore required.

Immunotoxicity:
The toxicity of the water-soluble Cr (VI) compounds has been comprehensively investigated and is well documented in the published scientific literature. There is no evidence of specific immunotoxicity. No further specific investigations are required for this group of compounds

11.1.5 STOT-single exposure
This substance is not classified for STOT SE.

11.1.6 STOT-repeated exposure
This substance is classified as STOT RE 1; H372: Causes damage to organs through prolonged or repeated exposure.

11.1.7 Aspiration hazard
This substance is not classified for aspiration hazard.

11.1.8 Other information on acute toxicity
The toxicity of the water-soluble Cr (VI) compounds has been comprehensively investigated and is well documented in the published scientific literature. No further specific investigations are required.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity
12.1.1 Aquatic toxicity

This substance is classified as Aquatic Chronic 1; H410: Very toxic to aquatic life with long lasting effects and H400: Very toxic to aquatic organisms.

Overview of Toxicity in Aquatic Species:
Short-term and long-term ecotoxicological data on the effects of hexavalent chromium compounds are available for a wide variety of organisms (freshwater and marine fish, invertebrates, algae, plants, amphibians), life stages (juveniles, adults, fry, larvae, tadpoles, eggs, etc.), endpoints (LC50s, EC50s, NOECs, LOECs based on mortality, reproduction, hatching, etc.), and test conditions. The results are expressed as the concentrations of chromium (VI), for ease of comparison among the five hexavalent compounds. In general, the majority of ecotoxicological information is available for potassium dichromate, as it is a reference toxicant.
For all species the lowest value between these endpoints was selected as the NOEC for the species.

Fish, *Oncorhynchus mykiss,* NOEC: 0.01 mg Cr/L. (Growth NOEC)
Aquatic invertebrates,*Ceriodaphnia dubia,* NOEC: 0.0047 mg Cr/L. (Reproduction)
Algae, *Selenastrum capricornutum,* NOEC: 0.033 mg Cr/L (Geometric mean of EC10)

12.1.2 Toxicity to other organisms
Soil macro-organisms:
Once released into soil, it is likely that much of the chromium (VI) present will be reduced to chromium (III). Toxicity data are available for chromium (VI) in soil, but it is also likely that in these experiments the majority of the chromium present will be converted to chromium (III) during the test. Chromium (III) has generally been shown to be less toxic than chromium (VI) to soil organisms. For Cr (VI) LC50 and EC50 values were 146 and 792 mg Cr (VI) /kg dry soil. An NOEC value of 32 mg Cr (III) /kg dry soil was observed.

12.2 Persistence and degradability

12.2.1 Biodegradation
Not relevant: the substance is inorganic.

12.2.2 Chemical degradation **(*)**
Ionic equilibria for chromium (VI)
Chromium (VI) is a strong oxidising agent and as a result only exists as oxygenated species in the environment. At very low pH values (1) the main species in solution is H2CrO4, at higher pH values between around 2 and 6, HCrO4- and Cr2O72-will both be present in equilibrium, and at higher pH values (>7) the main species present will be CrO42-. Thus at environmental pH values the species found in solution will be a mixture of Cr2O72-, HCrO4- and CrO42-, irrespective of the form in which the chromium (VI) enters solution.

Ionic equilibria for chromium (III)
At pH values >5 chromium (III) can be expected to precipitate out of solution as the insoluble hydroxide, often in conjunction with iron. However, complexation of chromium (III) ions with organic matter (such as citric acid, diethylenetriaminepentaacetic acid (DTPA), fulvic acid) can result in increased solubilisation of chromium (III) at higher pH values.

12.3 Bioaccumulative potential
Chromium (VI) has been shown to be taken up by a wide range of organisms from water, sediment and soil. For fish, although uptake does occur, the bioconcentration factors for chromium (VI) are usually very low (~1 l/kg).

12.4 Mobility in soil
Overall, chromium (VI) anions can be considered to be mobile in sediments in the environment, except possibly under highly acidic conditions. Chromium (III) appears to be much more strongly adsorbed to soils and sediments than chromium (VI).

12.5 Results of PBT and vPvB assessment
Sodium dichromate is neither a PBT nor a vPvB substance.

12.6 Other adverse effects
None known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste codes in accordance with the list of European Waste Catalogue (EWC) should be assigned by the user prior to final disposal. Dispose of product and product residue in accordance with the instructions of the person responsible for waste disposal. Refer to local and national waste management regulations and dispose of in accordance with the waste classification.

13.1 Waste treatment methods
The substance must be disposed of as hazardous waste.

SECTION 14. TRANSPORT INFORMATION

14.1	**UN number**	3288
14.2	**UN proper shipping name**	TOXIC SOLID, INORGANIC, N.O.S. (Sodium Dichromate)
14.3	**Transport hazard class(es)**	6.1
14.4	**Packing group**	II

14.5 Environmental hazards
This substance is very toxic to aquatic life with long lasting effects and very toxic to aquatic organisms.

