



Revision Date 15-Dec-2011

Revision Number 4

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier Product Description: Cat No. Synonyms

N-(9H-Fluoren-2-ylmethoxycarbonyloxy)succinimide 243100000; 243100010; 243100050 1-(9H-Fluorenylmethoxycarbonyloxy)2,5-pyrrolidinedione; 9-Fluorenylmethyl succinimidyl carbonate; FMOC-ONSu

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

Recommended Use Uses advised against Laboratory chemicals No Information available

Details of the supplier of the safety data sheet

Company Acros Organics BVBA Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium E-mail address

begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300 CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Skin Sensitization	Category 1
Chronic aquatic toxicity	Category 2

Classification according to EU Directives 67/548/EEC or 1999/45/EC

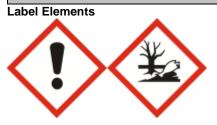
For the full text of the R-phrases and F	I-Statements mentioned in this Section, see Section 16
Symbol(s)	Xn - Harmful
	N - Dangerous for the environment
R-phrase(s)	R22 - Harmful if swallowed
	R43 - May cause sensitization by skin contact
Risk Combination Phrases	R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic
	environment



N-(9H-Fluoren-2-ylmethoxycarbonyloxy)succinimide

Revision Date 15-Dec-2011

SECTION 2. HAZARDS IDENTIFICATION



Signal Word

Warning

Hazard Statements

H317 - May cause an allergic skin reaction H302 - Harmful if swallowed H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear eye protection/ face protection

P273 - Avoid release to the environment

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
2,5-Pyrrolidinedione, 1-[[(9H-fluoren- 9-ylmethoxy)carbonyl]oxy]- 82911-69-1	433-520-5	98		R43 N; R51-53	Acute Tox. 4 (H302) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES

Description of first aid measures Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.



N-(9H-Fluoren-2-ylmethoxycarbonyloxy)succinimide

Revision Date 15-Dec-2011

Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.
Ingestion	Clean mouth with water. Get medical attention.
Inhalation	Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.
Notes to Physician	Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Dry chemical. chemical foam.

Extinguishing media which must not be used for safety reasons No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Do not ingest.



N-(9H-Fluoren-2-ylmethoxycarbonyloxy)succinimide

Revision Date 15-Dec-2011

Conditions for safe storage, including any incompatibilities

Keep in a dry place. Keep container tightly closed. Keep refrigerated.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Biological limit values Derived No Effect Level (DNEL) Predicted No Effect Concentration (PNEC)	This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies. No information available. No information available.
Exposure controls	
Engineering Measures Personal protective equipment Eye Protection Hand Protection Skin and body protection Respiratory Protection	Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location Goggles Protective gloves Wear appropriate protective gloves and clothing to prevent skin exposure Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
Hygiene Measures Environmental exposure controls	Handle in accordance with good industrial hygiene and safety practice No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Appearance odor pH Boiling Point/Range Melting Point/Range Flash Point Autoignition Temperature Water Solubility Molecular Formula Molecular Weight Powder, Solid Off-white odorless No information available. No information available. 145 - 153°C / 293 - 307.4°F No information available. No information available. Insoluble C19 H15 N O5 337.29





N-(9H-Fluoren-2-ylmethoxycarbonyloxy)succinimide

Revision Date 15-Dec-2011

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous PolymerizationNo information available.Hazardous Reactions .No information available.

Conditions to Avoid

Avoid dust formation, Incompatible products.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects	
Acute Toxicity Product Information	No acute toxicity information is available for this product
Component Information	
<u>Chronic Toxicity</u> Carcinogenicity	There are no known carcinogenic chemicals in this product
Sensitization Mutagenic Effects Reproductive Effects Developmental Effects Target Organs Other Adverse Effects Endocrine Disruptor Information	No information available. No information available No information available. No information available. No information available. The toxicological properties have not been fully investigated. None known



N-(9H-Fluoren-2-ylmethoxycarbonyloxy)succinimide

Revision Date 15-Dec-2011

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects

Do not empty into drains

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Vaste from Residues / Unused Products	Dispose of in accordance with local regulations					
Contaminated Packaging	Empty containers should be taken to local recyclers for disposal					

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

UN-No Hazard Class	UN3077 9
Packing Group	
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s

ADR

UN-No	UN3077
Hazard Class	9
Packing Group	111





N-(9H-Fluoren-2-ylmethoxycarbonyloxy)succinimide

Revision Date 15-Dec-2011

SECTION 14. TRANSPORT INFORMATION

Proper Shipping Name

Environmentally hazardous substance, solid, n.o.s

IATA

UN-No Hazard Class Packing Group Proper Shipping Name UN3077 9 III Environmentally hazardous substance, solid, n.o.s

SECTION 15. REGULATORY INFORMATION

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

International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
2,5-Pyrrolidinedione, 1-[[(9H-	-	-		-	Х	-	Х	-	-	-	Х
fluoren-9-ylmethoxy)carbonyl]oxy]-											

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R22 - Harmful if swallowed

R43 - May cause sensitization by skin contact

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment



N-(9H-Fluoren-2-ylmethoxycarbonyloxy)succinimide

Revision Date 15-Dec-2011

SECTION 16. OTHER INFORMATION

Revision Date Revision Summary 15-Dec-2011 (M)SDS sections updated, 2, 14, 16.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet