

**TC508II - CARREZ II for oenology**

# Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

**1.1. Product identifier**

Code: **TC508II**  
 Product name: **CARREZ II for oenology**

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

Intended use: **Reagent for laboratory use**

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

Name: **TITOLCHIMICA SPA**  
 Full address: **VIA S.PIETRO MARTIRE 1054**  
 District and Country: **45030 PONTECCHIO POLESINE (RO)**  
**ITALIA**  
 Tel. **+39425492644**

e-mail address of the competent person

responsible for the Safety Data Sheet: **utecnico@titolchimica.it**  
 Supplier: **TITOLCHIMICA SPA**

**1.4. Emergency telephone number**

For urgent inquiries refer to:  
**Pavia - National Center for Toxicological Information 0382/24444;**  
**Milan - Hosp. Niguarda Ca' Granda 02/66101029;**  
**Bergamo - Hosp. "Pope John XXIII" 800/883300;**  
**Verona - Hosp. Integrated Verona 800/011858**  
**Florence - Hosp. "Careggi" U.O. Medical Toxicology 055/7947819;**  
**Rome - "A. Gemelli" Polyclinic 06/3054343;**  
**Rome - "Umberto I" Polyclinic 06/49978000;**  
**Rome - "Bambino Gesù Pediatric Hospital" 06/68593726**  
**Naples - Hosp. "A. Cardarelli" 081/5453333;**  
**Foggia - Hosp. University of Foggia 800/183459**

## 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 (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Serious eye damage, category 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment, acute toxicity, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, chronic toxicity, category 1	H410	Very toxic to aquatic life with long lasting effects.

**2.2. Label elements**

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

Hazard pictograms:



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Signal words:                Danger

Hazard statements:

**H318**                        Causes serious eye damage.

**H410**                        Very toxic to aquatic life with long lasting effects.

Precautionary statements:

**P273**                        Avoid release to the environment.

**P280**                        Wear eye protection / face protection.

**P305+P351+P338**        IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**P310**                        Immediately call a POISON CENTER / doctor.

**P391**                        Collect spillage.

**Contains:**                 Zinc sulphate heptahydrate

### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

## SECTION 3. Composition/information on ingredients

### 3.2. Mixtures

Contains:

Identification	Conc. %	Classification (EC) 1272/2008 (CLP)
<b>Zinc sulphate heptahydrate</b>		
INDEX 030-006-00-9	35 - 40	Acute Tox. 4 H302, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 231-793-3		LD50 Oral: 1260 mg/kg
CAS 7446-20-0		
REACH Reg. 01-2119474684-27-xxxx		

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

In case of accident or if you feel unwell, seek medical advice (show the label where possible).

**EYES:** Rinse immediately with plenty of water for at least 15 minutes and call your doctor at once.

**SKIN:** immediately remove the clothing and wash the skin with SOAP and water. Get medical attention if irritation occurs.

**INGESTION:** Rinse mouth with plenty of water. If vomiting occurs, keep head down to prevent it from getting into your lungs. Consult a doctor.

**INHALATION:** move to fresh air and keep at rest. If breathing is difficult, give artificial respiration ceases or by taking the proper precautions for the rescuer. Consult a doctor.

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

Zinc sulphate heptahydrate

Eye contact: irritation. Risk of serious eye damage.

After skin contact: slight irritation.

After inhalation: irritation of the mucous membranes and / or respiratory tract Edema in the respiratory tract.

After ingestion: Irritation of the pharynx, gastrointestinal tract, mucous membranes of the mouth and/or oesophagus.

After long contact: hypotension, diarrhoea, collapse, vomiting, cardiovascular disorders.

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**4.3. Indication of any immediate medical attention and special treatment needed**

Information not available.

**SECTION 5. Firefighting measures**

The product is not flammable and does not feed the flames.

**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.

## Zinc sulphate heptahydrate

In case of fire, the following can be released: sulfur oxides (SO<sub>x</sub>).

**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. 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**

Avoid contact with eyes and skin. Avoid dust formation.

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When handling use protective equipment as specified in paragraph 8 of this form and the following procedures: no smoking, no eating, no drinking during handling; use special care when handling to avoid any exposure to the product. Provide an ensure good ventilation/exhaustion at the workplace; wash hands thoroughly after handling and at the end of the round.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage of the preparation use the following precautions:

- be aware of the physical and chemical properties of the preparation to avoid possible interactions with other products
- keep container tightly closed and in a cool and ventilated, not exposed to direct sunlight.

