Safety Data Sheet
Murin Facoum Pasta

Safety Data Sheet dated 20/5/2021, version 2

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

1.1. Product identifier

Mixture identification:
Trade name: Murin Facoum Pasta

Authorization of Ministry of Health n° : Italian authorization n° IT/2015/00262/AUT

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

Recommended use:
rodenticide
Uses advised against:
All uses not listed in the Recommended uses

1.3. Details of the supplier of the safety data sheet

Company:
VEBI ISTITUTO BIOCHIMICO SRL
Via Desman, 43 - 35010 Borgoricco (PD)
Tel. +39 049 9337111 - www.vebi.it

Competent person responsible for the safety data sheet:
info@vebi.it

1.4. Emergency telephone number

United Kingdom Emergency number: 111
Ireland National Poisons Information Centre: 353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week). Healthcare Professionals: +353 (1) 809 2566 (24 hour service)
VEBI ISTITUTO BIOCHIMICO customer service: Tel. +39 49 9337111 8:00-12:00- 13:00-17:00

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Danger, Repr. 1A, May damage the unborn child.

Warning, STOT RE 2, May cause damage to organs (blood) through prolonged or repeated exposure.

Adverse physicochemical, human health and environmental effects:
No other hazards

2.2. Label elements

Hazard pictograms:

Danger

Hazard statements:

H360D May damage the unborn child.

H373 May cause damage to organs (blood) through prolonged or repeated exposure.

Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves.

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

P501 Dispose of contents and container in accordance with national regulation.

Special Provisions:

None

Contains

brodifacoum (ISO);

4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin

Special provisions according to Annex XVII of REACH and subsequent amendments:

Restricted to professional users.

2.3. Other hazards

PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%:

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
500 ppm	bronopol (INN); 2-bromo-2-nitropropane-1,3-diol	Index number: 603-085-00-8 CAS: 52-51-7 EC: 200-143-0 REACH No.: 01-21199809 38-15-XXXX	3.8/3 STOT SE 3 H335 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 M=10. 3.1/4/Oral Acute Tox. 4 H302 3.1/4/Dermal Acute Tox. 4 H312
50 ppm	brodifacoum (ISO); 4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin	Index number: 607-172-00-1 CAS: 56073-10-0 EC: 259-980-5	3.1/1/Inhal Acute Tox. 1 H330 3.7/1A Repr. 1A H360D 3.1/1/Dermal Acute Tox. 1

			H310 3.1/1/Oral Acute Tox. 1 H300 3.9/1 STOT RE 1 H372 4.1/A1 Aquatic Acute 1 H400 M=10. 4.1/C1 Aquatic Chronic 1 H410 M=10. Specific Concentration Limits: C >= 0,003%: Repr. 1A H360D C >= 0,02%: STOT RE 1 H372 0,002% <= C < 0.02%: STOT RE 2 H373
10 ppm	Denatonium Benzoate	CAS: 3734-33-6 EC: 223-095-2	3.1/4/Oral Acute Tox. 4 H302 3.1/2/Inhal Acute Tox. 2 H330 3.3/1 Eye Dam. 1 H318
2 ppm	2,3-Butanedione	CAS: 431-03-8 EC: 207-069-8	2.6/2 Flam. Liq. 2 H225 3.1/3/Inhal Acute Tox. 3 H331 3.1/4/Oral Acute Tox. 4 H302 3.9/2 STOT RE 2 H373 3.3/1 Eye Dam. 1 H318 3.2/2 Skin Irrit. 2 H315 3.4.2/1 Skin Sens. 1 H317
494 ppb	propionic acid	Index number: 607-089-00-0 CAS: 79-09-4 EC: 201-176-3	3.2/1B Skin Corr. 1B H314 Specific Concentration Limits: C >= 25%: Skin Corr. 1B H314 10% <= C < 25%: Skin Irrit. 2 H315 10% <= C < 25%: Eye Irrit. 2 H319 C >= 10%: STOT SE 3 H335
494 ppb	acetophenone	Index number: 606-042-00-1 CAS: 98-86-2 EC: 202-708-7	3.3/2 Eye Irrit. 2 H319 3.1/4/Oral Acute Tox. 4 H302

SVHC, PBT, vPvB, endocrine disruptor substances:
50 ppm brodifacoum (ISO);
4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin
Index number: 607-172-00-1, CAS: 56073-10-0, EC: 259-980-5
PBT

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash with plenty of water and soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediatley and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Active ingredient is a so-called second generation anticoagulant rodenticide, which like other Coumarin derivatives, is a vitamin K antagonist. It disrupts the normal blood clotting mechanisms resulting in profuse internal haemorrhage and death.

