according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011 date of compilation: 2017-01-17

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

1.1 **Product identifier**

Identification of the substance Nourseothricin dihydrogen sulphate

Article number 3011

Registration number (REACH) This information is not available.

EC number none

CAS number 96736-11-7

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

Identified uses: laboratory chemical

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone: +49 (0) 721 - 56 06 0 Telefax: +49 (0) 721 - 56 06 149 e-mail: sicherheit@carlroth.de Website: www.carlroth.de

Competent person responsible for the safety data : Department Health, Safety and Environment

: sicherheit@carlroth.de e-mail (competent person)

1.4 **Emergency telephone number**

> **Emergency information service** Poison Centre Munich: +49/(0)89 19240

SECTION 2: Hazards identification

Classification of the substance or mixture 2.1

Classification according to Regulation (EC) No 1272/2008 (CLP)

Classification acc. to GHS

Section	Hazard class	Hazard class and cat- egory	Hazard state- ment
3.10	acute toxicity (oral)	(Acute Tox. 4)	H302
3.2	skin corrosion/irritation	(Skin Irrit. 2)	H315
3.3	serious eye damage/eye irritation	(Eye Irrit. 2)	H319
3.8R	specific target organ toxicity - single exposure (respiratory tract ir- ritation)	(STOT SE 3)	H335

United Kingdom (en) Page 1 / 11

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011

Remarks

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word	Warning
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Pictograms



Hazard statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statements

Precautionary statements - prevention

P280 Wear protective gloves/eye protection.

Precautionary statements - response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning

Symbol(s)



2.3 Other hazards

There is no additional information.

United Kingdom (en) Page 2 / 11

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance Nourseothricin dihydrogen sulphate

CAS number 96736-11-7

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

Rinse mouth with water (only if the person is conscious). Call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Vomiting, Irritation, Cough, Dyspnoea

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings water spray, foam, dry extinguishing powder, carbon dioxide (CO2)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible.

United Kingdom (en) Page 3 / 11

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011

Hazardous combustion products

May produce toxic fumes of carbon monoxide if burning.

5.3 Advice for firefighters

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Do not breathe dust. Avoid contact with skin, eyes and clothes.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains.

Advices on how to clean up a spill

Take up mechanically. Control of dust.

Other information relating to spills and releases

Place in appropriate containers for disposal.

Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation.

Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place. Keep in a cool place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

Ventilation requirements

Use local and general ventilation.

United Kingdom (en) Page 4 / 11

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011

Specific designs for storage rooms or vessels

Recommended storage temperature: 4 °C.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 **Control parameters**

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Coun- try	Name of agent	CAS No	Nota- tion	Identifier	TWA [mg/m³]	STEL [mg/m³]	Source
GB	dust		i	WEL	10		EH40/2005
GB	dust		r	WEL	4		EH40/2005

Notation

Inhalable fraction Respirable fraction

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-

minute period unless otherwise specified
Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average **TWA**

8.2 **Exposure controls**

Individual protection measures (personal protective equipment)







Eye/face protection

Use safety goggle with side protection.

Skin protection

hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

· type of material

NBR (Nitrile rubber)

material thickness

>0,11 mm

breakthrough times of the glove material

>480 minutes (permeation: level 6)

United Kingdom (en) Page 5 / 11

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection

Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state solid (powder)

Colour light grey
Odour odourless

Odour threshold No data available

Other physical and chemical parameters

pH (value) 6,3 (1 ^g/_l, 22 °C)

Melting point/freezing point not determined

Initial boiling point and boiling range This information is not available.

Flash point not applicable

Evaporation rate no data available

Flammability (solid, gas) Non-flammable

Explosive limits

lower explosion limit (LEL)
 upper explosion limit (UEL)
 this information is not available
 Explosion limits of dust clouds
 Vapour pressure
 This information is not available.

Density This information is not available.

Vapour density This information is not available.

Relative density Information on this property is not available.

Solubility(ies)

Water solubility $1 \, {}^{g}/_{l}$ at 22 ${}^{\circ}$ C

United Kingdom (en) Page 6 / 11

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011

Partition coefficient

n-octanol/water (log KOW)

This information is not available.

Auto-ignition temperature Information on this property is not available.

Decomposition temperature >100 °C

Viscosity not relevant (solid matter)

Explosive properties Shall not be classified as explosive

Oxidising properties none

9.2 Other information

There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: Strong oxidiser, Strong acid

10.4 Conditions to avoid

Decompostion takes place from temperatures above: >100 °C.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Exposure route	Endpoint	Value	Species	Source
oral	LD50	1.185 ^{mg} / _{kg}	rat	TOXNET

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

United Kingdom (en) Page 7 / 11

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

• Specific target organ toxicity - single exposure

May cause respiratory irritation.

• Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

If swallowed

data are not available

• If in eyes

data are not available

• If inhaled

cough, Dyspnoea

• If on skin

causes skin irritation

Other information

None

SECTION 12: Ecological information

12.1 Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

12.2 Process of degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

United Kingdom (en) Page 8 / 11

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011

SECTION 13: Disposal considerations

13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1	UN number	(not subject to transport regulations)

14.2 UN proper shipping name not relevant14.3 Transport hazard class(es) not relevant

Class -

14.4 Packing group not relevant

14.5 Environmental hazards none (non-environmentally hazardous acc. to the danger-

ous goods regulations)

14.6 Special precautions for user

There is no additional information.

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

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

Not subject to ADR, RID and ADN.

• International Maritime Dangerous Goods Code (IMDG)

Not subject to IMDG.

• International Civil Aviation Organization (ICAO-IATA/DGR)

Not subject to ICAO-IATA.

United Kingdom (en) Page 9 / 11

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)
 - Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC) Not listed.
 - Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS) Not listed.
 - Regulation 850/2004/EC on persistent organic pollutants (POP) Not listed.
 - List of substances subject to authorisation (REACH, Annex XIV) not listed

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II \sim

not listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

not listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations	
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)	
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)	
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)	
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures	
CMR	Carcinogenic, Mutagenic or toxic for Reproduction	
DGR	Dangerous Goods Regulations (see IATA/DGR)	
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations	
IATA	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
ICAO	International Civil Aviation Organization	
IMDG	International Maritime Dangerous Goods Code	
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")	

United Kingdom (en) Page 10 / 11

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Nourseothricin dihydrogen sulphate ≥85 %, for biochemistry and microbiology

article number: 3011

Abbr.	Descriptions of used abbreviations
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	short-term exposure limit
TWA	time-weighted average
vPvB	very Persistent and very Bioaccumulative
WEL	workplace exposure limit

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EÚ GHS)

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H302	harmful if swallowed
H315	causes skin irritation
H319	causes serious eye irritation
H335	may cause respiratory irritation

Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

United Kingdom (en) Page 11 / 11