

17.05.2010

Kit Components

Product code	Description
--------------	-------------

106430	Triponaltoner odourless for 1L
---------------	---------------------------------------

Components:

106430 Part1	TRIPONALTONER GERUCHLOS Bleicher Part1
106430 Part2	TRIPONALTONER Toner geruchlos Part2
106430 Part3	TRIPONALTONER GERUCHLOS Steuerteil Part3

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**

- **Trade name:** TRIPONALTONER Bleach Part1

- **Article number:** 106430 Part1, 45221, 5117/4 Part 1

- **Application of the substance / the preparation** Toner for photograph materials

- **Manufacturer/Supplier:**

TETENAL AG & CO. KG

Schützenwall 31-35

D-22844 Norderstedt / Germany

Tel.: +49 040 521 45-0

Fax: +49 040-52145-296

www.tetenal.com

E-mail: info@tetenal.com

TETENAL LTD., Unit 1, Foxholes Road

Leicester LE3 1TH / Great Britain

Tel.: +44 0870 460 8996 Fax: +44 0870 460 8997, e.mail: uk@tetenal.com, www.tetenal.co.uk

- **Further information obtainable from:** Department environment and safety. E-mail: info@tetenal.com

- **Information in case of emergency:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

2 Hazards identification

- **Hazard description:** Not applicable.

- **Information concerning particular hazards for human and environment:**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **GHS label elements**

Safety data sheet available on request.

3 Composition/information on ingredients

- **Chemical characterization**


- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 7757-79-1

EINECS: 231-818-8

potassium nitrate

 O; R 8Danger:  2.14/2

1-5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **General information:** No special measures required.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Immediately rinse with water.

- **After eye contact:** Rinse opened eye for several (15 min) under running water.

- **After swallowing:** If symptoms persist consult doctor.

GB

(Contd. on page 2)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER Bleach Part1

(Contd. of page 1)

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Pick up mechanically.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Store under lock and key and out of the reach of children.
Recommended storage temperature: 5-25°C

* 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:

13746-66-2 Potassium ferricyanide (5-10%)

WEL	Long-term value: 5 mg/m ³ as CN; Sk
-----	---

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**

(Contd. on page 3)

GB

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER Bleach Part1

(Contd. of page 2)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR
Nitrile rubber, NBR
Neoprene gloves

- **Penetration time of glove material**

Glove material: Butyl rubber with breakthrough-time: ≥ 480 min, layer thickness: $\geq 0,4$ mm

Gloves made of nitrile rubber with layer thickness $> 0,38$ mm and breakthrough-time > 480 min

Glove material: Neopren with breakthrough time: > 240 min, layer thickness: $> 0,65$ mm

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **General Information**

Form:	Fluid
Colour:	Orange
Odour:	Odourless

- **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: $> 100^{\circ}\text{C}$

- **Flash point:** Not applicable.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Vapour pressure at 20°C:** 23 hPa

- **Density at 20°C:** 1.09 g/cm³

- **Solubility in / Miscibility with water:** Fully miscible.

- **Solvent content:**

Organic solvents: 0.0 %

Water: 86.2 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Materials to be avoided:**

- **Dangerous reactions** No dangerous reactions known.

- **Dangerous decomposition products:** Irritant gases/vapours

11 Toxicological information

- **Acute toxicity:**

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

(Contd. on page 4)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER Bleach Part1

(Contd. of page 3)

- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- **Product:**
- **Recommendation**
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

- **European waste catalogue**

09 01 99	wastes not otherwise specified
----------	--------------------------------

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -

- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

- **UN "Model Regulation":** -

15 Regulatory information

- **Labelling according to EU guidelines:**
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

(Contd. on page 5)

GB

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER Bleach Part1

(Contd. of page 4)

- **Special labelling of certain preparations:**
Safety data sheet available for professional user on request.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**

8 Contact with combustible material may cause fire.

- **Department issuing MSDS:** Department product safety

- **Contact:** e-mail: sida@tetenal.com

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

- *** Data compared to the previous version altered.**

GB

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**

- **Trade name:** TRIPONALTONER TONER Part2

- **Article number:** 106430 Part2, 45222, 5117/4 Part2

- **Application of the substance / the preparation** Toner for photograph materials

- **Manufacturer/Supplier:**

TETENAL AG & CO. KG

Schützenwall 31-35

D-22844 Norderstedt / Germany

Tel.: +49 040 521 45-0

Fax: +49 040-52145-296

www.tetenal.com

E-mail: info@tetenal.com

TETENAL LTD., Unit 1, Foxholes Road

Leicester LE3 1TH / Great Britain

Tel.: +44 0870 460 8996 Fax: +44 0870 460 8997, e.mail: uk@tetenal.com, www.tetenal.co.uk

- **Further information obtainable from:** Department environment and safety. E-mail: info@tetenal.com

- **Information in case of emergency:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

2 Hazards identification

- **Hazard description:**



Xn Harmful

N Dangerous for the environment

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 22 Harmful if swallowed.

