



Safety Data Sheet according to Regulation (EC)
No. 1907/2006 (REACH)
Revision 17.01.2008 (GB) Version 1.0
5011104 Patina Tiefschwarz 5000 ml

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

| | |
|---------------------------------|---|
| Name of product | 5011104 Patina Tiefschwarz 5000 ml |
| Manufacturer/distributor | TGK GmbH Helleforthstraße 18 - 20, D-33758 Schloß Holte - Stukenbrock Phone 05207 91280, Fax 05207 912840 E-Mail tgk@tgk.de Internet www.tgk.de |
| Advice | Phone 05207 91280 Fax 05207 912840 |
| Emergency advice | Phone 05207 91280 |

2. HAZARDS IDENTIFICATION

Classification

Xn; R22
T; R23/25
C; R34
C; R35
N; R50/53

R-phrases

23/25 Toxic by inhalation and if swallowed.
34 Causes burns.
35 Causes severe burns.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Special hazards information for humans and environment

Irritating to eyes and skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

| CAS No | EC No | Name | [%] | Classification |
|-----------|-----------|-------------------------|------|-----------------------------|
| 7446-08-4 | | Selendioxid | < 1 | T, N |
| 7646-85-7 | 231-592-0 | zinc chloride | < 5 | Xn R22; C R34; N R50-53 |
| 7697-37-2 | | Salpetersäure 65 % | < 10 | C |
| 7758-99-8 | | Kupfersulfatpentahydrat | < 6 | Xn R22; Xi R36/38; N R50/53 |



4. FIRST AID MEASURES

In case of inhalation

Remove the casualty into fresh air and keep him immobile.
Refer for medical treatment.

In case of skin contact

In case of contact with skin wash off immediately with soap and water.

In case of eye contact

Eye rinsing with water carefully while protecting unhurt eye.

In case of ingestion

Medical treatment.
Rinse out mouth and give plenty of water to drink.

Treatment (Advice to doctor)

Treat symptoms.
Decontamination

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Fire-extinguishing activities according to surrounding.

Extinguishing media which must not be used for safety reasons

no

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

no

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective clothing.

Environmental precautions

Do not discharge into the drains or bodies of water..

Methods for cleaning up

Take up with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).
After taking up the material dispose according to regulation.

Additional Information

Informations for safe handling see chapter 7.
Informations for personal protective equipment see chapter 8.
Informations for disposal see chapter 13.

7. HANDLING AND STORAGE

Advice on safe handling

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

Advice on protection against fire and explosion

No special measures necessary.



Requirements for storage rooms and vessels

Prevent penetration into the ground.
Keep only in original container.

Advice on storage compatibility

Do not store together with food.

Further information on storage conditions

Store closed container at cool and aired place.
Protect from frost.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional advice on system design

Provide for sufficient exhaust air.

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC or 2006/15/EC)

| CAS No | Name | Code | [mg/m ³] | [ppm] | Remark |
|-----------|-------------|------------|----------------------|-------|--------|
| 7697-37-2 | nitric acid | Short-term | 2,6 | 1 | |

Respiratory protection

Particle filter P2

Short term: filter apparatus, combination filter A-P1

Hand protection

Protective gloves

Angaben zum Handschuhmaterial [Art/Typ, Dicke, Durchdringzeit/Tragedauer, Benetzungsstärke]:
Nitrilkautschuk, Schichtstärke 0,4 mm Durchbruchzeit >480 Min//Einmalhandschuh: Nitrilkautschuk,
Schichtstärke 0,11 mm, Durchbruchzeit: 10 Min

Eye protection

tightly fitting goggles

Skin protection

protective clothing

General protective measures

Avoid contact with the skin.

Avoid contact with the eyes.

Hygiene measures

Do not eat or drink when working.

Do not smoke when working.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form
liquid

Colour
blue

Odour
odourless

Important health, safety and environmental information

| | Value | Temperature | at | Method | Remark |
|-----------------------------------|------------|-------------|----------|--------|--------|
| pH value in delivery state | ca. 2 | 20 °C | | | |
| starts to boil | ca. 100 °C | | 1013 bar | | |



| | Value | Temperature | at | Method | Remark |
|----------------------------|----------------|-------------|----|--------|----------|
| solidifying point | <= 0 °C | | | | |
| Flash point | not determined | | | | |
| Vapour pressure | 23 mbar | 20 °C | | | |
| Density | ca. 1,1 g/ml | 20 °C | | | |
| Solubility in water | | | | | miscible |

10. STABILITY AND REACTIVITY

Conditions to avoid

No hazardous reactions known.

Hazardous decomposition products

No hazardous decomposition products known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity/Irritability/Sensitization

| | Value/Validation | Species | Method | Remark |
|-------------------------|------------------|---------|--------|--------|
| LD 50 acute oral | 68,1 mg/kg | rat | | |

Experiences made from practice

Causes corrosions.

12. ECOLOGICAL INFORMATION

Data on elimination (persistence and degradability)

| | Elimination rate | Method of analysis | Method | Validation |
|---------------------------------|-------------------------------------|--------------------|--------|------------|
| Biological eliminability | The eliminability is insignificant. | | | |

General regulation

Product is not allowed to be discharged into the ground water or aquatic environment.

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

Harmfull to fishes and bacteria.

13. DISPOSAL CONSIDERATIONS

Recommendations for the product

In accordance with regulations for special waste, must be taken to a special waste disposal.

General information

Do not dispose together with household waste. Do not discharge into sewerage.



14. TRANSPORT INFORMATION

Land and inland navigation transport ADR/RID
UN 1760 CORROSIVE LIQUID, N.O.S., 8, II

15. REGULATORY INFORMATION

Remarks for classification

The product is classified and labelled in accordance with EC directives/German regulations on dangerous substances.

Classification

- C Corrosive
- N Dangerous for the environment

R-phrases

- 23/25 Toxic by inhalation and if swallowed.
- 34 Causes burns.
- 35 Causes severe burns.
- 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases

- 2 Keep out of the reach of children.
- 24/25 Avoid contact with skin and eyes.
- 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Special labelling for certain preparations

Keep out of the reach of children.

National regulations

| | | |
|---------------------------|---|--|
| Water hazard class | 2 | Mixture-WGK Water Hazard Class 2: Hazardous to waters |
|---------------------------|---|--|

Other regulations, restrictions and prohibition regulations

no

16. OTHER INFORMATION

Further information

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Wording of the R-phrases specified in chapter 2 (not the classification of the formulation!)

- R 22 Harmful if swallowed.
- R 23/25 Toxic by inhalation and if swallowed.
- R 33 Danger of cumulative effects.
- R 34 Causes burns.
- R 35 Causes severe burns.
- R 36/38 Irritating to eyes and skin.
- R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.