- Harmful to skin contact; could be absorbed and cause internal hemorrhage.
- Harmful if swallowed; serious risk of internal hemorrhage
- Harmful if inhaled; serious risk of internal hemorrhage
- Soil and water could be contaminated.
- Symptoms may be associated to increased bleeding tendency.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
The anticoagulant rodenticide active substances work by blocking the regeneration of vitamin K 2,3-epoxide to vitamin K hydroquinone. Since, the amount of vitamin K in the body is finite, the progressive block of the regeneration of vitamin K will lead to an increasing probability of a fatal hemorrhage.
1.To check the prothrombinic activity many times, also after a few days, particularly if the quantity swallowed is high. Diagnosis: changes in prothrombin time (symptoms and clotting tests)
2.Treatment: vitamin K1.
3. In animals and particularly in pets, vitamin K1 can be given even in absence of alterations of the coagulation, because of the gravity of the hemorrhage which can appear in case of ingestion.

Other Medical data:
No significant effects caused by active ingredient in personnel with occupational exposure have been observed.

Vitamin K. Antidote

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water.
Carbon dioxide (CO2).
CO2 or Dry chemical fire extinguisher.
Extinguishing media which must not be used for safety reasons:
direct water jets

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.
Do not inhale explosion and combustion gases.
Hazardous combustion products:
Carbon monoxide
Inorganic acid gases

5.3. Advice for firefighters

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Use suitable breathing apparatus .

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.

6.3. Methods and material for containment and cleaning up

For cleaning up:
Wet clean or vacuum up solids.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Advice on general occupational hygiene:
Do not eat, drink or smoke when using this product.
Contamined clothing should be changed before entering eating areas.
Wash hands after use

7.2. Conditions for safe storage, including any incompatibilities

Avoid temperatures > 40°C
Avoid light and sunlight exposure
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Keep away from water or from damp surroundings.
Instructions as regards storage premises:
Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

brodifacoum (ISO);
4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin - CAS: 56073-10-0
- OEL Type: TWA - TWA: 0.002 mg/m3
- OEL Type: ACGIH - TWA: 0.002 mg/m3
- OEL Type: OSHA - TWA: 0.008 mg/m3

2,3-Butanedione - CAS: 431-03-8
- OEL Type: EU - TWA(8h): 0.07 mg/m3, 0.02 ppm - STEL: 0.36 mg/m3, 0.1 ppm
- OEL Type: ACGIH - TWA(8h): 0.01 ppm - STEL: 0.02 ppm - Notes: A4 - Lung dam (Bronchiolitis obliterans-like illness)

propionic acid - CAS: 79-09-4
- OEL Type: EU - TWA(8h): 31 mg/m3, 10 ppm - STEL: 62 mg/m3, 20 ppm
- OEL Type: ACGIH - TWA(8h): 10 ppm - Notes: Eye, skin and URT irr

acetophenone - CAS: 98-86-2
- OEL Type: ACGIH - TWA(8h): 10 ppm - Notes: URT irr, CNS impair, pregnancy loss

DNEL Exposure Limit Values

brodifacoum (ISO);
4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin - CAS: 56073-10-0
Consumer: 0.0000033 mg/kg - Exposure: Human Oral

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

For the choice of personal protection equipment, refer to the risk assessment carried out by the user in compliance with the national legislation on safety in the workplace.

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Wear category III professional long-sleeved work clothes and safety footwear (ref. Reg. (EU) 2016/425 and EN ISO 20344 standard). In the event that large quantities of product are used, type 6 (or greater) protective overalls (ref. UNI EN13034) are recommended.

Protection for hands:

UNI EN 374 (PF 3)
NBR (nitrile rubber).
PVC (polyvinyl chloride).

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

Do not get into drains, soil or any water body
Place the product out of the reach of children, birds, pets, farm animals and other non-target animals.

Appropriate engineering controls:

Notes (Irish Regulation):
Professional and Trained Professional users: this product should only be used in accordance with a code of best practice such as the CRRU Ireland Best Practice Requirements for Rodent Control and Safe Use of Rodenticides. Follow any additional instructions in that code of best practice.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Solid	--	--
Colour:	blue	--	--
Odour:	butter	--	--
Melting point/freezing point:	Not Relevant	--	--
Boiling point or initial boiling point and boiling range:	Not Relevant	--	--
Flammability:	N.A.	--	--
Lower and upper explosion limit:	Not Relevant	--	--
Flash point:	Not Relevant	--	--
Auto-ignition temperature:	373 °C	Regulation (EC) No. 440/2008, Annex, A.16	--
Decomposition temperature:	Not Relevant	--	--
pH:	7.1	Cipac MT 75.3	The measurement of the pH of a 1% w/v aqueous suspension is not considered relevant due to either nature and use of the product (ready to-use solid,not intended for dissolution/ emulsion/ dispersion in water).
Kinematic viscosity:	Not Relevant	--	--
Solubility in water:	Non soluble	--	--
Solubility in oil:	Not soluble	--	--
Partition coefficient n-octanol/water (log value):	Not Relevant	--	--
Vapour pressure:	Not Relevant	--	--
Density and/or relative density:	1.154 g/ml	OECD 109	--
Relative vapour density:	Not Relevant	--	--
Particle characteristics:			
Particle size (average and range)	Not Relevant	--	--

