

**CROMOLOGY ITALIA S.p.A.****Vierotone**VIE
Revision nr.1
Dated 29/5/2015
Printed on 1/7/2015
Page n. 1 / 10

EN

Safety data sheet

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

1.1. Product identifier

Code: VIE433811S
Product name: Vierotone

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

Identified Uses	Industrial	Professional	Consumer
	-	✓	✓

1.3. Details of the supplier of the safety data sheet

Name: CROMOLOGY ITALIA S.p.A.
Full address: Sede Legale: Via IV Novembre 4
District and Country: 55016 Porcari LU
ITALY
Tel. 199119955 (+39)05832424
Fax 199119977

e-mail address of the competent person responsible for the Safety Data Sheet: info-sds@cromology.it

Product distribution by: CROMOLOGY ITALIA S.p.A.

1.4. Emergency telephone number

For urgent inquiries refer to:
Numeri telefonici dei principali Centri Antiveleni italiani (attivi 24/24 ore):
Centro Antiveleni di Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia);
Centro Antiveleni di Milano 02 66101029 (CAV Ospedale Niguarda Ca` Granda - Milano);
Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti - Bergamo);
Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze);
Centro Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma);
Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I - Roma);
Centro Antiveleni di Roma 06 68593726 (CAV Osp. Pediatrico Bambino Gesù - Roma);
Centro Antiveleni di Foggia 0881 732326 (Azienda Ospedaliero Universitaria di Foggia);
Centro Antiveleni di Napoli 081 7472870 (CAV Ospedale Cardarelli - Napoli).

Per ulteriori informazioni: Cromology Italia SpA 199119955 (+39)05832424 from Monday to Friday 9:30-12:30 14:00-17:30.

**SECTION 2. Hazards identification****2.1. Classification of the substance or mixture**

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to EC Regulation 1907/2006 and subsequent amendments.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments

Hazard classification and indication:

2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Warning symbols: None

Hazard sentences (R): None

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Hazard statements:

EUH208

Contains:

1,2-BENZOISOTIAZOL-3(2H)-ONE

2-METIL-2H-ISOTIAZOL-3-ONE

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one. [EC no. 220-239-6] (3:1)

May produce an allergic reaction

EUH210

Safety data sheet available on request.

Precautionary statements:

2.3. Other hazards

Information not available

SECTION 3. Composition/information on ingredients**3.1. Substances**

Information not relevant

**Vierotone****SECTION 3. Composition/information on ingredients** ... / >>**3.2. Mixtures****Contains:**

Identification	Conc. %	Classification 67/548/EEC	Classification 1272/2008 (CLP)
ETHANEDIOL			
CAS 107-21-1	0,00 - 0,4	Xn R22	Acute Tox. 4 H302
EC 203-473-3			
INDEX 603-027-00-1			
Reg. no. 01-2119456816-28-XXXX			

Xn= HARMFUL

Note: Upper limit is not included into the range

The full wording of the Risk (R) and 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 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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**

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.

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. 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. 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

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. 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:

United Kingdom

EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended).

Éire

Code of Practice Chemical Agent Regulations 2011.

OEL EU

Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.

TLV-ACGIH

ACGIH 2012

**Vierotone****SECTION 8. Exposure controls/personal protection ... / >>****CALCIUM CARBONATE****Threshold Limit Value**

Type	Country	TWA/8h mg/m ³	ppm	STEL/15min mg/m ³	ppm
WEL	UK	4			
OEL	IRL	4			
TLV-ACGIH		10			

Threshold Limit Value

Type	Country	TWA/8h mg/m ³	ppm	STEL/15min mg/m ³	ppm
WEL	UK	4			
OEL	IRL	4			
TLV-ACGIH		10			

TITANIUM DIOXIDE**Threshold Limit Value**

Type	Country	TWA/8h mg/m ³	ppm	STEL/15min mg/m ³	ppm
WEL	UK	4			
OEL	IRL	4			
TLV-ACGIH		10			

