

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

Printing date 27.03.2018

Version 2

Revision: 27.03.2018

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

• **1.1 Product identifier**

• **Trade name: C-41 RA FX-R RTU**

• **Article number: 13353**

• **1.2 Relevant identified uses of the substance or mixture and uses advised against**

To this day we do not have any information about the identified use at the moment. These data are available we will add these to the safety data sheet.

• **Application of the substance / the mixture**

Photographic activities  
Photochemicals  
Photographic fixer  
Colour film photographic processing solution

• **1.3 Details of the supplier of the safety data sheet**

• **Manufacturer/Supplier:**

Calbe Chemie GmbH  
Stadtfeld 31  
D-39240 Calbe  
Tel.: +49 (0)39291 425-0  
Fax: +49 (0)39291 425-25  
e-mail: info@calbe-chemie.de  
www.calbe-chemie.de

• **Informing department:**

Tel.: +49 (0)39291 42515  
E-Mail: kr@calbe-chemie.de

• **1.4 Emergency telephone number:** Tel.: 0700-24112112 (CAL)

\* **SECTION 2: Hazards identification**

• **2.1 Classification of the substance or mixture**

• **Classification according to Regulation (EC) No 1272/2008**

The product is not classified, according to the CLP regulation.

• **2.2 Label elements**

• **Labelling according to Regulation (EC) No 1272/2008** Void

• **Hazard pictograms** Void

• **Signal word** Void

• **Hazard statements** Void

• **Additional information:**

EUH210 Safety data sheet available on request.

• **2.3 Other hazards**

• **Results of PBT and vPvB assessment**

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

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### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

• **Description:** Mixture of the substances listed below with harmless additions.

#### Dangerous components:

CAS: 1762-95-4 EINECS: 217-175-6 Index number: 615-004-00-3 Reg.nr.: 01-2119543696-28-xxxx	ammonium thiocyanate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332 Aquatic Chronic 3, H412	2.0-5.0%
CAS: 10192-30-0 EINECS: 233-469-7 Reg.nr.: 01-2119537321-49-xxxx	ammonium hydrogensulphite ⚠ Eye Irrit. 2, H319	2.0-5.0%
CAS: 1336-21-6 EINECS: 215-647-6 Index number: 007-001-01-2	ammonia solution 25 % ⚠ Skin Corr. 1B, H314 ⚠ Aquatic Acute 1, H400	0.5-2.0%

• **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** No special measures required.

• **After skin contact** The product is not skin irritating.

#### After eye contact

Rinse opened eye for several minutes under running water (> 15 min). Then consult doctor.

#### After swallowing

Rinse out mouth and then drink plenty of water.

In case of persistent symptoms consult doctor.

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

No further relevant information available.

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

No further relevant information available.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

#### Suitable extinguishing agents

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Use fire fighting measures that suit the environment.

• **For safety reasons unsuitable extinguishing agents** Water with a full water jet.

#### 5.2 Special hazards arising from the substance or mixture

Can be released in case of fire

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

Nitrogen oxides (NO<sub>x</sub>)

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- **5.3 Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
At formation of toxic gases:  
Put on breathing apparatus.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, 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 of contaminated material as waste according to item 13.  
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
- **6.4 Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** The product is not flammable
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:**  
Keep away from foodstuffs, beverages and food.
- **Further information about storage conditions:** Store in a cool place.
- **Recommended storage temperature:** 5-25°C
- **Storage class**  
LGK 12  
(German Technical Rule for Hazardous Substance – TRGS 510)
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **8.1 Control parameters**
- **Components 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 that were valid during the compilation were used as basis.

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- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures should be adhered to general rules for handling chemicals.  
Keep away from foodstuffs, beverages and food.  
Take off immediately all contaminated clothing.  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.  
Do not eat, drink or smoke while working.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:** Not required.
- **Eye protection:** Safety glasses recommended during refilling.
- **Body protection:** Light weight protective 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>	Colourless Clear

- **Odour:** Ammonia-like
- **Odour threshold:** Not determined.

