

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Revision Date 24.05.2017

Version 3.5

---

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

### 1.1 Product identifier

Catalogue No. 820576

Product name N-Fluoren-2-ylacetamide for synthesis

REACH Registration Number A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. 53-96-3

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

Identified uses Chemical for synthesis  
For additional information on uses please refer to the Merck Chemicals portal ([www.merckgroup.com](http://www.merckgroup.com)).

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

Company Merck KGaA \* 64271 Darmstadt \* Germany \* Phone:+49 6151 72-0

Responsible Department LS-QHC \* e-mail: [prodsafe@merckgroup.com](mailto:prodsafe@merckgroup.com)

1.4 Emergency telephone number Please contact the regional company representation in your country.

---

## SECTION 2. Hazards identification

### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 820576

Product name N-Fluoren-2-ylacetamide for synthesis

---

Germ cell mutagenicity, Category 2, H341

Carcinogenicity, Category 1B, H350

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

## 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

*Hazard pictograms*



*Signal word*

Danger

*Hazard statements*

H350 May cause cancer.

H341 Suspected of causing genetic defects.

*Precautionary statements*

Prevention

P201 Obtain special instructions before use.

Response

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Restricted to professional users.

CAS-No. 53-96-3

## 2.3 Other hazards

None known.

---

## SECTION 3. Composition/information on ingredients

### 3.1 Substance

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	820576
Product name	N-Fluoren-2-ylacetamide for synthesis

---

Formula	C <sub>15</sub> H <sub>13</sub> NO (Hill)
EC-No.	200-188-6
Molar mass	223,27 g/mol

## Hazardous components (REGULATION (EC) No 1272/2008)

*Chemical name (Concentration)*

CAS-No.	Registration number	Classification
N-Fluoren-2-ylacetamide (<= 100 % )		
53-96-3	*)	

Germ cell mutagenicity, Category 2, H341

Carcinogenicity, Category 1B, H350

\*) A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

## 3.2 Mixture

Not applicable

---

## SECTION 4. First aid measures

### 4.1 Description of first aid measures

After inhalation: fresh air. Call in physician.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Consult a physician.

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

We have no description of any toxic symptoms.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	820576
Product name	N-Fluoren-2-ylacetamide for synthesis

---

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

No information available.

---

## SECTION 5. Firefighting measures

### 5.1 Extinguishing media

#### *Suitable extinguishing media*

Water, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

#### *Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

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

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of:

nitrogen oxides

### 5.3 Advice for firefighters

#### *Special protective equipment for firefighters*

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### *Further information*

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

---

## SECTION 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 820576

Product name N-Fluoren-2-ylacetamide for synthesis

---

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

## 6.4 Reference to other sections

Indications about waste treatment see section 13.

---

## SECTION 7. Handling and storage

### 7.1 Precautions for safe handling

#### *Advice on safe handling*

Observe label precautions.

Work under hood. Do not inhale substance/mixture.

#### *Hygiene measures*

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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

#### *Storage conditions*

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

Recommended storage temperature see product label.

### 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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 820576  
Product name N-Fluoren-2-ylacetamide for synthesis

---

## 8.2 Exposure controls

### Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

### Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

#### *Eye/face protection*

Safety glasses

#### *Hand protection*

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet(>,<) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	820576
Product name	N-Fluoren-2-ylacetamide for synthesis

---

## *Other protective equipment*

protective clothing

## *Respiratory protection*

required when dusts are generated.

Recommended Filter type: Filter P 3 (acc. to DIN 3181) for solid and liquid particles of toxic and very toxic substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

## **Environmental exposure controls**

Do not let product enter drains.

