

# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 814921

2',7'-Dichlorofluorescein spr. 100 mL

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Printing date: 15.11.2021

Date of issue: 20.05.2019

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

### 1.1 Product identifier

REF

814921

Product name

2',7'-Dichlorofluorescein spr. 100 mL

REACH Registration number(s):

see SECTION 3.1/3.2 or

A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

1 x 100 mL 2',7'-Dichlorofluorescein spray reagent

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

**Relevant identified uses**

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0

The exposure scenario is integrated into sections 1-16.

**Uses advised against**

not described

### 1.3 Details of the supplier of the safety data sheet

**Manufactured by:**

MACHEREY-NAGEL GmbH & Co. KG

Valenciennner Str. 11, 52355 Düren, GERMANY

Tel.: +49 2421 969 0

E-mail: sds@mn-net.com (msds@mn-net.com)

### 1.4 Emergency telephone number

Outside Germany (DE): Call your regional Poisons Information Service or call local Life Saving Service.

DE: Gemeinsames Giftinformationszentrum (GGIZ)

99089 Erfurt tel. +49 361 730 730

You find our current versions of SDS (22 languages) in Internet:

<http://www.mn-net.com/SDS>

## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

100 mL 2',7'-Dichlorofluorescein spray reagent



GHS02

GHS07

Signal word

DANGER

**Hazard identification**

**Hazard classes/categories**

H225

Flam. Liq. 2

H319

Eye Irrit. 2

H336, H335

STOT SE 3

### 2.2 Label elements

According CLP directive inner packages must be only labelled with GHS symbol(s) and product identifier(s) (EU 1272/2008 Annex I - 1.5.1.2).

Harmful chemicals/mixtures with signal word: **WARNING** and highly flammable chemicals/mixtures must not be labelled with H and P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).

**100 mL 2',7'-Dichlorofluorescein spray reagent**

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GHS02



GHS07

Signal word: DANGER

## 2.3 Other hazards

### Possible hazards from physicochemical properties

In the case of pH values are less than 5 or higher than 9 then it is irritant. Flammable properties. ---

### Information pertaining to particular risks to human and possible symptoms

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### Information pertaining to particular risks to the environment

---

### Other hazards

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances or 3.2 Mixtures

#### 100 mL 2',7'-Dichlorofluorescein spray reagent

Chemical: 2-propanol

CAS No.: 67-63-0

Classification: H225, Flam. Liq. 2, H319, Eye Irrit. 2, H336, STOT SE 3

Formula: C<sub>3</sub>H<sub>8</sub>O

Pseudonym: isopropanol, IPA, propan-2-ol

TSCA Inventory: listed

REACH Reg. No.: 01-2119457558-25-XXXX

EC No.: 200-661-7

Indice No.: 603-117-00-0

RTECS: NT8050000

MFCD: 00011674

KE No.: KE-29363

Concentration: 95 - <100 %

acc. CLP (GHS): H225, Flam. Liq. 2, H319, Eye Irrit. 2, H336, STOT SE 3

Chemical: 2',7'-dichlorofluorescein

CAS No.: 76-54-0

Classification: No criteria for classification or naming of chemical not required.

Formula: C<sub>20</sub>H<sub>10</sub>Cl<sub>2</sub>O<sub>5</sub>

Pseudonym: 2',7'-dichloro-3',6'-dihydroxy-spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one

TSCA Inventory: listed

EC No.: 200-968-6

MFCD: 00005047

Concentration: < 0.10 %

acc. CLP (GHS): The criteria for classification are not fulfilled.

### 3.3 Remarks

When not listed, mixtures are added with water [CAS No. 7732-18-5] to 100%.

List of H and P phrases: see section 16.1

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice.

#### 4.1.1 After SKIN Contact

Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.

#### 4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

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- 4.1.3 After INHALATION of vapours**  
After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. ---
- 4.1.4 After ORAL Intake**  
After oral intake lots of water should be drunk after it has been ingested. ---
- 4.2 Most important symptoms and effects, both acute and delayed**  
---
- 4.3 Indication of any immediate medical attention and special treatment needed**  
No additionally recommendations. ---

## SECTION 5: Firefighting measures

- 5.1 Extinguishing media**  
Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.
- 5.2 Special hazards arising from the substance or mixture**  
DANGER: Highly flammable (GHS regulation). Forms explosive vapour-air mixtures. Formation of hazardous and caustic vapour-air mixtures possible. ---
- 5.3 Advice for firefighters**  
No, for listed product. Product package burns like paper or plastic.
- 5.4 Additional information**  
---

## SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**  
Do not breathe vapours. Regular staff training is necessary.
- 6.2 Environmental precautions**  
not necessary
- 6.3 Methods and material for containment and cleaning up**  
Bind any escaping liquid with inert absorbent.  
Collect small amounts of leaked liquid and flush with water into drains.
- 6.4 Reference to other sections**  
---

## SECTION 7: Handling and storage

- 7.1 Precautions for safe handling**  
Handling in accordance with the test instruction, that comes with the product.
- 7.2 Conditions for safe storage, including any incompatibilities**  
The original product package of MACHEREY-NAGEL allows a safe storage.  
Storage class (VCI): 3  
Water hazard class (DE): 2
- 7.2.1 Requirements for stock rooms and containers**  
Keep original product packages tightly closed during handling and storage.
- 7.3 Specific end use(s)**  
Product for analytical use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**100 mL 2',7'-Dichlorofluorescein spray reagent**

Chemical: 2-propanol

CAS No.: 67-63-0

DNEL: [inh] 500 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC (fresh water): 140.9 mg/L

PNEC = Predicted No Effect Concentration

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TRGS 900 (DE): 200 ppm / 500 mg/m<sup>3</sup>  
A/a aveoles passing, E/e respirable, G total

Short-term exposure factor: 2 (II), Y  
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 200 ppm / 500 mg/m<sup>3</sup>

TRGS 903 (DE): [Aceton B/b, U/b] 25 mg/L  
B blood, U urine, a no limitation, b end of exposition or shift

NIOSH: [TWA] 400 ppm / 980 mg/m<sup>3</sup>

NIOSH STEL: 500 ppm / 1225 mg/m<sup>3</sup>  
[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: [TWA] 400 ppm / 980 mg/m<sup>3</sup>

Chemical: 2',7'-dichlorofluorescein CAS No.: 76-54-0

## 8.2 Exposure controls

The highest level of cleanliness must be maintained at the workplace.

### 8.2.1 Respiratory protection

No additional recommendations.

### 8.2.2 Hand protection

Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC (f.ex. from Ansell or KCL). Use for short times chemical resistant latex or nitril gloves with code EN 374-3 level 1.

### 8.2.3 Eye protection

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.

### 8.2.4 Skin protection

Not necessary.

### 8.2.5 Personal hygiene

Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating, and then apply protective skin cream.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### 100 mL 2',7'-Dichlorofluorescein spray reagent

|                                     |                         |                 |
|-------------------------------------|-------------------------|-----------------|
| Appearance: liquid                  | Colour: green           | Odor: alcoholic |
| Melting point:                      | -90 °C                  |                 |
| Boiling point:                      | 82 °C                   |                 |
| Flash point:                        | 12 °C                   |                 |
| Explosion limits:                   | 2 ...12.7 Vol%          |                 |
| Vapour pressure (20°C):             | 43 hPa                  |                 |
| Vapour density <sub>(air=1)</sub> : | 2,08                    |                 |
| Specific gravity:                   | 0,785 g/cm <sup>3</sup> |                 |
| Solubility in water:                | 0-100 %                 |                 |
| Flashing temperature:               | 425 °C                  |                 |
| Volatiles by volume:                | 106 g/m <sup>3</sup>    |                 |

### 9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

#### Relevant Properties of Substance Group

Substances are very volatile and form flammable vapour-air mixtures. ---

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no further data available.

### 10.2 Chemical stability

No known instability.

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## 10.3 Possibility of hazardous reactions

No further data available.

## 10.4 Conditions to avoid

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## 10.5 Incompatible materials

Avoid contact with strong acids or alkalines.

## 10.6 Hazardous decomposition products

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

#### 100 mL 2',7'-Dichlorofluorescein spray reagent

|                                       |                                                                                                         |                                            |
|---------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Chemical:                             | 2-propanol                                                                                              | CAS No.: 67-63-0                           |
| TSCA Inventory:                       | listed                                                                                                  | California Proposition 65 List: not listed |
| ACGIH:                                | 1230 ppm                                                                                                |                                            |
| Exposure Routes:                      | inhalation, ingestion, skin and/or eye contact                                                          |                                            |
| Target Organs:                        | Eyes, skin, respiratory system                                                                          |                                            |
| Symptoms:                             | irritation eyes, nose, throat; drowsiness, dizziness, headache; dry cracking skin; in animals: narcosis |                                            |
| Australia NICNAS:                     | Canada CEPA 1999: DSL yes                                                                               |                                            |
| Japan CSCL/PRTR:                      | PAC yes, Japan PDSCL: -                                                                                 |                                            |
| Japan ISHL:                           | listed $\geq 1,0\%$ / $\geq 0,1\%$ , Article 57-2 (SDS required)                                        |                                            |
| South Korea TCCA:                     |                                                                                                         |                                            |
| Korea Exist.Chem.Inventory:           | KE-29363                                                                                                |                                            |
| LD50 <sub>orl rat</sub> :             | 5045 mg/kg                                                                                              |                                            |
| LC <sub>Low<sub>orl</sub> hmn</sub> : | 3570 mg/kg                                                                                              |                                            |
| LC50 <sub>ihl rat</sub> :             | 164h g/m <sup>3</sup>                                                                                   |                                            |
| LD50 <sub>drm rbt</sub> :             | 12.8 g/kg                                                                                               |                                            |
| TRGS 905 (DE):                        | R <sub>F</sub> C                                                                                        |                                            |
| Chemical:                             | 2',7'-dichlorofluorescein                                                                               | CAS No.: 76-54-0                           |
| TSCA Inventory:                       | listed                                                                                                  |                                            |

## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

#### 100 mL 2',7'-Dichlorofluorescein spray reagent

|                                               |                           |                  |
|-----------------------------------------------|---------------------------|------------------|
| Chemical:                                     | 2-propanol                | CAS No.: 67-63-0 |
| PNEC(fresh water):                            | 140.9 mg/L                |                  |
| PNEC = Predicted No Effect Concentration      |                           |                  |
| LC50 <sub>fish/96h</sub> :                    | 1400 mg/L                 |                  |
| EC50 <sub>daphnia/48h</sub> :                 | 13.3 g/L                  |                  |
| IC50 <sub>scenedesmus quadricauda/72h</sub> : | >1000 mg/L                |                  |
| EC10 <sub>pseudomonas putida/16h</sub> :      | EC5: 1050 mg/L            |                  |
| Water hazard class (DE):                      | 1                         | WGK No.: 0135    |
| Dispersion coefficient(octanol-water):        | 0.05                      |                  |
| Storage class (VCI):                          | 3                         |                  |
| Chemical:                                     | 2',7'-dichlorofluorescein | CAS No.: 76-54-0 |
| Water hazard class (DE):                      | 2                         |                  |

### 12.2 Persistence and degradability

not necessary

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## 12.3 Bioaccumulative potential

not necessary

## 12.4 Mobility in soil

not necessary

## 12.5 Results of PBT and vPvB assessment

no data available

## 12.6 Other adverse effects

no additional data available

## SECTION 13: Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06).

### 13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains.

## SECTION 14: Transport information

14.1. UN number: 3316 14.2. UN proper shipping name: Chemical Kit

14.3. Class: 9 14.4. Packing group: II

Road transport

Classification code: M11 Tunnel restriction code: E

Limited Quantity: acc. ADR 3.3.1/251: see LQ in Alternative declaration for transportation

Air transport

PAX: 960 max. weight PAX: 10 KG

CAO: 960 max. weight CAO: 10 KG

Maritime transport

EmS: F-A, S-P Storage category: A

Or use Alternative declaration for transportation:

14.1 UN number: 1993 14.2 UN proper shipping name: Flammable liquid, n.o.s. (2-propanol mixture)

14.3 Class: 3 14.4 Packing group: II

Road transport

Classification code: F1 Tunnel restriction code: E

Limited Quantity: 1 L Special instructions: 640C

Excepted Quantity: E 2

Air transport

PAX: 353 max. weight PAX: 5 L

CAO: 364 max. weight CAO: 60 L

Maritime transport

EmS: F-E, S-E Storage category: B

## 14.5 Environmental hazards

none, contains only small quantities of hazardous substances

## 14.6 Special precautions for user

not necessary

## 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

## SECTION 15: Regulatory information

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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013

German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC

TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011

MN Leaflet/User manual, also see [www.mn-net.com](http://www.mn-net.com)

Look for your country-specific regulations.



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## 15.2 Chemical safety assessment

not necessary for these small amounts ---

## SECTION 16: Other information

### 16.1 List of H and P phrases

#### 16.1.1 List of relevant H phrases

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.

#### 16.1.2 List of relevant P phrases

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P260D Do not breathe vapours.  
P280sh Wear protective gloves/eye protection.

### 16.2 Training advice

Regular safety training.

### 16.3 Recommended restriction on use

Only for professional user.  
An individual package of this product or test kit has a moderate hazardous potential.

### 16.4 Further information

MACHEREY-NAGEL GmbH & Co. KG provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.  
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### 16.5 Sources of key data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS  
Regulation 487/2013/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress  
Regulation 669/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress  
Regulation 1480/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress  
Regulation 849/2021/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress  
TRGS 900, German engineering rules governing limits in air at work, updated 03/2019  
SUVA .CH, Limits in air at work 2009, revised on 01.2009  
KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

#### Revisions/Updates

Reason for Revision: 2016-03 Adaptation of regulation 1221/2015/EU