

Safety Data Sheet

according to UK REACH Regulation

Mixture II

Revision date: 24.05.2022

Product code: 32005

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

1.1. Product identifier

Mixture II

UFI: 8SMU-22E9-100R-SXP1

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

1.3. Details of the supplier of the safety data sheet

Company name:	Fa. Bernd Kraft GmbH	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
e-mail:	info@berndkraft.de	
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
e-mail:	produktsicherheit@berndkraft.de	
Internet:	www.berndkraft.de	
Responsible Department:	Abteilung Produktsicherheit	

1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Ox. Sol. 2; H272
Acute Tox. 4; H302
Eye Dam. 1; H318
Resp. Sens. 1; H334
Skin Sens. 1; H317
Muta. 2; H341
Carc. 1B; H350i
Repr. 1B; H360F
Aquatic Acute 1; H400
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

cobalt (II) nitrate hexahydrate

Signal word: Danger

Pictograms:



Hazard statements

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

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H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.
H350i	May cause cancer by inhalation.
H360F	May damage fertility.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P201	Obtain special instructions before use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

Special labelling of certain mixtures

Restricted to professional users.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No Index No REACH No	
	Classification (GB CLP Regulation)	
10026-22-9	cobalt (II) nitrate hexahydrate	95 - < 100 %
	233-402-1 027-009-00-2 01-2119542530-49	
	Ox. Sol. 2, Carc. 1B, Muta. 2, Repr. 1B, Acute Tox. 4, Eye Dam. 1, Resp. Sens. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H272 H350i H341 H360F H302 H318 H334 H317 H400 H410	
7782-61-8	Iron(III) nitrate nonahydrate	5 - < 10 %
	233-899-5	
	Ox. Sol. 3, Skin Irrit. 2, Eye Irrit. 2; H272 H315 H319	

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
10026-22-9	233-402-1	cobalt (II) nitrate hexahydrate	95 - < 100 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = 691 mg/kg Carc. 1B; H350i: >= 0,01 - 100 M acute; H400: M=10 M chron.; H410: M=10	
7782-61-8	233-899-5	Iron(III) nitrate nonahydrate	5 - < 10 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Provide adequate ventilation.
- Use personal protection equipment.
- Avoid contact with skin, eyes and clothes.
- Remove persons to safety.
- Emergency procedures
- Consult an expert
- Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

6.3. Methods and material for containment and cleaning up

For containment

- Cover drains.
- Prevent spread over a wide area (e.g. by containment or oil barriers).
- Collect in closed and suitable containers for disposal.
- Take up carefully when dry. Take up dust-free and set down dust-free.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

- Provide adequate ventilation.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

7.2. Conditions for safe storage, including any incompatibilities

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
10026-22-9	cobalt (II) nitrate hexahydrate			
Consumer DNEL, long-term		oral	systemic	0,093 mg/kg bw/day
7782-61-8	Iron(III) nitrate nonahydrate			
Worker DNEL, long-term		inhalation	systemic	12 mg/m ³
Worker DNEL, long-term		dermal	systemic	17 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	3 mg/m ³
Consumer DNEL, long-term		dermal	systemic	8,6 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	1,2 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
10026-22-9	cobalt (II) nitrate hexahydrate	
Freshwater		0,00062 mg/l
Marine water		0,00236 mg/l
Freshwater sediment		53,8 mg/kg
Marine sediment		69,8 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,37 mg/l
Soil		10,9 mg/kg
7782-61-8	Iron(III) nitrate nonahydrate	
Freshwater		0,024 mg/l
Freshwater (intermittent releases)		0,24 mg/l
Marine water		0,002 mg/l
Freshwater sediment		0,2 mg/kg
Marine sediment		0,02 mg/kg
Micro-organisms in sewage treatment plants (STP)		500 mg/l
Soil		0,026 mg/kg

8.2. Exposure controls

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid	
Colour:	red	
Odour:	No data available	
Flash point:		X
Density:		No data available

SECTION 10: Stability and reactivity

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 727,4 mg/kg

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
10026-22-9	cobalt (II) nitrate hexahydrate				
	oral	LD50 691 mg/kg	Rat	Fd Chem. Toxic, Vol. 20:311-314. (1982)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2007)	OECD Guideline 402
7782-61-8	Iron(III) nitrate nonahydrate				
	oral	LD50 > 2000 mg/kg	Rat	Study report (2002)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2004)	OECD Guideline 402

Irritation and corrosivity

Causes serious eye damage.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (cobalt (II) nitrate hexahydrate)

May cause an allergic skin reaction. (cobalt (II) nitrate hexahydrate)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (cobalt (II) nitrate hexahydrate)

