

16.11.2021

### Kit Components

Product code	Description
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<b>102021 Kit</b>	<b>professionalline RA-4 CD-RT</b>
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Components:

102021	RA-4 CD-R RT Colour Developer Replenisher
102021 Part 2	RA-4 CD-R RT Part 2 Colour Developer Replenisher
102021 Part 3	RA-4 CD-R RT Part 3 Colour Developer-Replenisher

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

### 1.1 Product identifier

Trade name: **RA-4 CD-R RT Colour Developer Replenisher**

Article number: 102021

Index number:

None of the ingredients is listed.

UFI: SDQ3-E0G4-N003-VD9Q

### 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 Developer 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

STOT RE 2      H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

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



GHS08

Signal word Warning

#### Hazard-determining components of labelling:

ethylene glycol

#### Hazard statements

H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container in accordance with local regulations.

### 2.3 Other hazards

#### Results of PBT and vPvB assessment

PBT: Not applicable.

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# Safety data sheet

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

Printing date 16.11.2021

version no: 4

Revision: 28.10.2021

**Trade name: RA-4 CD-R RT Colour Developer Replenisher**

. vPvB: Not applicable.

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### SECTION 3: Composition/information on ingredients

#### . 3.2 Chemical characterisation: Mixtures

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

#### . **Dangerous components:**

CAS: 107-21-1	ethylene glycol	10-<25%
EINECS: 203-473-3	⚠ STOT RE 2, H373; ⚠ Acute Tox. 4, H302	
Index number: 603-027-00-1		
Reg.nr.: 01-2119456816-28		
CAS: 3710-84-7	N,N-diethylhydroxylamine (DEHA)	10-<25%
EINECS: 223-055-4	⚠ Flam. Liq. 3, H226; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; STOT SE 3, H335	
Reg.nr.: 01-2119962470-39		

. **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:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

##### . **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

##### . **After skin contact:** Immediately rinse with water.

##### . **After eye contact:** Rinse opened eye for several (15 min) under running water.

##### . **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor 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 (NOx)

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:**

Mouth respiratory protective device.

Do not inhale explosion gases or combustion gases.

### SECTION 6: Accidental release measures

#### . 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

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# Safety data sheet

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

Printing date 16.11.2021

version no: 4

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**Trade name: RA-4 CD-R RT Colour Developer Replenisher**

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### 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).

Dispose contaminated material as waste according to item 13.

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:** Keep ignition sources away - Do not smoke.

### 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.

#### 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

Protect from exposure to the light.

**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:**

#### 25322-68-3 Polyethylene glycol (25-50%)

WEEL (USA) Long-term value: 10 mg/m<sup>3</sup>  
(H); MW>200

#### 107-21-1 ethylene glycol (10-<25%)

WEL (Great Britain) Short-term value: 104\*\* mg/m<sup>3</sup>, 40\*\* ppm  
Long-term value: 10\* 52\*\* mg/m<sup>3</sup>, 20\*\* ppm  
Sk \*particulate \*\*vapour

IOELV (EU) Short-term value: 104 mg/m<sup>3</sup>, 40 ppm  
Long-term value: 52 mg/m<sup>3</sup>, 20 ppm  
Skin

TLV (USA) Short-term value: 10\*\* mg/m<sup>3</sup>, 50\* ppm  
Long-term value: 25\* ppm  
\*vapor fraction:\*\*inh. fraction, aerosol only, A4

WEEL (USA) I (2)

#### 3710-84-7 N,N-diethylhydroxylamine (DEHA) (10-<25%)

TLV (USA) Long-term value: 2 ppm

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#### DNELs

##### 3710-84-7 N,N-diethylhydroxylamine (DEHA)

Oral	Long-term - systemic effects	0.13 mg/kg bw/day (Consumer (Verbraucher))
Dermal	Long-term - systemic - effects	0.26 mg/kg bw/day (Worker (Arbeiter))
	Akute- systemic - effects	4.7 mg/kg bw/day (Worker (Arbeiter))
Inhalative	Akute /short-term exposure - local effects	45.6 mg/m <sup>3</sup> (Worker (Arbeiter))
	Long-term exposure-local effects	3.65 mg/m <sup>3</sup> (Worker (Arbeiter))
	Long-term - local effects	0.65 mg/m <sup>3</sup> (general population- Verbraucher)
	Akute - local systemic	2.92 mg/m <sup>3</sup> (Worker (Arbeiter))
	Long-term - systemic-effects	3.65 mg/m <sup>3</sup> (Worker (Arbeiter))

