

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1. Product identifier:
TC85990 Buffer pH 9.00 blue
- 1.2. Relevant identified uses of the mixture and uses advised against:
Laboratory reagent for process control.
For professional use.
- 1.3. Details of the supplier of the safety data sheet:
Distributor:
Etatron D.S. SPA
VIA DEI RANUNCOLI 53
00134 ROMA
ITALY
Tel.: +39069349891
- Information about the manufacturer:
TITOLCHIMICA SPA
VIA SAN PIETRO MARTIRE, 1054
45030 PONTECCHIO POLESINE (RO)
ITALY
Tel.: 0425/492644
Fax: 0425/492909
- 1.3.1. Responsible person: Technical Department of TITOLCHIMICA SPA
E-mail: utecnico@titolchimica.it
- 1.4. Emergency telephone number: <<Please fill in>>

SECTION 2: HAZARDS IDENTIFICATION

- 2.1. Classification of the mixture:
Classification according to Regulation 1272/2008/EC (CLP):
Not considered as hazardous mixture.
Warning **H statements:** none.
- 2.2. Label elements:
No labelling required.
Warning **H statements:** none.
Precautionary **P statements:** none.
- 2.3. Other hazards:
The product has no other known specific hazards for human or environment.
Results of PBT and vPvB assessment: no information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance:
Not applicable.

3.2. Mixture:

The product does not contain any substances which considered as hazardous, or the concentration of hazardous substances does not reach the extent stated in the relevant regulations, therefore it is not necessary to indicate them in the safety data sheet.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

IN CASE OF INGESTION:

Measures:

- No special measures required.
- Observe good industrial hygiene precautions.

IN CASE OF INHALATION:

Measures:

- No special measures required.
- Observe good industrial hygiene precautions.

IN CASE OF SKIN CONTACT:

Measures:

- No special measures required.
- Observe good industrial hygiene precautions.

IN CASE OF EYE CONTACT:

Measures:

- No special measures required.
- Observe good industrial hygiene precautions.

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

No adverse effects on health known.

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

No data available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

5.1.1. Suitable extinguishing media:

Conventional extinguishers: carbon dioxide, foam, powder and water spray.

5.1.2. Unsuitable extinguishing media:

None known.

5.2. Special hazards arising from the substance or mixture:

In case of fire, smoke and other combustion products (carbon oxides, toxic pyrolysis products, etc.) may be formed, the inhalation of such combustion products can have serious adverse effects on health.

5.3. Advise for firefighters:

General:

Use water jets 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.

Equipment:

Protection helmet with visor, fireproof clothing (fireproof jacket and trousers with bands around the arms, legs and waist), gloves (fireproof, cut-proof and dielectric), a pressure face mask covering the entire face of the operator or breathing apparatus in the event of large quantities of smoke.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

6.1.1. For non-emergency personnel:

Keep unprotected people away, allow only well trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. For emergency responders:

Use breathing equipment if fumes or powders are released into the air.

These indications apply for both processing staff and those involved in emergency procedures.

- 6.2. Environmental precautions:
Dispose the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.
- 6.3. Methods and material for containment and cleaning up:
Confine using earth or inert material. Collect as much material as possible and eliminate the rest using water jets. Contaminated material should be disposed of in compliance with the provisions in section 13.
- 6.4. Reference to other sections:
For further and detailed information see section 8 and 13.

SECTION 7: HANDLING AND STORAGE

- 7.1. Precautions for safe handling:
Observe conventional hygiene precautions.
The product contains a hazardous substance with a concentration lower than the concentration limits.
However, avoid any contact with the product.
Technical measures:
Ensure adequate ventilation.
Precautions against fire and explosion:
No special measures required.
- 7.2. Conditions for safe storage, including any incompatibilities:
Technical measures and storage condition:
Keep in original, closed and appropriately labelled container.
Incompatible materials: see section 10.
Packaging material: no special prescriptions.
- 7.3. Specific end use(s):
No specific instructions available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1. Control parameters:

Occupational exposure limit values:

The components of the mixture are not regulated with exposure limit value.

DNEL		Routes of exposure	Exposure frequency:	Remarks:
Worker	Consumer			
no data available	no data available	Dermal	Short term (acute) Long term (repeated)	no data available
no data available	no data available	Inhalative	Short term (acute) Long term (repeated)	no data available
no data available	no data available	Oral	Short term (acute) Long term (repeated)	no data available

PNEC			Exposure frequency:	Remarks:
Water	Soil	Air		
no data available	no data available	no data available	Short term (single use) Long term (continuous)	no data available
no data available	no data available	no data available	Short term (single use) Long term (continuous)	no data available
no data available	no data available	no data available	Short term (single use) Long term (continuous)	no data available

- 8.2. Exposure controls:
In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.
- 8.2.1 Appropriate engineering controls:
In pursuance of work is proper foresight needed to avoid leaking onto clothes and floors and to avoid contact with eyes and skin.
Whereas the use of proper technical measures must always have priority regarding the personal protection equipment, ensure good ventilation in the work place through effective local draught or by changing the contaminated air.

- 8.2.2. Individual protection measures, such as personal protective equipment:
1. Eye/face protection: the use of tightly sealed protective goggles (ref. standard EN 166) is recommended.
 2. Skin protection:
 - a. Hand protection: protect hands with category I (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as latex, PVC or equivalent. In choosing appropriate work glove material consider: degradation, breakage time and permeation. Work glove resistance to preparations must be checked before use, as it could be unpredictable. Glove wear depends on the duration of exposure.
 - b. Other: wear category I professional long-sleeved protective clothing and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing protective clothing.
 3. Respiratory protection: If the threshold value for one or more of the substances present in the preparation for daily exposure in the workplace, or to a fraction established by the company's prevention and protection service, is exceeded, wear a half-face filter mask type FFP3 (ref. standard EN 141). The use of breathing protection equipment, such as masks with organic vapour and dust/mist cartridges, is necessary in the absence of technical measures limiting worker exposure. The protection provided by masks is in any case limited. If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).
 4. Thermal hazards: none known.