9.2. Other information

Properties	Value	Method:	Notes
Explosive properties:	Not explosive	Regulation (EC) No. 440/2008, Annex, A.14	--
Oxidizing properties:	Not oxidant	CHETAH 7.3 (ASTM 2002)	--

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions

10.2. Chemical stability
Stable under normal conditions

10.3. Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions do not occur.

10.4. Conditions to avoid
Stable under normal conditions.

10.5. Incompatible materials
None in particular.

10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Toxicological information of the product:

Murin Facoum Pasta

a) acute toxicity
- Not classified
- Based on available data, the classification criteria are not met

b) skin corrosion/irritation
- Not classified
- Based on available data, the classification criteria are not met
- Test: Eye Corrosive Negative
- Test: Skin Corrosive Negative

c) serious eye damage/irritation
- Not classified
- Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation
- Not classified
- Based on available data, the classification criteria are not met

e) germ cell mutagenicity
- Not classified
- Based on available data, the classification criteria are not met

f) carcinogenicity
- Not classified
- Based on available data, the classification criteria are not met

g) reproductive toxicity
- The product is classified: Repr. 1A H360D

h) STOT-single exposure
- Not classified
- Based on available data, the classification criteria are not met

i) STOT-repeated exposure
- The product is classified: STOT RE 2 H373

j) aspiration hazard
- Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

bronopol (INN); 2-bromo-2-nitropropane-1,3-diol - CAS: 52-51-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 307 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 0.588 mg/l - Duration: 4h

b) skin corrosion/irritation:

Test: Eye Corrosive Positive

Test: Skin Irritant Positive

e) germ cell mutagenicity:

Test: Mutagenesis Negative

f) carcinogenicity:

Test: Carcinogenicity Negative

g) reproductive toxicity:

Test: Reproductive Toxicity Negative

brodifacoum (ISO);
4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin - CAS: 56073-10-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 0.4 N.A.

Test: LD50 - Route: Skin - Species: Rat > 3.2 mg/kg bw

Test: LC50 - Route: Inhalation - Species: Rat = 3.05 mg/m3 - Duration: 4h

Denatonium Benzoate - CAS: 3734-33-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 749 N.A.

Test: LD50 - Route: Inhalation - Species: Rat = 0.2 mg/l

Test: LD50 - Route: Skin - Species: Rat > 2000 N.A.

c) serious eye damage/irritation:

Test: Eye Irritant - Route: Eyes Positive

2,3-Butanedione - CAS: 431-03-8

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit > 5 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 1580 mg/kg

propionic acid - CAS: 79-09-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 3500 mg/kg

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive

c) serious eye damage/irritation:

Test: Eye Corrosive - Route: Oral - Species: Rabbit Positive

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Murin Facoum Pasta

Not classified for environmental hazards

Based on available data, the classification criteria are not met
bronopol (INN); 2-bromo-2-nitropropane-1,3-diol - CAS: 52-51-7
a) acute toxicity::
Endpoint: EC50 - Species: Algae = 0.068 mg/l - Duration h: 72 - Notes: Anabaena flos aqua
Endpoint: EC50 - Species: Daphnia = 1.04 mg/l - Duration h: 48 - Notes: Daphnia magna
Endpoint: LC50 - Species: Fish = 3.0 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Algae = 0.0025 mg/l - Duration h: 72 - Notes: Anabaena flos aqua
Endpoint: NOEC - Species: Fish = 2.61 mg/l - Duration h: 672 - Notes: Oncorhynchus mykiss
Endpoint: NOEC - Species: Daphnia = 0.06 mg/l - Duration h: 504 - Notes: Daphnia magna
brodifacoum (ISO); 4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin - CAS: 56073-10-0
a) acute toxicity::
Endpoint: LC50 - Species: Fish = 0.04 mg/l - Duration h: 96
Endpoint: LC50 - Species: Daphnia = 0.25 mg/l - Duration h: 48
Endpoint: LC50 - Species: earthworm > 994 mg/kg - Duration h: 336
Endpoint: ErC50 - Species: Algae = 0.04 mg/l - Duration h: 72
Endpoint: LD50 - Species: birds = 0.31 mg/kg bw
Endpoint: NOEC - Species: birds = 0.0038 mg/kg
Endpoint: EC10 - Species: activated sludge > 0.058 mg/l - Duration h: 3
d) Terrestrial toxicity:
Endpoint: LC50 - Species: birds = 0.72 mg/kg bw
propionic acid - CAS: 79-09-4
a) acute toxicity::
Endpoint: LC50 - Species: Fish = 51-72.2 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss
Endpoint: EC50 - Species: Daphnia = 21 mg/l - Duration h: 48