#### PNECs

##### 3710-84-7 N,N-diethylhydroxylamine (DEHA)

Aquatic compartment - freshwater	0.0082 mg/l (-)
Aquatic compartment - marine water	0.00082 mg/l (-)
Aquatic compartment -water,intermittent releases	0.082 mg/l (-)
Aquatic compartment -sediment in freshwater	0.0652 mg/kg sed dw (-)
Aquatic compartment -sediment in marine water	0.00652 mg/kg sed dw (-)
Terrestrial compartment -soil	0.0082 mg/kg dw (-)
Sewage treatment plant (Abwasserreinigungsanlagen)	10 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.

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:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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
Nitrile rubber:	≥480 min	≥0,38mm
Neoprene:	≥240 min	≥0,65mm

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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:**

<b>Form:</b>	Fluid
<b>Colour:</b>	Light yellow
<b>. Odour:</b>	Amine-like
<b>. Odour threshold:</b>	Not determined.

**. pH-value at 20 °C:** 10.5

**. Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	Undetermined.

**. 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:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

**. Vapour pressure:** Not determined.

<b>. Density at 20 °C:</b>	1.09 g/cm <sup>3</sup>
<b>. Relative density</b>	Not determined.
<b>. Vapour density</b>	Not determined.
<b>. Evaporation rate</b>	Not determined.

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

**. Partition coefficient: n-octanol/water:** Not determined.

**. Viscosity:**

<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.

**. Solvent content:**

<b>Organic solvents:</b>	10.5 %
<b>Water:</b>	10-25 %
<b>VOC (EC)</b>	10.52 %

**Solids content:** 0.0 %

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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:**
- 
- 3710-84-7 N,N-diethylhydroxylamine (DEHA)**
- Oral LD50 2,190 mg/kg (rat)
  - Dermal LD50 1,300 mg/kg (rabbit)
  - Inhalative LC50 4 mg/l (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.
  - . **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:  
 Harmful
  - . **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**  
 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
  - . **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- . **12.1 Toxicity**
  - . **Aquatic toxicity:**
- 
- 3710-84-7 N,N-diethylhydroxylamine (DEHA)**
- EC50 48 mg/l (daphnia magna (Water flea))  
     96 mg/l (fish: Pimephales promelas) (OECD 203)
  - LC50 96 mg/l (fish: Pimephales promelas)
  - . **12.2 Persistence and degradability** No further relevant information available.

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- . **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:**  
 Harmful to aquatic organisms  
 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**  


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 09 00 00 WASTES FROM THE PHOTOGRAPHIC INDUSTRY  
 09 01 00 wastes from the photographic industry  
 09 01 01\* water-based developer and activator solutions
- . **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

- |  |                 |
|--|-----------------|
| . <b>14.1 UN-Number</b>  | Void            |
| . <b>ADR, ADN, IMDG, IATA</b>  | Void            |
| . <b>14.2 UN proper shipping name</b>  | Void            |
| . <b>ADR, ADN, IMDG, IATA</b>  | Void            |
| . <b>14.3 Transport hazard class(es)</b>   | Void            |
| . <b>ADR, ADN, IMDG, IATA</b>  | Void            |
| . <b>Class</b>   | Void            |
| . <b>14.4 Packing group</b>  | Void            |
| . <b>ADR, IMDG, IATA</b>   | Void            |
| . <b>14.5 Environmental hazards:</b>   | No              |
| . <b>Marine pollutant:</b>   | No              |
| . <b>14.6 Special precautions for user</b>                                       | Not applicable. |
| . <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable. |
| . <b>UN "Model Regulation":</b>  | 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

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**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.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.

**Contact:** E: sida@tetenal.com

#### Abbreviations and acronyms:

- 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)
- 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
- Flam. Liq. 3: Flammable liquids – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

EN

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

**TETENAL**

Printing date 16.11.2021

version no: 6

Revision: 16.11.2021

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

**Trade name:** **RA-4 CD-R RT Part 2**  
**Colour Developer Replenisher**

**Article number:** 102021 Part 2

**Index number:**

None of the ingredients is listed.

**UFI:** 3GQ3-X05H-X00K-HQVS

**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** Developer 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**

Acute Tox. 4      H302 Harmful if swallowed.  
Eye Dam. 1      H318 Causes serious eye damage.  
Skin Sens. 1      H317 May cause an allergic skin reaction.  
Aquatic Chronic 2 H411 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    GHS07    GHS09

**Signal word** Danger

**Hazard-determining components of labelling:**

N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3)

**Hazard statements**

H302 Harmful if swallowed.  
H318 Causes serious eye damage.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P261      Avoid breathing dust/fume/gas/mist/vapours/spray.  
P273      Avoid release to the environment.  
P280      Wear protective gloves / eye protection.

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# Safety data sheet

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

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### Trade name: RA-4 CD-R RT Part 2 Colour Developer Replenisher

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- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: 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: 25646-71-3                | N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide 10-<25% |
| EINECS: 247-161-5              | sesquisulphate (CD-3)   |
| Index number: 612-134-00-2     | ⚠ Acute Tox. 3, H301; ⚠ Eye Dam. 1, H318; ⚠ Aquatic                 |
| Reg.nr.: 01-2120794432-50-0001 | Chronic 1, H410; ⚠ 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. Then consult a doctor.
- . **After swallowing:** Rinse mouth.
- . **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<sub>x</sub>)  
Carbon monoxide (CO)  
Sulphur dioxide (SO<sub>2</sub>)  
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 equipment. Keep unprotected persons away.  
Ensure adequate ventilation

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### Trade name: RA-4 CD-R RT Part 2 Colour Developer Replenisher

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**. 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.
- 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.
- Store away from oxidising agents.

**. 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
- Protect from exposure to the light.

**. 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:**

**7757-82-6 sodium sulfate (1-5%)**

TLV (USA) Short-term value: NIC-0.2 mg/m<sup>3</sup>  
thoracic fraction of aerosol

**. 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.
- 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:**

- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- Ensure adequate ventilation

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# Safety data sheet

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

Printing date 16.11.2021

version no: 6

Revision: 16.11.2021

### Trade name: RA-4 CD-R RT Part 2 Colour Developer Replenisher

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#### 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
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:

<b>Form:</b>	Fluid
<b>Colour:</b>	red brown
<b>Odour:</b>	to sulfur dioxide
<b>Odour threshold:</b>	Not determined.

**pH-value at 20 °C:** 2.4

##### Change in condition

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	>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.

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

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**Colour Developer Replenisher**

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<b>Upper:</b>	Not determined.
<b>Vapour pressure:</b>	Not determined.
<b>Density at 20 °C:</b>	0.96 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with water:</b>	Fully miscible.
<b>Partition coefficient: n-octanol/water:</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>Solvent content:</b>	
<b>Water:</b>	50-90 %
<b>Solids content:</b>	0.0 %
<b>9.2 Other information</b>	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**  
Harmful if swallowed.
- . **LD/LC50 values relevant for classification:**  

---

**25646-71-3 N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3)**  
Oral LD50 >75 mg/kg (rat)  
Dermal LD50 >2,000 mg/kg (rat)
- . **Primary irritant effect:**
- . **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- . **Serious eye damage/irritation**  
Causes serious eye damage.
- . **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

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**Colour Developer Replenisher**

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- . **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:**  


---

**25646-71-3 N-(2-(4-amino-N-ethyl-m-toluidino)ethyl)methanesulphonamide sesquisulphate (CD-3)**  
 LC50 96 mg/l (fish: Pimephales promelas)
- . **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:** Toxic for fish
- . **Additional ecological information:**
- . **General notes:**  
 Do not allow product to reach ground water, water course or sewage system.  
 Also poisonous for fish and plankton in water bodies.  
 Toxic for aquatic organisms  
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
 Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water  
 Danger to drinking water if even extremely 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 01\* water-based developer and activator solutions
- . **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

- |                                       |      |
|---------------------------------------|------|
| . <b>14.1 UN-Number</b>               |      |
| . <b>ADR, IMDG, IATA</b>              | Void |
| . <b>14.2 UN proper shipping name</b> |      |
| . <b>ADR, IMDG, IATA</b>              | Void |