---

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

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

Form	powder, finecrystalline
Colour	beige
Odour	No strong odour known.
Odour Threshold	No information available.
pH	No information available.
Melting point/range	193 - 196 °C
Boiling point	No information available.
Flash point	No information available.
Evaporation rate	No information available.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	820576
Product name	N-Fluoren-2-ylacetamide for synthesis

---

Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	No information available.
Relative vapour density	No information available.
Density	No information available.
Relative density	No information available.
Water solubility	at 20 °C insoluble
Partition coefficient: n-octanol/water	log Pow: 3,12 (calculated) (Lit.) Bioaccumulation is not expected.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none

## 9.2 Other data

none



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	820576
Product name	N-Fluoren-2-ylacetamide for synthesis

---

---

## SECTION 10. Stability and reactivity

### 10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

Violent reactions possible with:

Oxidizing agents, Acid anhydrides, acids

### 10.4 Conditions to avoid

no information available

### 10.5 Incompatible materials

no information 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 oral toxicity*

This information is not available.

#### *Acute inhalation toxicity*

This information is not available.

#### *Acute dermal toxicity*

This information is not available.

#### *Skin irritation*

This information is not available.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 820576

Product name N-Fluoren-2-ylacetamide for synthesis

---

## *Eye irritation*

This information is not available.

## *Sensitisation*

This information is not available.

## *Germ cell mutagenicity*

### *Genotoxicity in vivo*

Mutagenicity (mammal cell test): chromosome aberration.

Result: positive

(National Toxicology Program)

### *Genotoxicity in vitro*

Ames test

Result: positive

(HSDB)

Mutagenicity (mammal cell test):

Result: positive

(National Toxicology Program)

## *Carcinogenicity*

This information is not available.

## *Reproductive toxicity*

This information is not available.

## *Teratogenicity*

This information is not available.

## *CMR effects*

Carcinogenicity:

May cause cancer.

Mutagenicity:

Suspected of causing genetic defects.

## *Specific target organ toxicity - single exposure*

This information is not available.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 820576

Product name N-Fluoren-2-ylacetamide for synthesis

---

*Specific target organ toxicity - repeated exposure*

This information is not available.

*Aspiration hazard*

This information is not available.

## 11.2 Further information

Damage to:

Liver

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

---

## SECTION 12. Ecological information

### 12.1 Toxicity

No information available.

### 12.2 Persistence and degradability

No information available.

### 12.3 Bioaccumulative potential

*Partition coefficient: n-octanol/water*

log Pow: 3,12

(calculated)

(Lit.) Bioaccumulation is not expected.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

### 12.6 Other adverse effects

Discharge into the environment must be avoided.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	820576
Product name	N-Fluoren-2-ylacetamide for synthesis

---

---

## SECTION 13. Disposal considerations

### *Waste treatment methods*

See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

---

## SECTION 14. Transport information

### Land transport (ADR/RID)

14.1 - 14.6	Not classified as dangerous in the meaning of transport regulations.
-------------	--

### Inland waterway transport (ADN)

Not relevant

### Air transport (IATA)

14.1 - 14.6	Not classified as dangerous in the meaning of transport regulations.
-------------	--

### Sea transport (IMDG)

14.1 - 14.6	Not classified as dangerous in the meaning of transport regulations.
-------------	--

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

---

## SECTION 15. Regulatory information

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

#### *EU regulations*

Major Accident Hazard	SEVESO III
Legislation	Not applicable

Occupational restrictions	Take note of Dir 94/33/EC on the protection of young people at work. Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.
---------------------------	---

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	820576
Product name	N-Fluoren-2-ylacetamide for synthesis

---

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer      not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC      not regulated

Substances of very high concern (SVHC)	This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of $\geq 0.1\%$ (w/w).
--	--

## *National legislation*

Storage class	6.1A
---------------	------

## 15.2 Chemical safety assessment

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.

H341	Suspected of causing genetic defects.
H350	May cause cancer.

### Training advice

Provide adequate information, instruction and training for operators.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 820576

Product name N-Fluoren-2-ylacetamide for synthesis

---

## Labelling

### *Hazard pictograms*



### *Signal word*

Danger

### *Hazard statements*

H341 Suspected of causing genetic defects.

H350 May cause cancer.

### *Precautionary statements*

#### Prevention

P201 Obtain special instructions before use.

#### Response

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

### *Further information*

Restricted to professional users.

## Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

## Regional representation

This information is given on the authorised Safety Data Sheet for your country.

---

*The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.*