Safety Data Sheet
According to Regulation (EC) 1907/2006

1153 Chromium(VI) Oxide

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

1.1 Product identifier

Name:
Chromium(VI) Oxide

Synonym:
Chromic Acid, Chromic Anhydride, Chromium Trioxide

REACH Registration Number: 01-2119458868-17-XXXX

1.2 Relevant identified uses of the substance or mixture:

Escenario Exposicion	Grupo	Sector USO	Uso PC	Uso PROC	Categoria Articulo	Uso ERC
Use as Intermediate	Industrial	SU 3 SU 8 SU 9	PC 19	PROC 1 PROC 2 PROC 3 PROC 8b PROC 9		ERC 6a
Formulation	Industrial	SU 3 SU 10	PC 14 PC 15 PC 20	PROC 1 PROC 3 PROC 5 PROC 8b PROC 9 PROC 14		ERC 2
Use in the process of surface treatments, purification and etching.	Industrial	SU 3 SU 12 SU 15	PC 14 PC 15	PROC 2 PROC 8b PROC 9 PROC 10 PROC 13		ERC 5
Use as a processing aid, catalyst, dehydrating agent, pH regulator.	Industrial	SU 3	PC 20	PROC 1 PROC 2 PROC 3 PROC 4 PROC 8b PROC 9		ERC 6b
Use as laboratory chemicals.	Professional	SU 22	PC 21	PROC 15		ERC 8b

1.3 Identification of the company or firm:

PANREAC QUIMICA S.L.U.
C/Garraf 2
Polígono Pla de la Bruguera
E-08211 Castellar del Vallès
(Barcelona) Spain
Tel. (+34) 937 489 400
e-mail: product.safety@panreac.com

1.4 Emergency telephone:
Single telephone number for emergency calls: 112 (EU)
Tel.: (+34) 937 489 499

2. Identification of dangers

Classification of the substance or the mixture.

Classification Regulation (CE) nº 1272/2008.

Carc. 1A
Muta. 1B
Ox. Sol. 1
Acute Toxicity Oral cat. 3
Acute Toxicity Inhalation cat. 2
Acute Toxicity Dermal cat. 2
Skin Corr. 1A
Resp. Sens 1
Skin Sens. 1
STOT RE 1
Repr. 2
Aquatic Acute 1
Aquatic Chronic 1

Hazard Pictograms

Signal word
Danger

Hazard statements
H350 May cause cancer.
H340 May cause genetic defects.
H271 May cause fire or explosion; strong oxidiser.
H310 Fatal in contact with skin.
H301 Toxic if swallowed.
H330 Fatal if inhaled.
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.
H372 Causes damage to organs through prolonged or repeated exposure.
H361f Suspected of damaging fertility.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements
P201 Obtain special instructions before use.
P220 Keep/Store away from clothing/combustible materials.
P273 Avoid release to the environment.
P309+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

Classification (67/548/CEE or 1999/45/CE).

O Oxidizing	R45
C Corrosive	R46
T+ Very toxic	R9
N Dangerous for the environment	RE24/25
	RE26
	R35
	R42/43
	RE48/23
	R62
	R50/53

For the full text of the R-phrases mentioned in this section, see section 16.

3. Composition/information on ingredients

Name: Chromium(VI) Oxide
Formula: CrO3 M.= 99,99 CAS [1333-82-0]
EC number (EINECS): 215-607-8
EC index number: 024-001-00-0
REACH Registration Number: 01-2119458868-17-XXXX

4. First aid measures

4.1 General indications:
Never provide drink or induce vomiting in the event of loss of consciousness.

4.2 Inhaling:
Take the person out into the fresh air. In the event sickness persists, seek medical assistance.

4.3 Contact with the skin:
Wash with plenty of water. Remove contaminated clothing. Seek immediate medical assistance.

4.4 Eyes:
Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek immediate medical assistance.

4.5 Swallowing:
Drink large amounts of water. Avoid vomiting (there is a risk of perforation). Seek immediate medical assistance. Do not neutralize.

5. Firefighting measures

5.1 Suitable extinguishing media:
Atomized water. Carbon dioxide (CO2). Foam. Dry powder.

5.2 Unsuitable extinguishing media:
No specific data.

5.3 Special hazards arising from the substance or mixture:
Encourages fire to break out. Keep away from combustible substances.

5.4 Advice for firefighters:
Suitable clothing and footwear. Self-contained breathing equipment.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Do not inhale the dust. Ensure adequate ventilation.

6.2 Environmental precautions:
Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods and material for containment and cleaning up:
Collect up dry and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

7. Handling and storage

7.1 Precautions for safe handling:
Ensure good ventilation and renewal of the air in the premises. Avoid contact with the skin, eyes or clothing. Avoid sources of ignition. Do not smoke.

7.2 Conditions for safe storage, including any incompatibilities:
Well sealed containers.Dry atmosphere.In well ventilated premises.Keep away from flammable substances, sources of ignition and heat.

8. Exposure controls/personal protection

8.1 Exposure controls:
Do not inhale the fumes. Ensure good ventilation and renewal of the air in the premises.

8.2 Control parameters:
VME(Cr): 0,05 mg/m3 ,

Derived No Effect Level (DNEL)
: ,
DMELInhalation: 0,02 mg/m3 Short term,
DMELInhalation: 0,02 mg/m3 Long term,

Predicted No Effect Concentration (PNEC)
: ,
PNECSoil: , 6µg/kg wwt
PNECSewage treatment plant: , 0,4mg/l
PNECFreshwater: , 6,5µg/l
PNECFreshwater: , 60mg/kg

8.3 Respiratory protection:
If dust forms, use suitable respiratory protection. Filter P3.

8.4 Hand protection:
Use suitable gloves (PVC)

8.5 Eye/face protection:
Use safety glasses.

8.6 Individual hygiene measures:
Use suitable work clothing. Remove contaminated clothing. Wash hands and face before breaks and when the job is done.

