

SAFETY DATA SHEET of:

Orion C051

Revision date: Wednesday, April 23, 2014

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

1.1 Product identifier:

Orion C051

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

/

Concentration in use: /

1.3 Details of the supplier of the safety data sheet:

ORION INDUSTRIES BVBA

Groenveldstraat 13

3001 Heverlee

Phone: 016520898 — Fax: 016490210

E-mail: orion@orionindustries.be — Website: <http://www.orioncoltd.com/>

1.4 Emergency telephone number:

003270245245

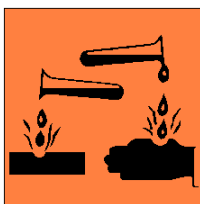
2 Hazards identification:

2.1 Classification of the substance or mixture:

R35: Corrosive

2.2 Label elements:

Symbols:



Corrosive

Risk Phrases:

R35: Causes severe burns.

Safety phrases:

- S1:** Keep locked up.
- S26:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37/39:** Wear suitable protective clothing, gloves and eye/face protection.
- S45:** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains:

Hydrochloric acid

2.3 Other hazards:

none

3 Composition/information on ingredients:

Hydrochloric acid	15% - 30%	CAS number:	7647-01-0
		EINECS:	231-595-7
		REACH Registration number:	01-2119484862-27
		CLP Classification:	H314 Skin Corr. 1B H335 STOT SE 3
		R-Phrases:	R34 R37

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

4 First aid measures:

4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur.

- Skin contact:** remove contaminated clothing, rinse skin with plenty of water and immediately transport to hospital.
- Eye contact:** first prolonged rinsing with water (contact lenses to be removed if this is easily done) then take to physician.
- Ingestion:** rinse mouth, do not induce vomiting, take to hospital immediately.
- Inhalation:** let sit upright, fresh air, rest and take to hospital.

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

- Skin contact:** caustic, redness, pain, serious burns
- Eye contact:** caustic, redness, bad looking, pain
- Ingestion:** caustic, lack of breath, vomiting, blisters on lips and tongue, burning pain in mouth and throat, gullet and stomach
- Inhalation:** headache, dizziness, nausea, drowsiness, unconsciousness

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

none

5 Fire-fighting measures:

5.1 Extinguishing media:

CO2, foam, powder, sprayed water

5.2 Special hazards arising from the substance or mixture:

none

5.3 Advice for fire-fighters:

Extinguishing agents to be avoided: none

6 Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind. Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

6.2 Environmental precautions:

do not allow to flow into sewers or open water.

6.3 Methods and material for containment and cleaning up:

remove by using absorbent material.

6.4 Reference to other sections:

for further information check sections 8 & 13.

7 Handling and storage:

7.1 Precautions for safe handling:

handle with care to avoid spillage.

7.2 Conditions for safe storage, including any incompatibilities:

keep in a sealed container in a closed, frost-free, ventilated room.

7.3 Specific end use(s):

/





8 Exposure controls/personal protection:

8.1 Control parameters:

Listing of the hazardous ingredients in section 3, of which the TLV value is known

Hydrochloric acid 8 mg/m³

8.2 Exposure controls:

Inhalation protection:	use with sufficient exhaust ventilation. If necessary, use an air-purifying face mask in case of respiratory hazards. Use the ABEK type as protection against these troublesome levels.	
Skin protection:	handling with Viton-gloves. Thoroughly check gloves before use. Take of the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands.	
Eye protection:	keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems.	
Other protection:	impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question.	