14.6 Special precautions for users
None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No data available.

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture (*)
EU Regulation (EC) No. 1907/2006 (REACH)
Annex XIV - List of substances subject to authorisation (substances of very high concern): INCLUDED. However, this product is exempted according to Article 8 (2(b)) of REACH Regulation as a transported isolated intermediate.

15.2 Chemical safety assessment
In accordance with Regulation (EC) No. 1907/2006 (REACH) Article 14, a Chemical Safety Assessment has been carried out for this substance.

SECTION 16. OTHER INFORMATION

16.1 Additions, Deletions, Revisions
Version 3.1: Manufacturer details were updated.
Version 3.0: DSD classification removed; emergency numbers updated.
Version 2.3: transport information updated.
Version 2.2: C&L updated.
This safety data sheet is drawn up to comply with the requirements of Regulation (EC) No. 1907/2006 (REACH), as amended by Annex II to Commission Regulation (EU) No. 2015/830 of 28 May 2015. All sections aligned with the REACH Chemical Safety Report.

16.2 Key or legend to abbreviations and acronyms

-AF - Assessment factor
-CLP - Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
-DNEL - Derived no-effect level
-DMEL - Derived minimum effect level
-EC50 - Concentration of the substance that causes 50 % reduction of a certain effect on test organisms
-EPA OTS - Environmental Protection Agency, Office for Toxic Substances (USA)
-EU RAR- European Union Risk Assessment Report
-EWC - European Waste Catalogue
-HC5 -Hazardous Concentration for 5% of species
-LC50 -Concentration of the substance that causes 50 % mortality of the test population
-LD50 - Lethal dose of the substance that causes 50 % mortality of the test population
-LOAEC - Lowest observed adverse effect concentration
-LOAEL-Lowest observed adverse effect level
-NOAEL- No observed adverse effect level
-NOEC - No observed effect concentration
-OECD - Organisation for Economic Co-operation and Development
-PBT/vPvB - Persistent, bioaccumulative and toxic/ very persistent and very bioaccumulative
-PNEC - Predicted no-effect concentration
-REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
-STOT RE - Specific Target Organ Toxicity, Repeated Exposure
-STOT SE - Specific Target Organ Toxicity, Single Exposure
-STP - Sewage treatment plant
-TLV -Thresold limit value

16.3 Key literature references and sources for data
REACH Chemical Safety Report Part B, Sodium dichromate.
All referenced studies within this safety data sheet can be found from the original Chemical Safety Report.

16.4 Classification procedure
This substance has a harmonised classification according to Annex VI to Regulation (EC) No. 1272/2008 (CLP).

16.6 Emergency telephone number **(*)**
Europe-wide emergency number: 112

Contact a poison control centre. List of Telephone Numbers :
AUSTRIA (Vienna Wien) +43 1 406 43 43; **BELGIUM** (Brussels Bruxelles) +32 70 245 245; **BULGARIA** (Sofia) +359 2 9154 409; **CZECH REPUBLIC** (Prague Praha) +420 224 919 293; **CROATIA** +385 1 23 48 342, **DENMARK** (Copenhagen) 82 12 12 12; **ESTONIA** (Tallinn) 112, calling from abroad +372 626 93 93; **FINLAND** (Helsinki) +358 9 471 977; **FRANCE** (Paris) +33 (0)1 45 42 59 59; **GREECE** (Athens Athinai) +30 10 779 3777; **HUNGARY** (Budapest) +36 80 20 11 99; **ICELAND** (Reykjavik) +354 543 2222; **IRELAND** (Dublin) +353 1 8379964; **ITALY** (Rome) +39 06 305 4343; **LATVIA** (Riga) +371 67042473; **LITHUANIA** (Vilnius) +370 5 236 20 52 or +370 687 53378; **MALTA** (Valletta) 2545 0000; **NETHERLANDS** (Bilthoven) +31 30 274 88 88 (only for the purpose of informing medical personnel in cases of acute intoxication); **NORWAY** (Oslo) 22 591300; **POLAND** (Gdansk) +48 58301 65 16 or +48 58 349 2831; **PORTUGAL** (Lisbon Lisboa) 808 250 143; **ROMANIA** (Bucharest) +40 21 3183606 (8.00-15.00) **SLOVAKIA** (Bratislava) +421 2 54 77 4166; **SLOVENIA** (Ljubljana) + 386 41 650 500; **SPAIN** (Barcelona) +34 93 227 98 33 or +34 93 227 54 00 bleep 190; **SWEDEN** (Stockholm) 112 or +46 010 456 6700 (mon-fri 9.00-17.00); **UNITED KINGDOM** 112

16.7 Recommended restrictions

DISCLAIMER OF LIABILITY: The information in this SDS was obtained from recent Chemical Safety Report of this substance from REACH registration 2010. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.