R 40 Limited evidence of a carcinogenic effect.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 63 Possible risk of harm to the unborn child.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **GHS label elements**

**Warning**

H351 - Suspected of causing cancer.

H361d - Suspected of damaging the unborn child.

**Warning**

H302 - Harmful if swallowed.



H411 - Toxic to aquatic life with long lasting effects.

- **Prevention:**

P273 Avoid release to the environment.

(Contd. on page 2)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER TONER Part2

(Contd. of page 1)

- P281 Use personal protective equipment as required.
- **Response:**
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P308+P313 IF exposed or concerned: Get medical advice/attention.
- **Storage:**
P405 Store locked up.
- **Disposal:**
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 62-56-6	thiourea	Carc. Cat. 3, Repr. Cat. 3; Xn, N; R 22-40-51/53-63	>90%
EINECS: 200-543-5		Warning: 3.6/2, 3.7/2; 3.1.0/4	
		4.1.C/2	

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **General information:**
Immediately remove any clothing/shoes soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several (15 min) under running water.
- **After swallowing:** Call for a doctor immediately.
- **Information for doctor:**
Hinweise in der GESTIS Gefahrstoffdatenbank: <http://www.dguv.de/ifa/de/gestis/stoffdb/index.jsp>

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **Protective equipment:** Do not inhale explosion gases or combustion gases.

6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Dispose contaminated material as waste according to item 13.

(Contd. on page 3)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER TONER Part2

Pick up mechanically.

(Contd. of page 2)

7 Handling and storage

- **Handling:**
- **Information for safe handling:** Prevent formation of dust.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Store under lock and key and out of the reach of children.
Recommended storage temperature: 5-25°C

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
Not necessary if room is well-ventilated.
required at the appearance from fumes/vapours/aerosol. Filter ABEK
- **Protection of hands:**



Protective gloves

Impervious gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

- **Penetration time of glove material**

Glove material: Butyl rubber with breakthrough-time: ≥ 480 min, layer thickness: $\geq 0,4$ mm

Gloves made of nitrile rubber with layer thickness $>0,38$ mm and breakthrough-time >480 min

(Contd. on page 4)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER TONER Part2

(Contd. of page 3)

Glove material: Neopren with breakthrough time: >240 min, layer thickness: >0,65 mm
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

Safety glasses

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **General Information**

Form:	Solid
Colour:	White
Odour:	Odourless

- **Change in condition**

Melting point/Melting range:	182°C
Boiling point/Boiling range:	Undetermined.

- **Flash point:** Not applicable.

- **Ignition temperature:** 440°C

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Density at 20°C:** 1.405 g/cm³

- **Bulk density at 20°C:** 640 kg/m³

- **Solubility in / Miscibility with water at 20°C:** 136 g/l

- **pH-value at 20°C:** 7

- **Solvent content:**

Organic solvents:	0.0 %
--------------------------	-------

Solids content:	100.0 %
------------------------	---------

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Materials to be avoided:**

- **Dangerous reactions** Risk of dust explosion.

- **Dangerous decomposition products:** Irritant gases/vapours

GB

(Contd. on page 5)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER TONER Part2

(Contd. of page 4)

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

62-56-6 thiourea

Oral	LD50	1750 mg/kg (rat)
Dermal	LD50	>2800 mg/kg (rabbit)

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

12 Ecological information

· **Ecotoxicological effects:**

· **Aquatic toxicity:**

62-56-6 thiourea

EC50	48h:	35 mg/l (daphnia magna)
LC50	96h:	1000 mg/l (Brachydanio)

· **Remark:** Toxic for fish

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

09 01 99	wastes not otherwise specified
----------	--------------------------------

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

GB

(Contd. on page 6)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER TONER Part2

(Contd. of page 5)

14 Transport information

· Land transport ADR/RID (cross-border)



- **ADR/RID class:** 9 (M7) Miscellaneous dangerous substances and articles.
- **Danger code (Kemler):** 90
- **UN-Number:** 3077
- **Packaging group:** III
- **Hazard label:** 9
- **Special marking:** Symbol (fish and tree)
- **Description of goods:** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiourea)
- **Tunnel restriction code** E

· Maritime transport IMDG:



- **IMDG Class:** 9
- **UN Number:** 3077
- **Label** 9
- **Packaging group:** III
- **EMS Number:** F-A,S-F
- **Marine pollutant:** Yes
Symbol (fish and tree)
- **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiourea)

· Air transport ICAO-TI and IATA-DGR:



- **ICAO/IATA Class:** 9
- **UN/ID Number:** 3077
- **Label** 9
- **Special marking:** Symbol (fish and tree)
- **Packaging group:** III
- **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiourea)

- **UN "Model Regulation":**
UN3077; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.; 9; III

15 Regulatory information

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

(Contd. on page 7)

GB

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER TONER Part2

(Contd. of page 6)

· **Code letter and hazard designation of product:**



Xn Harmful
N Dangerous for the environment

· **Hazard-determining components of labelling:**

thiourea

· **Risk phrases:**

- 22 Harmful if swallowed.
- 40 Limited evidence of a carcinogenic effect.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 63 Possible risk of harm to the unborn child.