Predicted no-effect concentration - PNEC

Normal value for the terrestrial compartment	> 100	mg/kg
Normal value in fresh water	> 1	mg/l
Normal value in marine water	0.127	mg/l
Normal value for fresh water sediment	> 1000	mg/kg
Normal value for marine water sediment	> 100	mg/kg
Normal value of STP microorganisms	100	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				700 mg/kg p.c.				
Inhalation							10 mg/mc	
Skin								

ETHANEDIOL**Threshold Limit Value**

Type	Country	TWA/8h mg/m ³	ppm	STEL/15min mg/m ³	ppm	
WEL	UK	52	20	104	40	
OEL	IRL	52	20	104	40	SKIN
OEL	EU	52	20	104	40	SKIN
TLV-ACGIH				100(C)		

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

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

8.2. Exposure controls

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Various colours
Odour	Characteristic, light
Odour threshold	Not available
pH	8,5
Melting point / freezing point	Not available
Initial boiling point	> 100 °C
Boiling range	Not available
Flash point	> 60 °C
Evaporation Rate	Not available
Flammability (solid, gas)	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	>1
Relative density	1,500 kg/l 20°C
Solubility	Dispersible in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	15000 cP.s
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

VOC (Directive 2004/42/EC) : 30,00 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

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

ETHANEDIOL: can absorb atmospheric humidity up to twice its own weight. Decomposes at temperatures over 200°C.

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.

ETHANEDIOL: risk of explosion on contact with: perchloric acid. Can react dangerously with: chlorosulphuric acid, sodium hydroxide, sulphuric acid, phosphorus pentasulphide, chromium (III) oxide, chromyl chloride, potassium perchlorate, potassium dichromate, sodium peroxide, aluminium. Forms explosive mixtures with the air.

10.4. Conditions to avoid

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

**Vierotone****SECTION 10. Stability and reactivity** ... / >>

ETHANEDIOL: avoid exposure to sources of heat and naked flames.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

ETHANEDIOL: hydroxyacetaldehyde, glyoxal, acetaldehyde, methane, formaldehyde, carbon monoxide, hydrogen.

SECTION 11. Toxicological information**11.1. Information on toxicological effects**

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.

This product contains sensitizing substance/s and may cause allergic reactions.

ETHANEDIOL: following ingestion it initially stimulates the CNS; later on depression results. Renal damage with anuria and uremia may occur. Symptoms of over exposure are: vomiting, somnolence, difficulty in breathing, convulsions. The lethal dose in man is approximately 1.4 l/kg. The way of entry is inhalation and ingestion.

ETHANEDIOL

LD50 (Oral) >2.000 mg/kg Rat

LD50 (Dermal) 9.530 mg/kg Rabbit

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

12.1. Toxicity

Information not available

12.2. Persistence and degradability

ETHANEDIOL: easily biodegradable.

12.3. Bioaccumulative potential

ETHANEDIOL: no appreciable bioaccumulation potential (log Ko/w 1-3).

12.4. Mobility in soil

ETHANEDIOL: very mobile in soil.

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.

Avoid littering. Do not contaminate soil, sewers and waterways.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

SECTION 15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso category

None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

None

Substances in Candidate List (Art. 59 REACH)

None

Substances subject to authorisation (Annex XIV REACH)

None

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

Healthcare controls

--

VOC (Directive 2004/42/EC):

Matt coatings for interior walls and ceilings.

VOC given in g/litre of product in a ready-to-use condition :

Limit value: 30 (2010)

VOC of product : 30,00

**Vierotone****SECTION 15. Regulatory information** ... / >>

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information

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

Acute Tox. 4 Acute toxicity, category 4
H302 Harmful if swallowed.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R22 HARMFUL IF SWALLOWED.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- 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
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- 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.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament

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

5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
9. The Merck Index. - 10th Edition
10. Handling Chemical Safety
11. Niosh - Registry of Toxic Effects of Chemical Substances
12. INRS - Fiche Toxicologique (toxicological sheet)
13. Patty - Industrial Hygiene and Toxicology
14. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
15. ECHA website

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.