

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

TETENAL

Printing date 15.07.2021

version no: 14

Revision: 15.07.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**. Trade name: **RA-4 BX-R Type 48 Part A Bleach Fix Replenisher**

. Article number: 102614

. Index number:

None of the ingredients is listed.

. UFI: J032-A0A3-U00M-K07U

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 Bleachfix preparation for photographic use

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 Dam. 1 H318 Causes serious eye damage.

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

. Signal word Danger

Hazard-determining components of labelling:

succinic acid

nitric acid

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

Precautionary statements

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

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.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2021

version no: 14

Revision: 15.07.2021

Trade name: RA-4 BX-R Type 48 Part A Bleach Fix Replenisher

(Contd. of page 1)

- P310 Immediately call a POISON CENTER/doctor.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.

. 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: 110-15-6	succinic acid	1-5%
EINECS: 203-740-4	☠ Eye Dam. 1, H318	
Reg.nr.: 01-2119896114-34		
CAS: 6484-52-2	ammonium nitrate	1-5%
EINECS: 229-347-8	☠ Ox. Sol. 1, H271	
CAS: 7697-37-2	nitric acid	1-5%
EINECS: 231-714-2	☠ Acute Tox. 3, H331; ☠ Skin Corr. 1A, H314	
Index number: 007-004-00-1		
Reg.nr.: 01-2119487297-23		

. **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:** 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:** Do not induce vomiting; call for medical help immediately.
 . **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:** Use fire extinguishing methods suitable to surrounding conditions.

. 5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

Sulphur dioxide (SO₂)

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

. 5.3 Advice for firefighters

. **Protective equipment:** Do not inhale explosion gases or combustion gases.

EN

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2021

version no: 14

Revision: 15.07.2021

Trade name: RA-4 BX-R Type 48 Part A Bleach Fix Replenisher

(Contd. of page 2)

SECTION 6: Accidental release measures

. 6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective clothing.
- Wear protective equipment. Keep unprotected persons away.
- Ensure adequate ventilation

. 6.2 Environmental precautions:

- 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).
- 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.

. Information about fire - and explosion protection: The product is not flammable.

. 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.
- Store away from oxidising agents.

. Further information about storage conditions:

- Keep container tightly sealed.
- Store in cool, dry conditions in well sealed receptacles.
- 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:

7697-37-2 nitric acid (1-5%)

WEL (Great Britain) Short-term value: 2.6 mg/m³, 1 ppm

IOELV (EU) Short-term value: 2.6 mg/m³, 1 ppm

PEL (USA) Long-term value: 5 mg/m³, 2 ppm

REL (USA) Short-term value: 10 mg/m³, 4 ppm

Long-term value: 5 mg/m³, 2 ppm

TLV (USA) Short-term value: 10 mg/m³, 4 ppm

Long-term value: 5.2 mg/m³, 2 ppm

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

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2021

version no: 14

Revision: 15.07.2021

Trade name: RA-4 BX-R Type 48 Part A Bleach Fix Replenisher

(Contd. of page 3)

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

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: 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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Fluid

Colour: red brown

Odour: Odourless

Odour threshold: Not determined.

pH-value at 20 °C: ~4

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2021

version no: 14

Revision: 15.07.2021

Trade name: RA-4 BX-R Type 48 Part A Bleach Fix Replenisher

(Contd. of page 4)

. Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	>100 °C
. Flash point:	Not applicable.
. Flammability (solid, gas):	Not applicable.
. Decomposition temperature:	Not determined.
. Auto-ignition temperature:	Product is not selfigniting.
. Explosive properties:	Product does not present an explosion hazard.
. Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
. Vapour pressure:	Not determined.
. Density at 20 °C:	~1.1 g/cm ³
. Relative density	Not determined.
. Vapour density	Not determined.
. Evaporation rate	Not determined.
. Solubility in / Miscibility with water:	Fully miscible.
. Partition coefficient: n-octanol/water:	Not determined.
. Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
. Solvent content:	
Water:	50-90 %
VOC (EC)	0.00 %
 Solids content:	0.0 %
. 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:** Stable at environment temperature.
- . **10.3 Possibility of hazardous reactions** Reacts with acids, alkalis and oxidising agents.
- . **10.4 Conditions to avoid** No further relevant information available.
- . **10.5 Incompatible materials:** Under certain fire conditions, traces of other toxic gases cannot be excluded.
- . **10.6 Hazardous decomposition products:**
 - Irritant gases/vapours
 - Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- . **11.1 Information on toxicological effects**
- . **Acute toxicity** Based on available data, the classification criteria are not met.

(Contd. on page 6)

EN

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2021

version no: 14

Revision: 15.07.2021

Trade name: RA-4 BX-R Type 48 Part A Bleach Fix Replenisher

(Contd. of page 5)

. LD/LC50 values relevant for classification:

7697-37-2 nitric acid

Inhalative LC50 2.65 mg/l (rat)

. Primary irritant effect:

. Skin corrosion/irritation

Causes skin irritation.

. Serious eye damage/irritation

Causes serious eye damage.

. Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

. Additional toxicological information:

. Acute effects (acute toxicity, irritation and corrosivity)

Irritant

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:

. 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:

7697-37-2 nitric acid

LC50 96 mg/l (fish: *Gambusia affinis*)

96 mg/l (fish: *Oncorhynchus mykiss*)

. 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.

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 00 00 WASTES FROM THE PHOTOGRAPHIC INDUSTRY

09 01 00 wastes from the photographic industry

09 01 05* bleach solutions and bleach fixer solutions

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

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Revision: 15.07.2021

Trade name: RA-4 BX-R Type 48 Part A Bleach Fix Replenisher

(Contd. of page 6)

- . **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 |
| . 14.5 Environmental hazards: | No |
| . 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**
- . **Labelling according to Regulation (EC) No 1272/2008 GHS label elements**
- . **Directive 2012/18/EU**
- . **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 65
- . **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**
- H271 May cause fire or explosion; strong oxidiser.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H331 Toxic if inhaled.
- . **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 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

(Contd. on page 8)

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Trade name: RA-4 BX-R Type 48 Part A Bleach Fix Replenisher

(Contd. of page 7)

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
Ox. Sol. 1: Oxidizing solids – Category 1
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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

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