

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 04.02.2021

version no: 6

Revision: 04.02.2021

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

**Trade name: Black and White Photographic Emulsion**

**Information** Dangerous good (see point 14)

**Article number:** 105005

**Index number:**

None of the ingredients is listed.

**UFI:** JNP1-E0WX-R00A-AUAJ

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

No further relevant information available.

**Application of the substance / the mixture**

Auxiliary product for photographic processing  
PHOTOEMULSION TO THE SELF COATING

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

**Manufacturer/Supplier:**

TETENAL 1847 GmbH  
Schützenwall 31-35  
D-22844 Norderstedt /Germany  
Tel.: +49 (0) 40 521 45-0; Fax: +49 (0)40-52145-296  
www.tetenal.com; E-mail: info@tetenal.com

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www.tetenal.com; E-mail: info@tetenal.com

**Further information obtainable from:** Department product safety. E-Mail: sida@tetenal.com

**1.4 Emergency telephone number:**

Poison Information Centre Germany: +49 (0) 30 - 30686 700 (English and German 24 hours)

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Met. Corr.1 H290 May be corrosive to metals.

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

**2.2 Label elements**

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

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

**Hazard pictograms**



GHS05 GHS09

**Signal word** Warning

**Hazard statements**

H290 May be corrosive to metals.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

P102 Keep out of reach of children.

P234 Keep only in original packaging.

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- P273 Avoid release to the environment.
- P390 Absorb spillage to prevent material damage.
- P406 Store in a corrosion resistant container / container with a resistant inner liner.
- P501 Dispose of contents/container in accordance with local regulations.

**2.3 Other hazards**

**Results of PBT and vPvB assessment**

- PBT:** Not applicable.
- vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

**3.2 Chemical characterisation: Mixtures**

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

**Dangerous components:**

CAS: 7785-23-1	silver bromide	1-5%
EINECS: 232-076-8	☠ Aquatic Acute 1, H400 (M=1000); Aquatic Chronic 1, H410 (M=100)	
Reg.nr.: 01-2119967397-20		
CAS: 7783-90-6	silver chloride	1-5%
EINECS: 232-033-3	☠ Met. Corr. 1, H290; ☠ Aquatic Acute 1, H400 (M=1000); Aquatic Chronic 1, H410 (M=100)	
Reg.nr.: 01-2119967399-16		
CAS: 108-95-2	phenol	<1%
EINECS: 203-632-7	☠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331;	
Index number: 604-001-00-2	☠ Muta. 2, H341; STOT RE 2, H373; ☠ Skin Corr. 1B, H314;	
Reg.nr.: 01-2119471329-32	☠ Aquatic Chronic 2, H411	
CAS: 64-17-5	ethanol	<1%
EINECS: 200-578-6	☠ Flam. Liq. 2, H225; ☠ Eye Irrit. 2, H319	
Index number: 603-002-00-5		
Reg.nr.: 01-2119457610-43		

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

### SECTION 4: First aid measures

**4.1 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 (15 min) under running water.
- After swallowing:** If symptoms persist consult doctor.

**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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

No further relevant information available.

### SECTION 5: Firefighting measures

**5.1 Extinguishing media**

**Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**5.2 Special hazards arising from the substance or mixture** No further relevant information available.

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- . **5.3 Advice for firefighters**
- . **Protective equipment:** Do not inhale explosion gases or combustion gases.

### SECTION 6: Accidental release measures

- . **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
- . **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- . **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- . **6.4 Reference to other sections** No dangerous substances are released.

### SECTION 7: Handling and storage

- . **7.1 Precautions for safe handling** No special measures required.
- . **Information about fire - and explosion protection:** Protect from heat.
- . **7.2 Conditions for safe storage, including any incompatibilities**
- . **Storage:**
- . **Requirements to be met by storerooms and receptacles:** No special requirements.
- . **Information about storage in one common storage facility:**
- Store away from foodstuffs.
- Store away from metals.
- . **Further information about storage conditions:**
- Store in a cool place.
- Protect from heat and direct sunlight.
- Protect from humidity and water.
- Protect from exposure to the light.
- Store under lock and key and out of the reach of children.
- . **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- . **8.1 Control parameters**
- . **Additional information about design of technical facilities:** No further data; see item 7.
- . **Ingredients with limit values that require monitoring at the workplace:**

**7785-23-1 silver bromide (1-5%)**

WEL (Great Britain) Long-term value: 0.01 mg/m<sup>3</sup>  
as Ag

**7783-90-6 silver chloride (1-5%)**

WEL (Great Britain) Long-term value: 0.01 mg/m<sup>3</sup>  
as Ag

**108-95-2 phenol (<1%)**

WEL (Great Britain) Short-term value: 16 mg/m<sup>3</sup>, 4 ppm  
Long-term value: 7.8 mg/m<sup>3</sup>, 2 ppm  
Sk

IOELV (EU) Short-term value: 16 mg/m<sup>3</sup>, 4 ppm  
Long-term value: 8 mg/m<sup>3</sup>, 2 ppm  
Skin

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PEL (USA) Long-term value: 19 mg/m<sup>3</sup>, 5 ppm  
Skin

REL (USA) Long-term value: 19 mg/m<sup>3</sup>, 5 ppm  
C e i l i n g l i m i t  
: 60\* mg/m<sup>3</sup>, 15.6\* ppm  
\*15-min; Skin

TLV (USA) Long-term value: 19 mg/m<sup>3</sup>, 5 ppm  
Skin; BEI

**Ingredients with biological limit values:**

**108-95-2 phenol (<1%)**

BEI (USA) 250 mg/g creatinine

Medium: urine

Time: end of shift

Parameter: Phenol with hydrolysis (background, nonspecific)

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

**8.2 Exposure controls**

**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.

Keep away from foodstuffs, beverages and feed.