**7.3. Specific end use(s)**

Information not available

**SECTION 8. Exposure controls/personal protection****8.1. Control parameters**

Information not available

**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.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

**HAND PROTECTION**

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): 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 Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

**EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

**RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). 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 (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**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**



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

**10.5. Incompatible materials**

Information not available

**10.6. Hazardous decomposition products**

Zinc sulphate heptahydrate  
Sulphur oxides.

**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 hazard classes as defined in Regulation (EC) No 1272/2008**Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Zinc sulphate heptahydrate

After a long contact: hypotension, diarrhea, collapse, pain, cardiovascular pathologies.

After ingestion: irritation of the mucous membranes in the mouth, esophagus, pharynx, gastrointestinal tract.

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

>2000 mg/kg

ATE (Dermal) of the mixture:

Not classified (no significant component)

Zinc sulphate heptahydrate

LD50 (Oral):

1260 mg/kg ratto

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

Zinc sulphate heptahydrate

Slight symptoms of irritation on contact with the skin.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

Zinc sulphate heptahydrate

Risk of serious eye damage.

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RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

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

Zinc sulphate heptahydrate  
Edema in the respiratory tract.  
Irritation of: respiratory tract.

**11.2. Information on other hazards**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

**SECTION 12. Ecological information**

This product is dangerous for the environment and highly toxic for aquatic organisms. In the long term, it have negative effects on aquatic environment.

**12.1. Toxicity**

Zinc sulphate heptahydrate

LC50 - for Fish 0,43 mg/l/96h Oncorhynchus mykiss (trout iridea) - database ECOTOX  
EC50 - for Crustacea 12 mg/l/48h Daphnia magna  
EC50: 21 mg/l (fish) Leuciscus idus  
IC50: 0.52 mg/l/5d (anhydrous) Algae  
Very toxic to aquatic organisms

**12.2. Persistence and degradability**

Information not available

**12.3. Bioaccumulative potential**

Information not available

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**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  $\geq$  than 0,1%.

**12.6. Endocrine disrupting properties**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

**12.7. Other adverse effects**

Zinc sulphate heptahydrate

Do not enter groundwater, watercourses or sewers, even in small doses.

Do not introduce the undiluted or unneutralised product into waste water and collection channels.

Danger for drinking water even in the event of leaks of minimal quantities of product underground.

Toxic for fish and plankton.

**SECTION 13. Disposal considerations**
**13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

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**
**14.1. UN number or ID number**

ADR / RID, IMDG, IATA: 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity  $\leq$  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  $\leq$  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  $\leq$  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. (Zinc sulphate heptahydrate)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc sulphate heptahydrate)

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc sulphate heptahydrate)

**14.3. Transport hazard class(es)**

ADR / RID: Class: 9 Label: 9

IMDG: Class: 9 Label: 9



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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: (-)
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 L	
IATA:	Cargo: Passengers: Special provision:	Maximum quantity: 450 L Maximum quantity: 450 L A97, A158, A197, A215	Packaging instructions: 964 Packaging instructions: 964

**14.7. Maritime transport in bulk according to IMO instruments**

Information not relevant

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

Seveso Category - Directive 2012/18/EU: E1

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

<u>Product</u>	
Point	3

<u>Contained substance</u>	
Point	75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

 On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

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None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

#### 15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

Zinc sulphate heptahydrate

### SECTION 16. Other information

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

<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>H302</b>	Harmful if swallowed.
<b>H318</b>	Causes serious eye damage.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.

#### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 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: 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: Regulation (EC) 1907/2006

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- 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: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
  12. Regulation (EU) 2016/1179 (IX Atp. CLP)
  13. Regulation (EU) 2017/776 (X Atp. CLP)
  14. Regulation (EU) 2018/669 (XI Atp. CLP)
  15. Regulation (EU) 2019/521 (XII Atp. CLP)
  16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
  17. Regulation (EU) 2019/1148
  18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
  19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
  20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
  21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
  22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**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.

**CALCULATION METHODS FOR CLASSIFICATION**

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Safety Data Sheet n.5 of 11/09/23. Complete revision of version n. 4 of 10/03/21.