- 8.2.3. Environmental exposure controls:

No data available.

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions an expert's advice should be sought out before deciding upon further protective measures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- 9.1. Information on basic physical and chemical properties:

Parameter	Test method:	Remarks:
1. Appearance:		blue liquid
2. Odour:		odourless
3. Odour threshold:		no data available
4. pH value:		9
5. Melting point/ freezing point:		not applicable
6. Initial boiling point and boiling range:		ca. 100 °C
7. Flash point:		not applicable
8. Evaporation rate:		no data available
9. Flammability (solid, gas):		no data available
10. Upper/lower flammability or explosive limits:		not applicable
11. Vapour pressure:		no data available
12. Vapour density:		no data available
13. Relative density:		ca. 1 kg/l
14. Solubility(ies):		soluble in water
15. Partition coefficient: n-octanol/water:		no data available
16. Auto-ignition temperature:		not applicable
17. Decomposition temperature:		no data available
18. Viscosity:		no data available
19. Explosive properties:		none
20. Oxidizing properties:		none

- 9.2. Other information:

No data available.

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:

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

- 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.

- 10.4. Conditions to avoid:

None in particular. In any case, take all the usual precautions for chemical products.

10.5. Incompatible materials:

None known.

10.6. Hazardous decomposition products:

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to the health may be released.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects:**

Acute toxicity: based on available data, the classification criteria are not met.

Skin corrosion/irritation: based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: based on available data, the classification criteria are not met.

Germ cell mutagenicity: based on available data, the classification criteria are not met.

Carcinogenicity: based on available data, the classification criteria are not met.

Reproductive toxicity: based on available data, the classification criteria are not met.

STOT-single exposure: based on available data, the classification criteria are not met.

STOT-repeated exposure: based on available data, the classification criteria are not met.

Aspiration hazard: based on available data, the classification criteria are not met.

11.1.1. For substances subject to registration, brief summaries of the information derived from the test conducted:

No data available.

11.1.2. Relevant toxicological properties of the hazardous substances:

No data available.

11.1.3. Information on likely routes of exposure:

Ingestion, inhalation, skin contact, eye contact.

11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

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

No adverse effects on health known.

Nevertheless, observance of good industrial hygiene is recommended.

11.1.6. Interactive effects:

No data available.

11.1.7. Absence of specific data:

No data available.

11.1.8. Other information:

No data available.

SECTION 12: ECOLOGICAL INFORMATION**12.1. Toxicity:**

Use according to good working practices, avoiding release of the product into the environment.

Inform the competent authorities, if the product reaches waterways or sewers or contaminate soil or vegetation.

12.2. Persistence and degradability:

No data available.

12.3. Bioaccumulation potential:

No data available.

12.4. Mobility in soil:

No data available.

12.5. Results of PBT and vPvB assessment:

No data available.

12.6. Other adverse effects:

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods:**

Disposal according to the local regulations.

13.1.1. Information regarding the disposal of the product:

Reuse, when possible. Product residues should be considered as special non-hazardous waste.

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

European Waste Code:

For this product no waste disposal key according the European Waste Catalogue (EWC) can be determined, as only the purpose of application defined by the user enables an allocation. The European waste code number has to be determined after a discussion with a specialist dealing with waste disposal.

- 13.1.2. Information regarding the disposal of the packaging:
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.
- 13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:
None known.
- 13.1.4. Sewage disposal:
None known.
- 13.1.5. Special precautions for any recommended waste treatment:
No data available.

SECTION 14: TRANSPORT INFORMATION

Not dangerous good in sense of the transport regulations.

- 14.1. UN Number:
None.
- 14.2. UN proper shipping name:
None.
- 14.3. Transport hazard class(es):
None.
- 14.4. Packaging group:
None.
- 14.5. Environmental hazards:
No relevant information available.
- 14.6. Special precautions for user:
No relevant information available.
- 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code:
Not applicable.

SECTION 15: REGULATORY INFORMATION

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:
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 (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- 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
- COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Seveso category: none.
Restrictions on the product or the ingredients according to Annex XVII of the Regulation (EC) 1907/2006: none.
Substances listed in Candidate List (Art. 59 REACH): none.
Substances subject to authorization (Annex XIV REACH): none.
- 15.2. Chemical safety assessment: no chemical safety assessment has been performed for the mixture or the ingredients.

SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet: none.

Full text of the abbreviations in the safety data sheet:

DNEL: Derived no effect level. PNEC: Predicted no effect concentration. CMR effects: carcinogenicity, mutagenicity and toxicity for reproduction. PBT: Persistent, bioaccumulative and toxic. vPvB: Very Persistent, Very Bioaccumulative. n.d.: not defined. n.a.: not applicable.

Data sources: safety data sheet in Italian language (dated 27/03/2012) issued by the manufacturer.

Methods used for the classification according to Regulation 1272/2008/EC: according to the calculation method based on the known hazards of the ingredients it is not classified as hazardous.

Relevant H-Phrases (number and full text) of Section 2 and 3: none.

Training advice: no data available.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information. The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product. It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

Safety data sheet was prepared by: ToxInfo Kft.

Professional help regarding the explanation of the safety data sheet:
+36 70 335 8480; info@msds-europe.com