

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Bismuth(III) nitrate**

Print date: 26.08.2015

Product code: 3L-038

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Bismuth(III) nitrate

CAS No: 1304-85-4

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Use as laboratory reagent

1.3. Details of the supplier of the safety data sheet

Company name: Waldeck GmbH & Co KG
Division Chroma
Street: Havixbecker Str. 62
Place: D-48161 Münster
Post-office box: 410180
D-48065 Münster
Telephone: +49(0)180/2247662 Telefax: +49(0)180/1247662
Responsible Department: Labor
Mo. – Do.: 08.00 – 17.00 Uhr, Fr.: 08.00 – 15.00 Uhr
1.4. Emergency telephone number: +49(0)180/2247662

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Oxidising liquid: Ox. Liq. 2

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

May intensify fire; oxidiser.

May cause respiratory irritation.

Causes serious eye irritation.

Causes skin irritation.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazardous components which must be listed on the label**

Bismuth-(III) nitrate

Signal word: Danger

Pictograms:

**Hazard statements**

H272 May intensify fire; oxidiser.
H335 May cause respiratory irritation.
H319 Causes serious eye irritation.
H315 Causes skin irritation.

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Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of 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.
P312 Call a POISON CENTER/doctor if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.1. Substances****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
1304-85-4	Bismuth-(III) nitrate			100 %
	215-136-8			
	Ox. Liq. 2, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H272 H315 H319 H335			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink plenty of water.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Hazardous combustion products.

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5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid generation of dust. Do not breathe dust.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep away from sources of ignition. - No smoking.

Advice on storage compatibility

No special measures are necessary.

7.3. Specific end use(s)

Use as laboratory reagent

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****8.2. Exposure controls****Protective and hygiene measures**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the



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supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	colourless
Odour:	odourless

Test method

pH-Value (at 20 °C):	~ 3,2
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Changes in the physical state

Melting point:	500 °C
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Initial boiling point and boiling range:	not determined
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Flash point:	not applicable
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Flammability

Solid:	not determined
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Gas:	not applicable
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Lower explosion limits:	not determined
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Upper explosion limits:	not determined
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Auto-ignition temperature

Solid:	not determined
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Gas:	not applicable
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Decomposition temperature:	not determined
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Oxidizing properties

Not oxidizing.

Vapour pressure:	not determined
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Density (at 20 °C):	4,93 g/cm³
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Water solubility: (at 20 °C)	practically insoluble
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Solubility in other solvents

not determined

Partition coefficient:	not determined
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Vapour density:	not determined
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Evaporation rate:	not determined
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9.2. Other information

Solid content:	not determined
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SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

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Moisture-sensitive.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Additional information on tests**

This substance is classified as not hazardous according to 67/548/EEC.

SECTION 12: Ecological information**12.1. Toxicity**

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:** UN 1477**14.2. UN proper shipping name:** NITRATES, INORGANIC, N.O.S. (Bismut(III)-Nitrat)**14.3. Transport hazard class(es):** 5.1**14.4. Packing group:** II



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Hazard label:

5.1



Classification code:

O2

Special Provisions:

511

Limited quantity:

1 kg

Excepted quantity:

E2

Transport category:

2

Hazard No:

50

Tunnel restriction code:

E

Inland waterways transport (ADN)14.1. UN number:

UN 1477

14.2. UN proper shipping name:

NITRATES, INORGANIC, N.O.S. (Bismut(III)-Nitrat)

14.3. Transport hazard class(es):

5.1

14.4. Packing group:

II

Hazard label:

5.1



Classification code:

O2

Special Provisions:

511

Limited quantity:

1 kg

Excepted quantity:

E2

Marine transport (IMDG)14.1. UN number:

UN 1477

14.2. UN proper shipping name:

NITRATES, INORGANIC, N.O.S. (Bismuth(III) nitrate)

14.3. Transport hazard class(es):

5.1

14.4. Packing group:

II

Hazard label:

5.1



Special Provisions:

-

Limited quantity:

1 kg

Excepted quantity:

E2

EmS:

F-A, S-Q

Air transport (ICAO)14.1. UN number:

UN 1477

14.2. UN proper shipping name:

NITRATES, INORGANIC, N.O.S. (Bismuth(III) nitrate)

14.3. Transport hazard class(es):

5.1

14.4. Packing group:

II

Hazard label:

5.1



Special Provisions:

A3 A803

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Limited quantity Passenger:	2.5 kg
Passenger LQ:	Y544
Excepted quantity:	E2
IATA-packing instructions - Passenger:	558
IATA-max. quantity - Passenger:	5 kg
IATA-packing instructions - Cargo:	562
IATA-max. quantity - Cargo:	25 kg

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information****Additional information**

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC)..

National regulatory information

Water contaminating class (D): 3 - highly water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H272	May intensify fire; oxidiser.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Further Information

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.