May cause cancer by inhalation. (cobalt (II) nitrate hexahydrate)

May damage fertility. (cobalt (II) nitrate hexahydrate)

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
10026-22-9	cobalt (II) nitrate hexahydrate					
	Acute fish toxicity	LC50 mg/l	54,1	96 h	Pimephales promelas	Study report (2009) other: ASTM guideline
	Acute algae toxicity	ErC50 mg/l	71,314	96 h	Dunaliella tertiolecta	Study report (2010) other: American Society for Testing and
	Acute crustacea toxicity	EC50 mg/l	42,7	48 h	Aeolosoma sp.	Study report (2008) Newman, J.P., Jr. 1975. The effects of h
	Fish toxicity	NOEC mg/l	0,21	34 d	Pimephales promelas	Study report (2009) other: This study was conducted accordin
	Algae toxicity	NOEC mg/l	0,0018	7 d	Champia parvula	Study report - model refit from original other: EPA 821-R- 02-014, Method 1009.0
	Crustacea toxicity	NOEC mg/l	0,1697	14 d	Aeolosoma sp.	Study report (2008) other: Newman, J.P., Jr. 1975. The effec
	Acute bacteria toxicity	(EC50 mg/l)	120	0,5 h	Activated sludge	Study report (2010) OECD Guideline 209
7782-61-8	Iron(III) nitrate nonahydrate					
	Acute fish toxicity	LC50 mg/l	1010	96 h	Pimephales promelas	Scott, G. & Crunkilton, R. (2000). Acute The study was not carried out to any spe
	Acute algae toxicity	ErC50	130 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (2002) OECD Guideline 201
	Acute crustacea toxicity	EC50	611 mg/l	48 h	Daphnia magna	Scott, G. & Crunkilton, R. (2000). Acute The study was not carried out to any spe
	Fish toxicity	NOEC	1,6 mg/l	146 d	Salvelinus namaycush	McGurk, M., Landry, F., Tang, A. & Hanks No specific guideline followed. However,
	Crustacea toxicity	NOEC	8,1 mg/l	21 d	Daphnia magna	Study report (2002) OECD Guideline 211

12.3. Bioaccumulative potential

BCF

CAS No	Chemical name	BCF	Species	Source
10026-22-9	cobalt (II) nitrate hexahydrate	23	Asterias rubens	Marine Pollution Bul

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

SECTION 14: Transport information

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Land transport (ADR/RID)

14.1. UN number or ID number: UN 1477
14.2. UN proper shipping name: NITRATES, INORGANIC, N.O.S.
14.3. Transport hazard class(es): 5.1
14.4. Packing group: III
 Hazard label: 5.1
 Classification code: O2
 Special Provisions: 511
 Limited quantity: 5 kg
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 50
 Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1477
14.2. UN proper shipping name: NITRATES, INORGANIC, N.O.S.
14.3. Transport hazard class(es): 5.1
14.4. Packing group: III
 Hazard label: 5.1
 Classification code: O2
 Special Provisions: 511
 Limited quantity: 5 kg
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 1477
14.2. UN proper shipping name: NITRATES, INORGANIC, N.O.S.
14.3. Transport hazard class(es): 5.1
14.4. Packing group: III
 Hazard label: 5.1
 Special Provisions: 223
 Limited quantity: 5 kg
 Excepted quantity: E1
 EmS: F-A, S-Q

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1477
14.2. UN proper shipping name: NITRATES, INORGANIC, N.O.S.
14.3. Transport hazard class(es): 5.1
14.4. Packing group: III
 Hazard label: 5.1
 Special Provisions: A3 A803
 Limited quantity Passenger: 10 kg
 Passenger LQ: Y546
 Excepted quantity: E2
 IATA-packing instructions - Passenger: 559
 IATA-max. quantity - Passenger: 25 kg
 IATA-packing instructions - Cargo: 563
 IATA-max. quantity - Cargo: 100 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No
 Danger releasing substance: Cobaltdinitrate

SECTION 15: Regulatory information

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

EU regulatory information

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):
cobalt (II) nitrate hexahydrate

National regulatory information

Water hazard class (D): 3 - highly hazardous to water

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,9,11.

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Ox. Sol. 2; H272	On basis of test data
Acute Tox. 4; H302	Calculation method
Eye Dam. 1; H318	Calculation method
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method
Muta. 2; H341	Calculation method
Carc. 1B; H350i	Calculation method
Repr. 1B; H360F	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H and EUH statements (number and full text)

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.
H350i	May cause cancer by inhalation.
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)