· **Safety phrases:**

- 2 Keep out of the reach of children.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37 Wear suitable protective clothing and gloves.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 29 Do not empty into drains.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant R-phrases**

- 22 Harmful if swallowed.
- 40 Limited evidence of a carcinogenic effect.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 63 Possible risk of harm to the unborn child.

· **Department issuing MSDS:** Department product safety

· **Contact:** e-mail: sida@tetenal.com

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· *** Data compared to the previous version altered.**

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**

- **Trade name:** TRIPONALTONER Part3

- **Article number:** 106430 Part3, 45223, 5117/4 Part 3

- **Application of the substance / the preparation** Toner for photograph materials

- **Manufacturer/Supplier:**

TETENAL AG & CO. KG

Schützenwall 31-35

D-22844 Norderstedt / Germany

Tel.: +49 040 521 45-0

Fax: +49 040-52145-296

www.tetenal.com

E-mail: info@tetenal.com

TETENAL LTD., Unit 1, Foxholes Road

Leicester LE3 1TH / Great Britain

Tel.: +44 0870 460 8996 Fax: +44 0870 460 8997, e.mail: uk@tetenal.com, www.tetenal.co.uk

- **Further information obtainable from:** Department environment and safety. E-mail: info@tetenal.com

- **Information in case of emergency:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

2 Hazards identification

- **Hazard description:**



Xi Irritant

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 36/38 Irritating to eyes and skin.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **GHS label elements**



Warning

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

- **Prevention:**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

- **Response:**

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

P321 Specific treatment (see on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

GB

(Contd. on page 2)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010



Trade name: TRIPONALTONER Part3

(Contd. of page 1)

3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 1310-73-2	Sodium hydroxide; caustic soda	 C; R 35	0.5-2%
EINECS: 215-185-5		Danger:  3.2/1A	

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **General information:** Immediately remove any clothing/shoes soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Pick up mechanically.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

(Contd. on page 3)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER Part3

(Contd. of page 2)

Store under lock and key and out of the reach of children.
Recommended storage temperature: 5-25°C

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

1310-73-2 Sodium hydroxide; caustic soda (0.5-2%)

WEL Short-term value: 2 mg/m³

· **Additional information:** The lists valid during the making were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Not necessary if room is well-ventilated.

· **Protection of hands:**



Protective gloves

Impervious gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

· **Penetration time of glove material**

Glove material: Butyl rubber with breakthrough-time: ≥ 480 min, layer thickness: $\geq 0,4$ mm

Gloves made of nitrile rubber with layer thickness $>0,38$ mm and breakthrough-time >480 min

Glove material: Neopren with breakthrough time: >240 min, layer thickness: $>0,65$ mm

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Safety glasses



Tightly sealed goggles

(Contd. on page 4)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER Part3

· **Body protection:** Protective work clothing

(Contd. of page 3)

9 Physical and chemical properties

· General Information

Form:	Fluid
Colour:	Colourless
Odour:	Odourless

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· **Flash point:** Not applicable.· **Self-igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Vapour pressure at 20°C:** 23 hPa· **Density at 20°C:** 1.128 g/cm³· **Solubility in / Miscibility with water:** Fully miscible.

· Solvent content:

Organic solvents:	0.0 %
Water:	84.4 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** Irritant gases/vapours

11 Toxicological information

· Acute toxicity:

· LD/LC50 values relevant for classification:

1310-73-2 Sodium hydroxide; caustic soda		
Oral	LD50	325 mg/kg (rat)

· Primary irritant effect:

· **on the skin:** Irritant to skin and mucous membranes.· **on the eye:** Irritating effect.· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

GB

(Contd. on page 5)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER Part3

(Contd. of page 4)

12 Ecological information

- **Ecotoxicological effects:**

- **Aquatic toxicity:**

1310-73-2 Sodium hydroxide; caustic soda

EC50 24h: 76 mg/l (daphnia magna)

LC50 48h: 99 mg/l (Lepomis macrochirus)

96h: 45.4 mg/l (onc)

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

09 01 99 wastes not otherwise specified

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** -

- **Maritime transport IMDG:**

- **IMDG Class:** -

- **Marine pollutant:** No

- **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** -

- **UN "Model Regulation":** -

15 Regulatory information

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**



Xi Irritant

(Contd. on page 6)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 17.05.2010

version no: 1

Revision: 17.05.2010

Trade name: TRIPONALTONER Part3

(Contd. of page 5)

· Risk phrases:

36/38 Irritating to eyes and skin.

· Safety phrases:

2 Keep out of the reach of children.

46 If swallowed, seek medical advice immediately and show this container or label.

56 Dispose of this material and its container to hazardous or special waste collection point.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant R-phrases

35 Causes severe burns.

· Department issuing MSDS: Department product safety**· Contact:** e-mail: sida@tetenal.com**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· * Data compared to the previous version altered.

GB