9 Physical and chemical properties:

9.1 Information on basic physical and chemical properties:

Melting point/melting range:	0 °C
Boiling point/Boiling range:	100 °C
pH:	1.0
pH 1% diluted in water:	/
Vapour pressure/20°C,:	2 332 Pa
Vapour density:	not applicable
Relative density, 20°C:	/
Appearance/20°C:	liquid
Flash point:	/
Flammability (solid, gas):	not applicable
Auto-ignition temperature:	/
Upper flammability or explosive limit, (Vol %):	/
Lower flammability or explosive limit, (Vol %):	/
Explosive properties:	not applicable
Oxidising properties:	not applicable
Decomposition temperature:	/
Solubility in water:	completely soluble
Partition coefficient: n-octanol/water:	not applicable
Odour:	characteristic
Odour threshold:	not applicable
Dynamic viscosity, 20°C:	1 mPa.s
Kinematic viscosity, 20°C:	/
Evaporation rate (n-BuAc = 1):	0.300

9.2 Other information:

Volatile organic component (VOC):	/
Volatile organic component (VOC):	/

10 Stability and reactivity:

10.1 Reactivity:

stable under normal conditions.

10.2 Chemical stability:

extremely high or low temperatures.

10.3 Possibility of hazardous reactions:

none

10.4 Conditions to avoid:

protect from sunlight and do not expose to temperatures exceeding + 50°C.

10.5 Incompatible materials:

oxidants, alkalines

10.6 Hazardous decomposition products:

doesn't decompose with normal use

11 Toxicological information:

11.1 Information on toxicological effects:

About the preparation itself: not applicable under actual EEC guidelines for preparations.

General information: See ingredients under section 3

Calculated acute toxicity, LD50 oral rat: /

Calculated acute toxicity, LD50 dermal rat: /

12 Ecological information:

12.1 Toxicity:

not applicable under actual EEC guidelines for preparations.

12.2 Persistence and degradability:

not applicable under actual EEC guidelines for preparations.

12.3 Bioaccumulative potential:

not applicable under actual EEC guidelines for preparations.

12.4 Mobility in soil:

Water hazard class, WGK: 1

Solubility in water: completely soluble

12.5 Results of PBT and vPvB assessment:

not applicable under actual EEC guidelines for preparations.

12.6 Other adverse effects:

not applicable under actual EEC guidelines for preparations.

13 Disposal considerations:

13.1 Waste treatment methods:

The product may be discharged in the indicated percentages of utilization, provided it is neutralised to pH 7. Possible restrictive regulations by local authority should always be adhered to.

14 Transport information:

14.1 UN number:

3264

14.2 UN proper shipping name:

UN 3264 Corrosive liquid, acidic, inorganic, n.o.s. (mixture with Hydrochloric acid) , 8, II, (E)

14.3 Transport hazard class(es):

Class(es):	8
Identification number of the hazard:	80

14.4 Packing group:

II

14.5 Environmental hazards:

not dangerous to the environment

14.6 Special precautions for user:

Hazard characteristics:	Risk of burns. Risk to the aquatic environment and the sewerage system.
Additional guidance:	Prevent leaking substances from running into the aquatic environment or the sewage system.



15 Regulatory information:

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

Water hazard class, WGK:	1
Volatile organic component (VOC):	/
Volatile organic component (VOC):	/

Composition by regulation (EC) 648/2004: none

15.2 Chemical Safety Assessment:

No data available

16 Other information:

Legend to abbreviations used in the safety data sheet:

DPD:	Dangerous Preparations Directive
WGK 1:	slightly hazardous for water
WGK:	Water hazard class
WGK 2:	hazardous for water
ADR:	Accord européen relatif au transport international des marchandises Dangereuses par Route
CLP:	Classification, Labelling and Packaging of chemicals
WGK3:	extremely hazardous for water
EINECS:	European INventory of Existing Commercial chemical Substances
CAS:	Chemical Abstracts Service
Nr.:	number
PTB:	persistent, toxic, bioaccumulative
zPzB:	very persistent and very bioaccumulative substances
TLV:	Threshold Limit Value

Legend to the R & H Phrases used in the safety data sheet:

R34: Causes burns. **R35:** Causes severe burns. **R37:** Irritating to respiratory system.

H314 Skin Corr. 1B: Causes severe skin burns. **H335 STOT SE 3:** May cause respiratory irritation.

Reason of revision, changes of following items:

Sections: 2.1, 2.2, 3, 9.1, 14.2, 16

MSDS reference number:

ECM-105271,00

This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 453/2010. Classification has been calculated in accordance with the European directive 67/548/EWG, 1999/45/EC and regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.