

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Revision Date 02.10.2012

Version 5.7

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

1.1 Product identifier

Catalogue No.	814095
Product name	Sodium amide crystalline 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.

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.merck-chemicals.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

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)

Substances and mixtures, which in contact with water, emit flammable gases, Category 2, H261

Skin corrosion, Category 1B, H314

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

Classification (67/548/EEC or 1999/45/EC)

C	Corrosive	R14 - 19 - 29
N	Dangerous for the environment	R34
		R50

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word

Danger

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Catalogue No. 814095
Product name Sodium amide crystalline for synthesis

Hazard statements

H261 In contact with water releases flammable gases.
H314 Causes severe skin burns and eye damage.
EUH014 Reacts violently with water.
EUH019 May form explosive peroxides.
Contact with water liberates toxic gas.

Precautionary statements

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.
P402 + P404 Store in a dry place. Store in a closed container.
P422 Store contents under inert gas.

Reduced labelling (≤125 ml)

Hazard pictograms



Signal word

Danger

Hazard statements



H314 Causes severe skin burns and eye damage.
EUH014 Reacts violently with water.

Precautionary statements

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.
P422 Store contents under inert gas.

CAS-No. 7782-92-5

Labelling (67/548/EEC or 1999/45/EC)

<i>Symbol(s)</i>	 C  N	Corrosive Dangerous for the environment
<i>R-phrases(s)</i>	14-19-29-34-50	Reacts violently with water. May form explosive peroxides. Contact with water liberates toxic gas. Causes burns. Very toxic to aquatic organisms.
<i>S-phrases(s)</i>	6-7/8-26-36/37/39-45-61	Keep under protective gas. Keep container tightly closed and dry. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Avoid release to the environment. Refer to special instructions/ Safety data sheets.

EC-No. 231-971-0

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Catalogue No. 814095
Product name Sodium amide crystalline for synthesis

Reduced labelling (≤125 ml)

Symbol(s)



C
N

R-phrases(s)

34

S-phrases(s)

26-36/37/39-45

Corrosive

Dangerous for the environment

Causes burns.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

Formula	NaNH ₂	H ₂ NNa (Hill)
CAS-No.	7782-92-5	
EC-No.	231-971-0	
Molar mass	39,01 g/mol	

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

Chemical Name (Concentration)

CAS-No.	Registration number	Classification
---------	---------------------	----------------

sodium amide (≤ 100 %)

7782-92-5	*)	
-----------	----	--

Substances and mixtures, which in contact with water, emit flammable gases, Category 2, H261
Skin corrosion, Category 1B, H314

*) 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.

Hazardous components (1999/45/EC)

Chemical Name (Concentration)

CAS-No.	Classification
---------	----------------

sodium amide (≤ 100 %)

7782-92-5	R14-19-29
-----------	-----------

C, Corrosive; R34

N, Dangerous for the environment; R50

For the full text of the R-phrases mentioned in this Section, see Section 16.

SECTION 4. First aid measures

4.1 Description of first aid measures

General advice

First aider needs to protect himself.

After inhalation: fresh air. Call in physician.

After skin contact: wash off with plenty of water. Immediately remove contaminated clothing. If available swab with polyethylene glycol 400. Call a physician immediately.

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Catalogue No. 814095
Product name Sodium amide crystalline for synthesis

4.2 Most important symptoms and effects, both acute and delayed

Irritation and corrosion, Cough, Shortness of breath, Diarrhoea, Nausea, Vomiting
Risk of blindness!

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

Carbon dioxide (CO₂), Dry powder, Cover with dry sand or cement.

Unsuitable extinguishing media

Water, Foam

5.2 Special hazards arising from the substance or mixture

Combustible.

Risk of dust explosion.

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

Fire may cause evolution of:

nitrogen oxides

Caution! in contact with water product releases:

Ammonia, Sodium hydroxide solution

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

Cool closed containers exposed to fire with water spray. 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 substance contact. Avoid inhalation of dusts. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

Do not empty into drains. Risk of explosion.

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 dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Unsuitable cleaning agents Water

6.4 Reference to other sections

Indications about waste treatment see section 13.

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Catalogue No. 814095
Product name Sodium amide crystalline for synthesis

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Keep workplace dry. Do not allow product to come into contact with water.

Observe label precautions.

7.2 Conditions for safe storage, including any incompatibilities

Protective gas: Argon.

