

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

TETENAL

Printing date 09.02.2021

version no: 8

Revision: 09.02.2021

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

1.1 Product identifier

Trade name: **RA-4 STAB - WL**
Super Stabilizer and Replenisher

Article number: 104632, 104200, 102813, 104639

Index number:

None of the ingredients is listed.

UFI: 5XH0-V0ST-A00F-4TWQ

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 Stabilizer bath 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 Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
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



GHS07 GHS09

Signal word Warning

Hazard-determining components of labelling:

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
2-octyl-2H-isothiazol-3-one

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

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

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- 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.
 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.
 P391 Collect spillage.
 P501 Dispose of contents/container in accordance with local regulations.

Additional information:

Contains biocidal products: reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

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 | 1-5% |
| EINECS: 203-872-2 | ⚠ Acute Tox. 4, H302 | |
| Index number: 603-140-00-6 | | |
| CAS: 55965-84-9 | reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) | <1% |
| EC number: 611-341-5 | | |
| Index number: 613-167-00-5 | ⚠ Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330;
⚠ Skin Corr. 1C, H314; Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); ⚠ Skin Sens. 1A, H317 | |
| CAS: 26530-20-1 | 2-octyl-2H-isothiazol-3-one | <1% |
| EINECS: 247-761-7 | ⚠ Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ Skin Corr. 1B, H314; | |
| Index number: 613-112-00-5 | ⚠ Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1);
⚠ Acute Tox. 4, H302; Skin Sens. 1, H317 | |

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 and to be sure call for a doctor.

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.

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- . 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.

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:**
 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).
 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:** 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.
 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.

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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 (1-5%)

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

WEEL (USA) Long-term value: 10 mg/m³

DNELs

111-46-6 diethylene glycol

Dermal	Long-term - systemic - effects	43 mg/kg bw/day (Worker (Arbeiter))
	Long-term - systemic effects (dynamic)	21 mg/kg bw/day (general population- Verbraucher)
Inhalative	Long-term - local - effects	60 mg/m ³ (Worker (Arbeiter))
	Long-term - systemic effects	12 mg/m ³ (Consumer (Verbraucher))
	Long-term- systemics effects	44 mg/m ³ (Worker (Arbeiter))

PNECs

111-46-6 diethylene glycol

Aquatic compartment - freshwater	10 mg/l (-)
Aquatic compartment - marine water	1 mg/l (-)
Aquatic compartment -water,intermittent releases	10 mg/l (-)
Aquatic compartment -sediment in freshwater	20.9 mg/kg sed dw (-)
Terrestrial compartment -soil	1.53 mg/kg dw (-)
Sewage treatment plant (Abwasserreinigungsanlagen)	199.5 mg/l (-)

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.

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	breakthroug-time	layer thickness
Butyl rubber:	≥480 min	≥0,4mm

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Nitrile rubber: ≥ 480 min $\geq 0,38$ mmNeoprene: ≥ 240 min $\geq 0,65$ mm

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: Light blue

. Odour: Recognisable

. Odour threshold: Not determined.

. pH-value at 20 °C: ~4

. Change in condition

Melting point/freezing point: 0 °C

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 g/cm³

. 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:

Organic solvents: 0.0 %

Water: 50-90 %

VOC (EC) 3.95 %

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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 releasing sulphur dioxide.
 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.
- . **LD/LC50 values relevant for classification:**
- 111-46-6 diethylene glycol**
- Oral LD50 12,565 mg/kg (rat)
- 55965-84-9 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)**
- Oral LD50 472 mg/kg (rat)
- Dermal LD50 >1,000 mg/kg (rat)
- Inhalative LC50 4 mg/l (rat)
- 26530-20-1 2-octyl-2H-isothiazol-3-one**
- Oral LD50 356 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:**
- . **Acute effects (acute toxicity, irritation and corrosivity)**
 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
- . **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.

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SECTION 12: Ecological information

. 12.1 Toxicity

. Aquatic toxicity:

111-46-6 diethylene glycol

EC50 24 mg/l (daphnia magna (Water flea))

LC50 96 mg/l (Invertebrates)

55965-84-9 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

EC50 48 mg/l (daphnia magna (Water flea))

96 mg/l (rbf)

26530-20-1 2-octyl-2H-isothiazol-3-one

EC50 48 mg/l (daphnia magna (Water flea))

LC50 96 mg/l (Lepomis macrochirus (Sonnenbarsch))

96 mg/l (rbf)

. 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.

. Ecotoxicological effects:

. Remark: Harmful to fish

. Additional ecological information:

. General notes:

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even extremely small quantities leak into the ground.

Harmful to aquatic organisms

Water hazard class 3 (German Regulation) (Self-assessment): extremely 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 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

. ADR, IMDG, IATA

UN3082

. 14.2 UN proper shipping name

. ADR

Void

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. IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isothiazolone, 2-octyl-2H-isothiazol-3-one), MARINE POLLUTANT
. IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isothiazolone)
. 14.3 Transport hazard class(es)	
. ADR	
. Class	9 (M6) Miscellaneous dangerous substances and articles.
. Label	9

. IMDG, IATA	
. Class	9 Miscellaneous dangerous substances and articles.
. Label	9
. 14.4 Packing group	
. ADR, IMDG, IATA	III
. 14.5 Environmental hazards:	
	Product contains environmentally hazardous substances: Isothiazolone
. Marine pollutant:	No
	Symbol (fish and tree)
. Special marking (ADR):	Symbol (fish and tree)
. Special marking (IATA):	Symbol (fish and tree)
. 14.6 Special precautions for user	
	Warning: Miscellaneous dangerous substances and articles.
. Hazard identification number (Kemler code):	90
. EMS Number:	F-A,S-F
. Stowage Category	A
. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	
	Not applicable.
. Transport/Additional information:	
	Due to special provision 375 ADR and chapter 2.10.2. IMDG this item does not need to be labeled as dangerous goods.

. ADR	
. Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
. Transport category	3

. IMDG	
. Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
. 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

. Named dangerous substances - ANNEX I None of the ingredients is listed.

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

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

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

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

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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

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H310 Fatal in contact with skin.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H330 Fatal if inhaled.
- H331 Toxic if inhaled.
- 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 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)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 3: Acute toxicity - oral – Category 3
- Acute Tox. 4: Acute toxicity - oral – Category 4
- Acute Tox. 2: Acute toxicity - dermal – Category 2
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- Skin Corr. 1C: Skin corrosion/irritation – Category 1C
- 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
- Skin Sens. 1A: Skin sensitisation – Category 1A
- 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

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