

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 14.10.2011

version no: 1

Revision: 14.10.2011

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

- **Product identifier**
- **Trade name:** VARIO FIX POWDER for 2 x 5 L; conc. 2x500g
- **Article number:** 102483
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Fixing bath for photographic use
- **Details of the supplier of the safety data sheet**
- **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
- **Emergency telephone number:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

#### 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R41: Risk of serious damage to eyes.

R31: Contact with acids liberates toxic gas.

- **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.

- **Classification system:**

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

- **Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS05

- **Signal word** Danger

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- **Hazard-determining components of labelling:**  
sodium metabisulphite (disodium disulphite)
- **Hazard statements**  
H318 Causes serious eye damage.  
EUH031 Contact with acids liberates toxic gas.
- **Precautionary statements**  
P280 Wear protective gloves/protective clothing/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 or doctor/physician.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

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

· **Dangerous components:**

CAS: 7681-57-4	sodium metabisulphite (disodium disulphite)	10-<25%
EINECS: 231-673-0	☒ Xn R22; ☒ Xi R41 R31	
	☒ Eye Dam. 1, H318; ☒ Acute Tox. 4, H302	

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

### 4 First aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing/shoes soiled by the product.
- **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 minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
Sulphur dioxide (SO<sub>2</sub>)  
Nitrogen oxides (NO<sub>x</sub>)
- **Advice for firefighters**
- **Protective equipment:**  
Mouth respiratory protective device.  
Do not inhale explosion gases or combustion gases.

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### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Prevent formation of dust.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
No special requirements.  
Store in a cool location.
- **Information about storage in one common storage facility:**  
Do not store together with acids.  
Store away from foodstuffs.
- **Further information about storage conditions:**  
Protect from humidity and water.  
Protect from heat and direct sunlight.  
Store under lock and key and out of the reach of children.

### 8 Exposure controls/personal protection

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

<b>Ingredients with limit values that require monitoring at the workplace:</b>
<b>7681-57-4 sodium metabisulphite (disodium disulphite) (10-25%)</b>
WEL Long-term value: 5 mg/m <sup>3</sup>

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

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** Ensure adequate ventilation
- **Protection of hands:**



Protective gloves

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

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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**

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

Glove material: Butyl rubber with breakthrough-time:  $\geq 480$  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

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Solid

**Colour:** White

· **Odour:** Odourless

· **pH-value at 20°C:** 4.8

· **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.

· **Density at 20°C:** 1.503 g/cm<sup>3</sup>

· **Solubility in / Miscibility with water:** Soluble.

· **Solvent content:**  
**Organic solvents:** 0.0 %

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### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Reacts with acids releasing sulphur dioxide.
- **Hazardous decomposition products:** Sulphur dioxide

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

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

**7681-57-4 sodium metabisulphite (disodium disulphite)**

Oral	LD50	1540 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **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

### 12 Ecological information

- **Toxicity**

- **Acquatic toxicity:**

**7681-57-4 sodium metabisulphite (disodium disulphite)**

EC50	48h: 89 mg/l (daphnia magna)
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LC50	96h: 150-220 mg/l (Oncorhynchus mykiss)
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- **Persistence and degradability** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

09 01 04*	fixer solutions
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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

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#### 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":** -  
 · **Special precautions for user** Not applicable.

#### 15 Regulatory information

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

#### 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 phrases**

H302 Harmful if swallowed.

H318 Causes serious eye damage.

R22 Harmful if swallowed.

R31 Contact with acids liberates toxic gas.

R41 Risk of serious damage to eyes.

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

· **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.**