Do not eat or drink while working.

**Respiratory protection:**

Not required.

Ensure adequate ventilation

**Protection of hands:**

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

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 through 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

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### SECTION 9: Physical and chemical properties

#### . 9.1 Information on basic physical and chemical properties

##### . General Information

##### . Appearance:

**Form:** Not determined.  
may vary, jelly like

**Colour:** Yellow

**Odour:** Odourless

**pH-value (lsl g/l) at 20 °C:** ~5.5

##### . Change in condition

**Melting point/freezing point:** >30 °C

**Initial boiling point and boiling range:** Undetermined.

**Flash point:** Not applicable.

**Auto-ignition temperature:** Product is not selfigniting.

**Explosive properties:** Product does not present an explosion hazard.

**Vapour pressure:** Not applicable.

**Density:** Not determined.

**Solubility in / Miscibility with water:** Partly miscible.

##### . Solvent content:

**VOC (EC)** 0.00 %

**. 9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

**. 10.1 Reactivity** No further relevant information available.

#### . 10.2 Chemical stability

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

**. 10.3 Possibility of hazardous reactions** No dangerous reactions known.

**. 10.4 Conditions to avoid** No further relevant information available.

**. 10.5 Incompatible materials:** No further relevant information available.

**. 10.6 Hazardous decomposition products:** Possible in traces.

### SECTION 11: Toxicological information

#### . 11.1 Information on toxicological effects

**. Acute toxicity** Based on available data, the classification criteria are not met.

##### . LD/LC50 values relevant for classification:

##### 108-95-2 phenol

Oral LD50 317 mg/kg (rat)

##### 64-17-5 ethanol

Oral LD50 >2000 mg/kg (rat)

##### . Primary irritant effect:

**. Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**. Serious eye damage/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.

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- . **Additional toxicological information:**
- . **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- . **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.

### SECTION 12: Ecological information

- . **12.1 Toxicity**
- . **Aquatic toxicity:** No further relevant information available.
- . **12.2 Persistence and degradability** No further relevant information available.
- . **12.3 Bioaccumulative potential** No further relevant information available.
- . **12.4 Mobility in soil** No further relevant information available.
- . **Additional ecological information:**
- . **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- . **12.5 Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- . **13.1 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 07 photographic film and paper containing silver or silver compounds
- . **Uncleaned packaging:**
- . **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>. <b>14.1 UN-Number</b></li> <li>. <b>ADR, IMDG, IATA</b></li> </ul>   | UN1759  |
| <ul style="list-style-type: none"> <li>. <b>14.2 UN proper shipping name</b></li> <li>. <b>ADR</b></li> <li>. <b>IMDG</b></li> <li>. <b>IATA</b></li> </ul> | 1759 CORROSIVE SOLID, N.O.S. (silver chloride, silver bromide), ENVIRONMENTALLY HAZARDOUS CORROSIVE SOLID, N.O.S. (silver chloride, silver bromide), MARINE POLLUTANT CORROSIVE SOLID, N.O.S. (silver chloride, silver bromide) |
| <ul style="list-style-type: none"> <li>. <b>14.3 Transport hazard class(es)</b></li> <li>. <b>ADR</b></li> <li>. <b>Class</b></li> </ul>                    | 8 (C10) Corrosive substances.   |

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. Label	8
. IMDG, IATA	
. Class	8 Corrosive substances.
. Label	8
. 14.4 Packing group	
. ADR, IMDG, IATA	III
. 14.5 Environmental hazards:	Product contains environmentally hazardous substances: silver bromide, silver chloride
. Marine pollutant:	ja Symbol (fish and tree)
. Special marking (ADR):	Symbol (fish and tree)
. 14.6 Special precautions for user	Warning: Corrosive substances.
. EMS Number:	F-A,S-B
. Stowage Category	A
. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
. Transport/Additional information:	
. ADR	
. Limited quantities (LQ)	5 kg
. Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
. Transport category	3
. Tunnel restriction code	E
. IMDG	
. Limited quantities (LQ)	5L
. Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
. UN "Model Regulation":	UN 1759 CORROSIVE SOLID, N.O.S. (SILVER CHLORIDE, SILVER BROMIDE), 8, III, ENVIRONMENTALLY HAZARDOUS

. 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

. Directive 2012/18/EU

. Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t

. Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

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

### SECTION 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**

H225 Highly flammable liquid and vapour.

H290 May be corrosive to metals.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

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H331 Toxic if inhaled.  
 H341 Suspected of causing genetic defects.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H411 Toxic to aquatic life with long lasting effects.

Contact: E: sida@tetenal.com

**Abbreviations and acronyms:**

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

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

ICAO: International Civil Aviation Organisation

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 3: Acute toxicity - oral – Category 3

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Muta. 2: Germ cell mutagenicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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

Dangerous good (see point 14)