Tightly closed. Dry. Protected from light. Keep away from heat and sources of ignition.

Store at +15°C to +25°C.

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

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.

Hygiene measures

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

Eye/face protection

Tightly fitting safety goggles

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.

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Catalogue No. 814095
Product name Sodium amide crystalline for synthesis

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).

Other protective equipment
protective clothing

Respiratory protection
required when dusts are generated.
Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful 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 empty into drains.
Risk of explosion.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	powder, finecrystalline
Colour	light grey
Odour	ammoniacal
Odour Threshold	No information available.
pH	No information available.
Melting point	210 °C
Boiling point/boiling range	400 °C at 1.013 hPa
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	No information available.
Relative vapor density	No information available.
Relative density	1,39 g/cm ³ at 25 °C

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Catalogue No.	814095
Product name	Sodium amide crystalline for synthesis

Water solubility	at 20 °C (decomposition)
Partition coefficient: n-octanol/water	not applicable
Auto-ignition temperature	No information available.
Decomposition temperature	> 330 °C
Viscosity, dynamic	No information available.
Explosive properties	No information available.
Oxidizing properties	No information available.

9.2 Other data

Ignition temperature	450 °C
----------------------	--------

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.

Contact with water liberates toxic gas.

Reacts violently with water.

Formation of peroxides possible.

10.2 Chemical stability

sensitive to moisture

Sensitivity to light

10.3 Possibility of hazardous reactions

A risk of explosion and/or of toxic gas formation exists with the following substances:

Water, Halogenated hydrocarbon, Oxidizing agents, chromium(VI) oxide, Oxygen, nitrites, nitrates, chlorates, nitrogen oxides, halogens

Exothermic reaction with:

Alcohols, Strong acids

10.4 Conditions to avoid

Heating (decomposition).

Exposure to moisture.

Exposure to air.

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

in the event of fire: See section 5.

Peroxides

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Catalogue No. 814095
Product name Sodium amide crystalline for synthesis

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach., Nausea, Vomiting, Diarrhoea

Acute inhalation toxicity

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

Skin irritation

Causes burns.

Eye irritation

Causes serious eye damage. Risk of blindness!

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Based on available data the classification criteria are not met.

11.2 Further information

Quantitative data on the toxicity of this product are not available.

Further toxicological data:

Decomposition of the substance with tissue moisture.

Further data:

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

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

not applicable

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

Additional ecological information

Biological effects:

Harmful effect due to pH shift.

Forms toxic and corrosive mixtures with water even if diluted.

Further information on ecology

Discharge into the environment must be avoided.

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Catalogue No. 814095
Product name Sodium amide crystalline for synthesis

SECTION 13. Disposal considerations

Waste treatment methods

See 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 UN number	UN 1390
14.2 Proper shipping name	ALKALI METAL AMIDES (SODIUM AMIDE)
14.3 Class	4.3
14.4 Packing group	II
14.5 Environmentally hazardous	yes
14.6 Special precautions for user	yes
Tunnel restriction code	D/E

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

14.1 UN number	UN 1390
14.2 Proper shipping name	ALKALI METAL AMIDES
14.3 Class	4.3
14.4 Packing group	II
14.5 Environmentally hazardous	yes
14.6 Special precautions for user	no

Sea transport (IMDG)

14.1 UN number	UN 1390
14.2 Proper shipping name	ALKALI METAL AMIDE (SODIUM AMIDE)
14.3 Class	4.3
14.4 Packing group	II
14.5 Environmentally hazardous	yes
14.6 Special precautions for user	yes
EmS	F-G S-O

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

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Catalogue No.	814095
Product name	Sodium amide crystalline for synthesis

Major Accident Hazard Legislation	96/82/EC Dangerous for the environment 9a Quantity 1: 100 t Quantity 2: 200 t 96/82/EC Any classification 10b Quantity 1: 50 t Quantity 2: 200 t
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.
<i>National legislation</i> Storage class	4.3

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.

H261	In contact with water releases flammable gases.
H314	Causes severe skin burns and eye damage.

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

R14	Reacts violently with water.
R19	May form explosive peroxides.
R29	Contact with water liberates toxic gas.
R34	Causes burns.
R50	Very toxic to aquatic organisms.

Training advice

Provide adequate information, instruction and training for operators.

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.

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.