

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

1.1 Product identifier

Trade name: **Fixer Regenerator FX-RCY**
Fixer Regenerator

Article number: 102377

Index number:

None of the ingredients is listed.

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

Regenerator/ Refresher
Fixing 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

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



GHS07

Signal word Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash thoroughly after handling.

P280 Wear eye protection / face 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.

P337+P313 If eye irritation persists: Get medical advice/attention.

Additional information:

EUH031 Contact with acids liberates toxic gas.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

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. 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: 10192-30-0 | Ammonium hydrogensulphite (Ammonium bisulphite) | 10-<25% |
| EINECS: 233-469-7 | ⚠ Eye Irrit. 2, H319 | |
| Reg.nr.: 01-2119537321-49 | | |
| CAS: 64-02-8 | Tetrasodium ethylenediaminetetraacetate | 1-5% |
| EINECS: 200-573-9 | ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302 | |
| Index number: 607-428-00-2 | | |
| Reg.nr.: 01-2119486762-27-xxxx | | |

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

SECTION 4: First aid measures

. 4.1 Description of first aid measures

. **General information:** Immediately remove any clothing/shoes soiled by the product.. **After inhalation:** Supply fresh air; consult doctor in case of complaints.. **After skin contact:** Immediately rinse with water.. **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

. **After swallowing:**

Do not induce vomiting; call for medical help immediately.

Rinse out mouth and then drink plenty of water.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

. 5.1 Extinguishing media

. **Suitable extinguishing agents:**

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

. 5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

Sulphur dioxide (SO₂)

. 5.3 Advice for firefighters

. **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

. 6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Ensure adequate ventilation

Wear protective clothing.

. 6.2 Environmental precautions:

Dilute with plenty of water.

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

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. 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: Protect from heat.

. 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:

Do not store together with acids.
 Store away from foodstuffs.

. Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.
 Protect from heat and direct sunlight.
 Recommended storage temperature: 5-30°C

. 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

. Additional information about design of technical facilities: No further data; see item 7.

. 8.1 Control parameters

. 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.
 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

. 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.

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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: Goggles recommended during refilling

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 yellow |
| Odour: | Odourless |
| Odour threshold: | Not determined. |

pH-value at 20 °C: ~5.5

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 at 20 °C: 23 hPa

| | |
|--------------------------|------------------------|
| Density at 20 °C: | ~1.3 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:

| | |
|--------------------------|---------|
| Organic solvents: | 0.0 % |
| Water: | 25-50 % |

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| | |
|------------------------------|--|
| VOC (EC) | 0.00 % |
| 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- . **10.1 Reactivity** No further relevant information available.
- . **10.2 Chemical stability**
- . **Thermal decomposition / conditions to be avoided:** Stable at environment temperature.
- . **10.3 Possibility of hazardous reactions** Reacts with acids releasing sulphur dioxide.
- . **10.4 Conditions to avoid** No further relevant information available.
- . **10.5 Incompatible materials:** No further relevant information available.
- . **10.6 Hazardous decomposition products:**
 Irritant gases/vapours
 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** Based on available data, the classification criteria are not met.
- . **Serious eye damage/irritation**
 Causes serious eye irritation.
- . **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- . **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:**
- 64-02-8 Tetrasodium ethylenediaminetetraacetate**
- EC50 48h: >100 mg/l (Invertebrates)
- LC50 96h: >500 mg/l (Leuciscus leuciscus (Karpfenfisch))
- . **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 2 (German Regulation) (Self-assessment): hazardous for water
 Danger to drinking water if even small quantities leak into the ground.
- . **12.5 Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **12.6 Other adverse effects** No further relevant information available.

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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 04* fixer 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

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

SECTION 15: Regulatory information

- . **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**
- . **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**
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
- . **Contact:** E: sida@tetenal.com
- . **Abbreviations and acronyms:**
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

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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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity - oral – Category 4
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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

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