8.7 Environmental exposure controls:
Fulfill the commitments under local environmental protection legislation.

9. Physical and chemical properties

Appearance: solid
Colour: Red-brown
Granulometry: N/A
Odour: Odourless.
pH: <1 ((50 g/l))
Melting point/freezing point: 196 °C
Initial boiling point and boiling range:
N/A
Flash point:
N/A
Flammability (solid, gas):
N/A
Upper/lower flammability or explosive limits:
N/A
Vapour pressure: N/A
Vapour density: N/A
Relative density:
N/A
Solubility: 1.660 g/l in water (20 °C)
Partition coefficient: n-octanol/water:
N/A
Auto-ignition temperature:
N/A

Decomposition temperature: above196 °C
Kinematic viscosity:N/A
Dynamic viscosity:
N/A

10. Stability and reactivity

10.1 Conditions to avoid:
High temperatures.

10.2 Incompatible materials:
Flammable substances. Organic solvents. Alkaline metals. Ammonia. Non-metals. Halogen halides. Hydrazine and derivatives. Nitrates. Reducing agents. Nitric acid.

10.3 Hazardous decomposition products:
Toxic gases.

10.4 Chemical stability:
Vigorous oxidizing agent.

11. Toxicological information

11.1 Acute toxicity:
LD50 oral rat : 52 mg/kg
LD50 skn rbt : 57 mg/kg
LC50 inh rat : 0,217 mg/l 4h

11.2 Dangerous effects for health:
Upon contact with the skin: burns Penetration of the product causes injuries which are hard to cure. Through contact with the eyes: Serious injuries If swallowed: burns Tissue injuries (mouth, oesophagus, stomach and intestinal tract). If inhaled: Irritations to the respiratory tracts. Allergic reaction in nasal mucosae (perforation). **Skin corrosion/irritation:** Corrosive substance. **STOT-repeated exposure:** Causes damage to organs through prolonged or repeated exposure. **Carcinogenicity:** Carcinogenic. **Germ cell mutagenicity:** mutagenic effect., Muta. 1B **Reproductive toxicity:** Possible risk of impaired fertility. **Respiratory or skin sensitisation:** sensitization, Risk of cutaneous absorption.

12. Environmental information

12.1 Toxicity:
Acute toxicity for bacteria:
LC50 30 mg/l (3h) ($Na_2Cr_2O_7$)
Acute toxicity for Algae:
LC50 0,47 mg/l (72h)
Acute toxicity for aquatic invertebrates:
EC50 (Daphnia magna) 0,035 mg/l (48h)
Acute toxicity for fish:
Fish (Carassius auratus) LC50 37,5 mg/l (96h)
Chronic toxicity for fish:
NOEC 0,105 mg/l (60d) ($Na_2Cr_2O_7$)
Chronic toxicity for aquatic invertebrates:
NOEC (Daphnia magna) 60 mg/l (21d)
Chronic toxicity for bacteria:
NOEC 0,11 mg/l (7d)

12.2 Persistence and Degradability :
Data not available.

12.3 Bioaccumulative potential:
Data not available.

12.4 Mobility in soil :
Data not available.

12.5 Assessment PBT and MPMB :
Not applicable to inorganic substances.

12.6 Other adverse effects:
Do not allow it to enter soils or water channels.
High toxic product for water.

13. Disposal considerations

13.1 Waste treatment methods:
In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country. In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.
2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes.Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.
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13.2 Contaminated containers:
Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.
European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.
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14. Transport information

Overland (ADR):
Technical name: CHROMIUM TRIOXIDE, ANHYDROUS
UN 1463 Class: 5.1 6.1 8 PELIG.M.AMB Packaging group: II (E)
By sea (IMDG):
Technical name: CHROMIUM TRIOXIDE, ANHYDROUS
UN 1463 Class: 5.1 6.1 8 PELIG.M.AMB Packaging group: II
By air (ICAI-IATA):
Technical name: Chromium trioxide, anhydrous
UN 1463 Class: 5.1 6.1 8 PELIG.M.AMB Packaging group: II
Packaging instructions: CAO 562 PAX 558

15. Regulatory information

The substance is included in Annex XIV (LIST OF SUBSTANCES SUBJECT TO AUTHORISATION) according to Regulation (EC) No. 1907/2006 (REACH).

16. Other information

Other precautionary statements

Labelling (65/548/CEE or 1999/45/CE)

R-phrase(s):	**R45** May cause cancer. **R46** May cause heritable genetic damage. **R9** Explosive when mixed with combustible material. **RE24/25** Also toxic in contact with skin and if swallowed. **RE26** Also very toxic by inhalation. **R35** Causes severe burns. **R42/43** May cause sensitisation by inhalation and skin contact. **RE48/23** Also toxic: danger of serious damage to health by prolonged exposure through inhalation. **R62** Possible risk of impaired fertility. **R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s):	**S53** Avoid exposure - obtain special instructions before use. **S45** In case of accident or if you feel unwell, seek medical advice immediately (show the lable where possible). **S60** This material and its container must be disposed of as hazardous waste. **S61** Avoid release to the environment. Refer to special instructions/safety data sheets.

Version and revision date : 5 22.07.2013
Remplaced: 15.09.2011
In respect of the previous review, changes have been made to the following sections: 1,2,5,6,7,8,10,11,12,15
The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.