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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.5 Revision Date 28.03.2021 Print Date 21.09.2021 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1	Product identifiers Product name	:	9-Fluorenone
	Product Number Brand REACH No. CAS-No.	:	F1506 Aldrich 01-2120772462-53-XXXX 486-25-9
1.2	Relevant identified use	es	of the substance or mixture and uses advised against
	Identified uses	:	Laboratory chemicals, Manufacture of substances
1.3	Details of the supplier	of	the safety data sheet
	Company	:	Merck Life Science S.r.l. Via Monte Rosa 93 I-20149 MILANO
	Telephone Fax E-mail address		+39 02 3341 7340 +39 02 3801 0737 serviziotecnico@merckgroup.com

#### 1.4 Emergency telephone

Emergency Phone # :

800-789-767 (CHEMTREC Italia) +39-02-4555-7031 (CHEMTREC chiamate internazionali) +39 02-6610-1029 (Centro Antiveleni Niguarda Ca' Granda - Milano)

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008** Eye irritation (Category 2), H319 Long-term (chronic) aquatic hazard (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

# Labelling according Regulation (EC) No 1272/2008 Pictogram

Signal word

Warning

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Hazard statement(s) H319 H411	Causes serious eye irritation. Toxic to aquatic life with long lasting effects.		
Precautionary statement(s) P273 P305 + P351 + P338	Avoid release to the environment. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
Supplemental Hazard Statements	none		
Reduced Labeling (<= 125 ml) Pictogram			
Signal word	Warning		

	warning
Hazard statement(s)	none
Precautionary statement(s)	none
Supplemental Hazard	none

# Statements **2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Formula Molecular weight CAS-No. EC-No.	: C <sub>13</sub> H <sub>8</sub> O : 180,20 g/mol : 486-25-9 : 207-630-7		
Component Fluoren-9-one	. 207 000 7	Classification	Concentration
CAS-No. EC-No.	486-25-9 207-630-7	Eye Irrit. 2; Aquatic Chronic 2; H319, H411	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

# SECTION 4: First aid measures

#### 4.1 Description of first-aid measures

#### General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

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# If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### **4.2 Most important symptoms and effects, both acute and delayed** The most important known symptoms and effects are described in the labelling (see section

- 2.2) and/or in section 11
- **4.3 Indication of any immediate medical attention and special treatment needed** No data available

#### SECTION 5: Firefighting measures

5.1 Extinguishing media

# Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- **5.2 Special hazards arising from the substance or mixture** Carbon oxides
- **5.3** Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.
- **5.4 Further information** No data available

# SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.
- **6.2 Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

# **6.3 Methods and materials for containment and cleaning up** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections** For disposal see section 13.

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# SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

#### Advice on safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

#### Advice on protection against fire and explosion

Provide appropriate exhaust ventilation at places where dust is formed.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### SECTION 8: Exposure controls/personal protection

8.1 Control parameters

#### Ingredients with workplace control parameters

8.2 Exposure controls

#### **Personal protective equipment**

#### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

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data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body Protection**

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: solid
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing point	Melting point/range: 80 - 83 °C - lit.
f)	Initial boiling point and boiling range	342 °C - lit.
g)	Flash point	163 °C
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor pressure	No data available
I)	Vapor density	No data available
m)	Relative density	No data available
n)	Water solubility	0,001 g/l at 25 °C - slightly soluble
0)	Partition coefficient: n-octanol/water	log Pow: 3,58 at 25 °C

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- p) Autoignition No data available temperature
- q) Decomposition No data available temperature
- r) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available
- s) Explosive properties No data available
- t) Oxidizing properties No data available
- 9.2 Other safety information No data available

#### **SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No data available
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** No data available
- **10.5 Incompatible materials** No data available
- **10.6 Hazardous decomposition products** In the event of fire: see section 5

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

**Acute toxicity** 

#### Skin corrosion/irritation

# Serious eye damage/eye irritation

Eyes - In vitro study Result: irritating (OECD Test Guideline 492)

