

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

Printing date 27.03.2018

Version 5

Revision: 27.03.2018

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

- **1.1 Product identifier**
- **Trade name: C-41 CD-HR RTU**

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- **Article number: 13115**
- **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  
Colour film photographic processing solution  
Photographic developer
- **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**  
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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- **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** Void
- **Signal word** Void
- **Hazard statements**  
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**  
P273 Avoid release to the environment.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:**  
EUH208 Contains 4-(N-ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine sulphate, bis(hydroxylammonium) sulphate. May produce an allergic reaction.

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of the substances listed below with harmless additions.

- **Dangerous components:**

CAS: 584-08-7 EINECS: 209-529-3 Reg.nr.: 01-2119532646-36-xxxx	potassium carbonate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	2.0-5.0%
CAS: 25646-77-9 EINECS: 247-162-0 Index number: 612-133-00-7	4-(N-ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine sulphate ⚠ Acute Tox. 3, H301 ⚠ STOT RE 2, H373 ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ⚠ Skin Sens. 1, H317	< 0.5%
CAS: 10039-54-0 EINECS: 233-118-8 Index number: 612-123-00-2 Reg.nr.: 01-2119485971-25-xxxx	bis(hydroxylammonium) sulphate ⚠ Carc. 2, H351; STOT RE 2, H373 ⚠ Met. Corr.1, H290 ⚠ Aquatic Acute 1, H400 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	< 0.5%

- **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** Instantly remove any clothing soiled by the product.
- **After inhalation** Supply fresh air.
- **After skin contact**  
Instantly wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **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.  
Do not induce vomiting; instantly call for medical help.
- **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**  
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**  
No further relevant information available.
- **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.
- **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 precautions necessary if used correctly.
- **Information about protection against explosions and fires:**  
No special measures required.  
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:**  
Protect from heat and direct sunlight.  
Store in a cool place.
- **Recommended storage temperature:** 5-25°C

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- **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:**
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **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 required.
- **Protection of hands:**  
Protective gloves.  
The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374.  
This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.  
Only use chemical-protective gloves with CE-labelling of category III.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**

Thickness	Breakthrough time	
	(mm)	(min)
Nitril rubber	0,38	> 480
Neoprene	0,65	> 240
Butyl rubber	0,36	> 480

Avoid natural rubber gloves.
- **As protection from splashes gloves made of the following materials are suitable:**  
Synthetic gloves  
Value for permeation: Level:  
≥ 3 (60 min)
- **Eye protection:** Safety glasses

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- **Body protection:** Light weight protective clothing

**SECTION 9: Physical and chemical properties**

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Fluid
Colour:	Colourless Clear

· <b>Odour:</b>	Odourless
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· <b>pH-value at 25 °C:</b>	10.2
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· **Change in condition**

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

· <b>Flash point:</b>	Not applicable
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· <b>Self-inflammability:</b>	Product is not selfigniting.
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· <b>Explosive properties:</b>	Product is not explosive.
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· <b>Vapour pressure at 20 °C:</b>	23 hPa
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· <b>Density at 20 °C</b>	1.045 g/cm <sup>3</sup>
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· **Solubility in / Miscibility with**

Water:	miscible
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· **Viscosity:**

dynamic:	Not determined
kinematic:	Not determined

· **Solvent content:**

Organic solvents:	0.0 %
Water:	~ 94 %

· <b>9.2 Other information</b>	No further relevant information available.
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**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** No dangerous reactions known

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

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- **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:**

#### 25646-77-9 4-(N-ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine sulphate

Oral	LD50	45 mg/kg (rat)
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#### 10039-54-0 bis(hydroxylammonium) sulphate

Oral	LD50	620 mg/kg (rat)
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Dermal	LD50	1500 mg/kg (rab)
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- **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:**  
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:**

#### 25646-77-9 4-(N-ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine sulphate

LC50/96 h	0.75 mg/l (Daphnia magna)
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	0.5-1.0 mg/l (Pimephales promelas)
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#### 10039-54-0 bis(hydroxylammonium) sulphate

EC50/48 h	1.62 mg/l (Daphnia magna)
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LC50/96 h	7.2 mg/l (Pimephales promelas)
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- **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.
- **Ecotoxic effects:** No further relevant information available.

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- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**  
 At present there are no ecotoxicological assessments.  
 This statement was deduced from the properties of the single components.  
 Water hazard class 2 (German Regulation) (Self-assessment): Water-endangering.  
 Do not allow product to reach ground water, water bodies or sewage system.  
 Harmful to aquatic organisms
- **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.

· **European waste catalogue**

09 01 01*	water-based developer and activator solutions
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- **Uncleaned packagings:**
- **Recommendation:**  
 Non contaminated packagings can be used for recycling.  
 Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.  
 Packagings that cannot be cleaned are to be disposed of in the same manner as the product.  
 EAK-No. 15 01 10
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

**SECTION 14: Transport information**

- |  |      |
|--|------|
| · <b>14.1 UN-Number</b>                  |      |
| · <b>ADR/RID, ADN, IMDG, IATA</b>        | Void |
| · <b>14.2 UN proper shipping name</b>    |      |
| · <b>ADR/RID</b>                         | Void |
| · <b>ADN, IMDG, IATA</b>                 | Void |
| · <b>14.3 Transport hazard class(es)</b> |      |
| · <b>ADR/RID, ADN, IMDG, IATA</b>        |      |
| · <b>Class</b>                           | Void |

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- |  |  |
|--|--|
| · <b>14.4 Packing group</b><br>· <b>ADR/RID, IMDG, IATA</b>                      | Void   |
| · <b>14.5 Environmental hazards:</b>   | Not applicable.                                      |
| · <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>                                       | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | 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: 3, 65
- **National regulations**

Class	Share in %
I	0.5
- **Water hazard class:** Water hazard class 2 (Self-assessment): water-endangering.
- **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**  
H290 May be corrosive to metals.  
H301 Toxic if swallowed.  
H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H351 Suspected of causing cancer.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.
- **Department issuing data specification sheet:**  
Laboratory  
Tel.: +49 (0)39291 425-15

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• **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  
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  
Met. Corr. 1: Corrosive to metals – Category 1  
Acute Tox. 3: Acute toxicity – Category 3  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
Skin Sens. 1: Skin sensitisation – Category 1  
Carc. 2: Carcinogenicity – Category 2  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2  
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  
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

• **Sources**

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>  
applicable EEC directives:  
- 1907/2006  
- 1272/2008

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