- **pH-value at 20 °C:** 7.3

- **Change in condition**

<b>Melting point/freezing point:</b>	Not determined
<b>Initial boiling point and boiling range:</b>	> 100 °C

- **Flash point:** Not applicable
- **Inflammability (solid, gaseous)** Not applicable.
- **Decomposition temperature:** Not determined.
- **Self-inflammability:** Product is not selfigniting.
- **Explosive properties:** Product is not explosive.

- **Critical values for explosion:**

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

- **Oxidising properties** None

- **Vapour pressure at 20 °C:** 23 hPa

- **Density at 20 °C** 1.1 g/cm<sup>3</sup>
- **Relative density** Not determined.

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- |                    |                 |
|--------------------|-----------------|
| · Vapour density   | Not determined. |
| · Evaporation rate | Not determined. |

- |   |          |
|---|----------|
| · Solubility in / Miscibility with Water: | miscible |
|---|----------|

- |   |                 |
|---|-----------------|
| · Partition coefficient: n-octanol/water: | Not determined. |
|---|-----------------|

- |              |                |
|--------------|----------------|
| · Viscosity: |                |
| dynamic:     | Not determined |
| kinematic:   | Not determined |

- |                    |        |
|--------------------|--------|
| · Solvent content: |        |
| Organic solvents:  | 0.0 %  |
| Water:             | ~ 78 % |

- |                         |  |
|-------------------------|--|
| · 9.2 Other information | No further relevant information available. |
|-------------------------|--|

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with acids releasing sulphur dioxide  
Reacts with alkalis releasing ammonia
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

### 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 that are relevant for classification:**

#### 1762-95-4 ammonium thiocyanate

Oral	LD50	500 mg/kg (rat)
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#### 7783-18-8 ammonium thiosulphate

Oral	LD50	1098 mg/kg (gpg)
		2890 mg/kg (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.

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- **Additional toxicological information:**  
This statement was deduced from the properties of the single components.
- **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:**  
No further relevant information available.  
Not determined
- **12.2 Persistence and degradability** Not determined
- **12.3 Bioaccumulative potential** Not determined
- **Behaviour in environmental systems:** Not determined
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**  
No further relevant information available.  
Not determined
- **Behaviour in sewage processing plants:** Not determined
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): Weakly water-endangering.  
This statement was deduced from the properties of the single components.
- **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 of together with household garbage. Do not allow product to reach sewage system.  
Must be specially treated under adherence to official regulations.  
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

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· **European waste catalogue**

09 01 04*	fixer solutions
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· **Uncleaned packagings:**

· **Recommendation:**

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.  
 EAK-No. 15 01 10

Non contaminated packagings can be used for recycling.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

· **Recommended cleaning agent:** Water, if necessary with cleaning agent.

**SECTION 14: Transport information**

· **14.1 UN-Number**

· **ADR/RID, ADN, IMDG, IATA** Void

· **14.2 UN proper shipping name**

· **ADR/RID, ADN, IMDG, IATA** Void

· **14.3 Transport hazard class(es)**

· **ADR/RID, ADN, IMDG, IATA**

· **Class** Void

· **14.4 Packing group**

· **ADR/RID, IMDG, IATA** Void

· **14.5 Environmental hazards:**

Not applicable.

· **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.

· **Transport/Additional information:**

Not dangerous according to the above specifications.

· **UN "Model Regulation":**

Void

**SECTION 15: Regulatory information**

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 65

· **National regulations**

· **Water hazard class:** Water hazard class 1 (Self-assessment): weakly water-endangering.

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

### SECTION 16: Other information

These data are based on our present knowledge. However, they 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.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H400 Very toxic to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

- **Department issuing data specification sheet:**

Laboratory  
Tel.: +49 (0)39291 425-15

- **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)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

- **Sources**

applicable EEC directives:  
- 1907/2006  
- 1272/2008  
Internal physical tests, MSDS of the ingredients,  
Information system on hazardous substances of the German Social Accident Insurance  
(GESTIS-database on hazardous substances), <http://www.dguv.de/ifa/en/gestis/stoffdb/index.jsp>

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