#### **Respiratory or skin sensitization**

#### Germ cell mutagenicity

Test Type: reverse mutation assay Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: US-EPA

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Result: negative

#### **Carcinogenicity** No data available

**Reproductive toxicity** 

Specific target organ toxicity - single exposure

#### Specific target organ toxicity - repeated exposure

#### **Aspiration hazard**

# **11.2 Additional Information**

RTECS: LL8925000

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

# SECTION 12: Ecological information

#### **12.1 Toxicity**

No data available

Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - 15 mg/l - 24 h and other aquatic invertebrates

# 12.2 Persistence and degradability

#### 12.3 Bioaccumulative potential

12.4 Mobility in soil

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Toxic to aquatic life with long lasting effects.

# SECTION 13: Disposal considerations

#### **13.1 Waste treatment methods**

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave

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chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

# Contaminated packaging

Dispose of as unused product.

4.1	UN numb	er		
	ADR/RID:	-	IMDG: 3077	IATA: 3077
4.2		ENVIRONMENTAL	LY HAZARDOUS SUBSTANCE,	SOLID, N.O.S. (Fluoren-9-one) SOLID, N.O.S. (Fluoren-9-one) o.s. (Fluoren-9-one)
.4.3	Transport ADR/RID:	t <b>hazard class(e</b> s 9	5) IMDG: 9	IATA: 9
4.4	Packaging ADR/RID:		IMDG: III	IATA: III
		ental hazards		
4.5	Environm ADR/RID:		IMDG Marine pollutant: yes	IATA: yes
_	ADR/RID: Special pr Further in EHS-Mark combinatio	yes recautions for us formation required (ADR 2.2 on packagings con	ser 2.9.1.10, IMDG code 2.10.3) fo	or single packagings and Dangerous Goods > 5L for liquid
.4.6	ADR/RID: Special pr Further in EHS-Mark combinatio or > 5kg fo Class 9	yes recautions for us formation required (ADR 2.2 on packagings con or solids.Packages	ser 2.9.1.10, IMDG code 2.10.3) fo taining inner packagings with s smaller than or equal to 5 kg	or single packagings and Dangerous Goods > 5L for liquid
4.6 ECT	ADR/RID: Special pr Further in EHS-Mark combination or > 5kg for Class 9 TION 15: R	yes recautions for us formation required (ADR 2.2 on packagings con or solids.Packages egulatory inform	ser 2.9.1.10, IMDG code 2.10.3) fo taining inner packagings with smaller than or equal to 5 kg nation	or single packagings and Dangerous Goods > 5L for liqui / L , not dangerous goods of
.4.6 ECT .5.1	ADR/RID: Special pr Further in EHS-Mark combinatic or > 5kg fo Class 9 TON 15: R Safety, he tance or m	yes recautions for us formation required (ADR 2.2 on packagings con or solids.Packages egulatory inform ealth and enviro hixture fial safety data sho	ser 2.9.1.10, IMDG code 2.10.3) fo taining inner packagings with s smaller than or equal to 5 kg	or single packagings and Dangerous Goods > 5L for liquid / L , not dangerous goods of htion specific for the
.4.6 ECT .5.1	ADR/RID: Special pro- Further in EHS-Mark combination or > 5kg for Class 9 TON 15: R Safety, how tance or m This mater 1907/2006 National II Seveso III European control of	yes recautions for us formation required (ADR 2.2 on packagings con or solids.Packages egulatory inform ealth and enviro fixture fial safety data sho b. legislation : Directive 2012/1	Ser 2.9.1.10, IMDG code 2.10.3) for taining inner packagings with smaller than or equal to 5 kg nation nmental regulations/legisla eet complies with the requirem 8/EU of the : EN the Council on the	or single packagings and Dangerous Goods > 5L for liquid / L , not dangerous goods of nation specific for the

For this product a chemical safety assessment was not carried out

# SECTION 16: Other information

# Full text of H-Statements referred to under sections 2 and 3.

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H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

#### **Further information**

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