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<b>. 14.3 Transport hazard class(es)</b>	
<b>. ADR, ADN, IMDG, IATA</b>	
<b>. Class</b>	Void
<b>. 14.4 Packing group</b>	
<b>. ADR, IMDG, IATA</b>	Void
<b>. 14.5 Environmental hazards:</b>	
<b>. Marine pollutant:</b>	Yes
<b>. 14.6 Special precautions for user</b>	
	Not applicable.
<b>. 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	
	Not applicable.
<b>. Transport/Additional information:</b>	Due to special provision 375 ADR and chapter 2.10.2. IMDG this item does not need to be labeled as dangerous goods.
<b>. UN "Model Regulation":</b>	Void
<b>. 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
<b>. Labelling according to Regulation (EC) No 1272/2008 GHS label elements</b>	
<b>. Directive 2012/18/EU</b>	
<b>. Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t</b>	
<b>. Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t</b>	
<b>. REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3</b>	
<b>. 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.</b>	

### 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.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- 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
- Acute Tox. 3: Acute toxicity – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Skin Sens. 1: Skin sensitisation – 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.**



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

### 1.1 Product identifier

Trade name: **RA-4 CD-R RT Part 3**  
**Colour Developer-Replenisher**

Article number: 102021 Part 3

#### Index number:

None of the ingredients is listed.

UFI: KKW3-V05Q-P00Q-GY8C

### 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 Developer 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  
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.

Repr. 2 H361 Suspected of damaging fertility or the unborn child. Route of exposure: Oral.

### 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

GHS08

Signal word Danger

#### Hazard-determining components of labelling:

Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)

#### Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H361 Suspected of damaging fertility or the unborn child. Route of exposure: Oral.

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**Colour Developer-Replenisher**

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#### Precautionary statements

- P280 Wear protective gloves / eye 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.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P405 Store locked up.  
 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: 584-08-7	potassium carbonate	25-50%
EINECS: 209-529-3	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
Reg.nr.: 01-2119532646-36		
CAS: 140-01-2	Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)	1-5%
EINECS: 205-391-3	⚠ STOT RE 2, H373; ⚠ Acute Tox. 4, H332	
Index number: 607-736-00-7		
Reg.nr.: 01-2119474445-33		

- . **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 (NOx)

Carbon monoxide (CO)

Sulphur dioxide (SO<sub>2</sub>)

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

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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**  
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:** 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  
Protect from exposure to the light.
- . **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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- . **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.

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- 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:** Amber coloured

. **Odour:** Recognisable

. **Odour threshold:** Not determined.

. **pH-value at 20 °C:** >11

. **Change in condition**

**Melting point/freezing point:** Undetermined.

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

. **Flash point:** Not applicable.

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**Colour Developer-Replenisher**

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. <b>Flammability (solid, gas):</b>	Not applicable.
. <b>Decomposition temperature:</b>	Not determined.
. <b>Auto-ignition temperature:</b>	Product is not selfigniting.
. <b>Explosive properties:</b>	Product does not present an explosion hazard.
. <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
. <b>Vapour pressure:</b>	Not determined.
. <b>Density at 20 °C:</b>	1.38 g/cm <sup>3</sup>
. <b>Relative density</b>	Not determined.
. <b>Vapour density</b>	Not determined.
. <b>Evaporation rate</b>	Not determined.
. <b>Solubility in / Miscibility with water:</b>	Fully miscible.
. <b>Partition coefficient: n-octanol/water:</b>	Not determined.
. <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
. <b>Solvent content:</b>	
<b>Water:</b>	50-90 %
<b>Solids content:</b>	0.0 %
. <b>9.2 Other information</b>	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.
- . **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.

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**. Additional toxicological information:**

The preparation is "irritant". J.R. Young, M.J. How, A.P. Walker and W.M.H. Worth (1988): Classification as corrosive or irritant to skin of preparations containing acidic or alkaline substances, without testing on animals. Toxic. in Vitro, Bd.2, Nr.1, 1988, S.19-26].

**. 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**

Suspected of damaging fertility or the unborn child. Route of exposure: Oral.

**. 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 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 01\* water-based developer and activator solutions

**. Uncleaned packaging:**

**. Recommendation:** Disposal must be made according to official regulations.

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

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**Colour Developer-Replenisher**

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### 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:	
. 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	
. National regulations:	
. Information about limitation of use:	
Employment restrictions concerning pregnant and lactating women must be observed.	
. 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**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

. **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)

PBT: Persistent, Bioaccumulative and Toxic

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

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**Trade name: RA-4 CD-R RT Part 3**  
**Colour Developer-Replenisher**

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vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Acute toxicity – Category 4  
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  
Repr. 2: Reproductive toxicity – Category 2  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2  
**\* Data compared to the previous version altered.**

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