

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

1.1 Product identifier

Trade name: **E-6 REV Reversal and Replenisher**

Article number: 105481

Index number:

None of the ingredients is listed.

UFI: VRV1-C0X4-G00G-92Q4

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

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

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

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful 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



GHS07

Signal word Warning

Hazard-determining components of labelling:

tin dichloride

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2021

version no: 6

Revision: 08.09.2021

Trade name: E-6 REV Reversal and Replenisher

(Contd. of page 1)

- P302+P352 IF ON SKIN: Wash with plenty of water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 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: 111-46-6	diethylene glycol	5-10%
EINECS: 203-872-2	⚠ Acute Tox. 4, H302	
Index number: 603-140-00-6		
CAS: 79-09-4	Propionic acid	1-5%
EINECS: 201-176-3	⚠ Flam. Liq. 3, H226; ⚠ Met. Corr.1, H290; Skin Corr. 1B, H314	
Index number: 607-089-00-0		
Reg.nr.: 01-2119486971-24		
CAS: 7772-99-8	tin dichloride	1-5%
EINECS: 231-868-0	⚠ STOT RE 2, H373; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317	
CAS: 90-43-7	biphenyl-2-ol	<1%
EINECS: 201-993-5	⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; ⚠ Skin Irrit. 2,	
Index number: 604-020-00-6	H315; STOT SE 3, H335	

- . **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:**

Rinse out mouth and then drink plenty of water.
 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:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2021

version no: 6

Revision: 08.09.2021

Trade name: E-6 REV Reversal and Replenisher

(Contd. of page 2)

. 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:

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

. 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Pick up mechanically.

Ensure adequate ventilation.

. 6.4 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.

SECTION 7: Handling and storage

. 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

. Information about fire - and explosion protection: No special measures required.

. 7.2 Conditions for safe storage, including any incompatibilities

. Storage:

. Requirements to be met by storerooms and receptacles: Store only in the original receptacle.

. Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with oxidising and acidic materials as well as heavy-metal compounds.

. Further information about storage conditions:

Protect from heat and direct sunlight.

Store under lock and key and out of the reach of children.

Recommended storage temperature: 5-30°C

. 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:

111-46-6 diethylene glycol (5-10%)

WEL (Great Britain) Long-term value: 101 mg/m³, 23 ppm

WEEL (USA) Long-term value: 10 mg/m³

79-09-4 Propionic acid (1-5%)

WEL (Great Britain) Short-term value: 46 mg/m³, 15 ppm

Long-term value: 31 mg/m³, 10 ppm

IOELV (EU) Short-term value: 62 mg/m³, 20 ppm

Long-term value: 31 mg/m³, 10 ppm

REL (USA) Short-term value: 45 mg/m³, 15 ppm

Long-term value: 30 mg/m³, 10 ppm

TLV (USA) Long-term value: 10 ppm

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2021

version no: 6

Revision: 08.09.2021

Trade name: E-6 REV Reversal and Replenisher

(Contd. of page 3)

7772-99-8 tin dichloride (1-5%)

WEL (Great Britain) Short-term value: 4 mg/m³
 Long-term value: 2 mg/m³
 as Sn

IOELV (EU) Long-term value: 2 mg/m³
 as Sn

PEL (USA) Long-term value: 2 mg/m³
 as Sn

REL (USA) Long-term value: 2 mg/m³
 as Sn

TLV (USA) Long-term value: 2* mg/m³
 *inhalable fraction, as Sn

. **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.

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

Impervious gloves

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

Glove material	breakthrough-time	layer thickness
Butyl rubber:	≥480 min	≥0,4mm
Nitrile rubber:	≥480 min	≥0,38mm
Neoprene:	≥240 min	≥0,65mm

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

. **Body protection:** Protective work clothing

EN

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2021

version no: 6

Revision: 08.09.2021

Trade name: E-6 REV Reversal and Replenisher

(Contd. of page 4)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	Clear
Odour:	Recognisable

pH-value at 20 °C: 6.2

Change in condition

Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: >100 °C

Flash point: Not applicable.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Vapour pressure at 20 °C: 23 hPa

Density at 20 °C: 1.23 g/cm³

Solubility in / Miscibility with water:

Fully miscible.

Solvent content:

Organic solvents: 5.7 %
Water: 50-90 %

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: Irritant gases/vapours

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:

7772-99-8 tin dichloride

Oral LD50 <2,000 mg/kg (rat)

Primary irritant effect:

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Additional toxicological information:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2021

version no: 6

Revision: 08.09.2021

Trade name: E-6 REV Reversal and Replenisher

(Contd. of page 5)

- . **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:**
- 7772-99-8 tin dichloride**
- EC50 48-88 mg/l (daphnia magna (Water flea))
- . **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 product to reach ground water, water course or sewage system.
- Harmful to aquatic organisms
- Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
- Danger to drinking water if even small quantities leak into the ground.
- . **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 00 00 WASTES FROM THE PHOTOGRAPHIC INDUSTRY
- 09 01 00 wastes from the photographic industry
- 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.

SECTION 14: Transport information

- | | |
|--|------|
| . 14.1 UN-Number | Void |
| . ADR, ADN, IMDG, IATA | Void |
| . 14.2 UN proper shipping name | Void |
| . ADR, ADN, IMDG, IATA | Void |
| . 14.3 Transport hazard class(es) | Void |
| . ADR, ADN, IMDG, IATA | Void |
| . Class | Void |
| . 14.4 Packing group | Void |
| . ADR, IMDG, IATA | Void |

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2021

version no: 6

Revision: 08.09.2021

Trade name: E-6 REV Reversal and Replenisher

(Contd. of page 6)

. 14.5 Environmental hazards:
. Marine pollutant: No

. 14.6 Special precautions for user Not applicable.

. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

. UN "Model Regulation": Void

. 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 No further relevant information available.

. Directive 2012/18/EU
. REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

. National regulations:
. Regulation (EC) No 648/2004 on detergents / Labelling for contents

phosphonates

≥5 - <15%

. 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

H226 Flammable liquid and vapour.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

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.

. 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)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

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

Acute Tox. 4: Acute toxicity – Category 4

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

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

(Contd. on page 8)

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

Printing date 08.09.2021

version no: 6

Revision: 08.09.2021

Trade name: E-6 REV Reversal and Replenisher

(Contd. of page 7)

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 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

EN