12.2. Persistence and degradability

bronopol (INN); 2-bromo-2-nitropropane-1,3-diol - CAS: 52-51-7
Test: CO2 production - %: 70 - Notes: (OECD 301 B (mod. -Sturm- Test))
Test: OECD 314 - %: 63.5
brodifacoum (ISO);
4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin - CAS: 56073-10-0
Biodegradability: Non-readily biodegradable

12.3. Bioaccumulative potential

bronopol (INN); 2-bromo-2-nitropropane-1,3-diol - CAS: 52-51-7
Test: BCF - Bioconcentrantion factor 3.16 - Notes: calculated (EPIWIN)
Test: Kow - Partition coefficient 0.38 - Notes: (Log Kow n-octanol/water OECD 107)
brodifacoum (ISO);
4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin - CAS: 56073-10-0
Bioaccumulative - Test: BCF - Bioconcentrantion factor 35134 - Notes: Calculated according to TGD eq. 75, using log Kow = 6.12

12.4. Mobility in soil

brodifacoum (ISO);
4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin - CAS: 56073-10-0
Mobile - Test: Koc 91551 - Duration h: 157d

12.5. Results of PBT and vPvB assessment

PBT Substances:
50 ppm brodifacoum (ISO);
4-hydroxy-3-(3-(4'-bromo-4-biphenylyl)-1,2,3,4-tetrahydro-1-naphthyl)coumarin - CAS: 56073-10-0
vPvB Substances: None

12.6. Endocrine disrupting properties
No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:
Dispose of unused product and packaging as hazardous waste.
Notes (Irish Regulation):
In case of rodenticides: At the end of the treatment, dispose of uneaten bait and the packaging in accordance with EPA requirements for the disposal of hazardous waste. Use of gloves is recommended.
Professional and Trained Professional users: dispose of dead rodents in accordance with local requirements, using one of the following methods of disposal (in order of preference): via an on-site or on-farm small carcass incinerator; with the site's or farm's domestic waste; in the site's or farm's normal non-hazardous waste; or by burial on-site, but away from sensitive areas.
Rodents can be disease carriers. Do not touch dead rodents with bare hands, use gloves or use tools such as tongs when disposing them.

SECTION 14: Transport information

14.1. UN number or ID number
Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name
N.A.

14.3. Transport hazard class(es)
N.A.

14.4. Packing group
N.A.

14.5. Environmental hazards
ADR-Enviromental Pollutant: No
IMDG-Marine pollutant: No

14.6. Special precautions for user
N.A.

14.7. Maritime transport in bulk according to IMO instruments
N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:
Restriction 40
Restrictions related to the substances contained:
Restriction 30

Regulation (EU) n. 528/2012

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H335 May cause respiratory irritation.
H315 Causes skin irritation.
H318 Causes serious eye damage.

H400 Very toxic to aquatic life.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H330 Fatal if inhaled.
H360D May damage the unborn child.
H310 Fatal in contact with skin.
H300 Fatal if swallowed.
H372 Causes damage to organs (blood) through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H225 Highly flammable liquid and vapour.
H331 Toxic if inhaled.
H317 May cause an allergic skin reaction.
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.

Hazard class and hazard category	**Code**	**Description**
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 1	3.1/1/Dermal	Acute toxicity (dermal), Category 1
Acute Tox. 1	3.1/1/Inhal	Acute toxicity (inhalation), Category 1
Acute Tox. 1	3.1/1/Oral	Acute toxicity (oral), Category 1
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Repr. 1A	3.7/1A	Reproductive toxicity, Category 1A
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 1	3.9/1	Specific target organ toxicity - repeated exposure, Category 1
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 5: Firefighting measures
SECTION 6: Accidental release measures
SECTION 7: Handling and storage

SECTION 8: Exposure controls/personal protection
SECTION 9: Physical and chemical properties
SECTION 10: Stability and reactivity
SECTION 11: Toxicological information
SECTION 12: Ecological information
SECTION 14: Transport information
SECTION 15: Regulatory information
SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Repr. 1A, H360D	Calculation method
STOT RE 2, H373	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.

PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.