

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reference number: M0304

Issue date: 03/10/2024 Revision date: 03/10/2024 Supersedes version of: 11/09/2024 Version: 2.1

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

### 1.1. Product identifier

Product form	: Mixture
Trade name	: Macro-salt mixture Gamborg's B5 Medium
Product code	: M0304
Synonyms	: Macro-salt mixture as used in Gamborg's B5 Medium (G0210)
Product group	: Blend

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

#### 1.2.1. Relevant identified uses

Main use category	: Professional use
Industrial/Professional use spec	: For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

Duchefa Biochemie B.V.  
A. Hofmanweg 71  
2031 BH Haarlem  
The Netherlands  
T +31(0)23-5319093 - F +31(0)23-5318027  
[info@duchefa.nl](mailto:info@duchefa.nl)

### 1.4. Emergency telephone number

Emergency number	: Supplier contact information: +31(0)23-5319093 (M-F 09:00-17:00) +31(0)6-30008100 (outside office hours)
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Country	Organisation/Company	Address	Emergency number	Comment
	World Health Organization world directory of poison centres	<a href="http://apps.who.int/poisoncentres/">http://apps.who.int/poisoncentres/</a>		Consult website for a local poison centre
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2 H319

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

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### Adverse physicochemical, human health and environmental effects

Causes serious eye irritation.

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS07

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H319 - Causes serious eye irritation.

Precautionary statements (CLP)

: P280 - Wear eye protection.

P337+P313 - If eye irritation persists: Get medical advice/attention.

Extra phrases

: Based on research by TNO in Rijswijk (The Netherlands), commissioned by Duchefa Biochemie B.V. in Haarlem, the medium has no oxidising or explosive properties. As such the substance is not classified as oxidizing (H272, GHS03).

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

The substance/mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium nitrate	CAS-No.: 7757-79-1 EC-No.: 231-818-8 REACH-no: 01-2119488224-35	39,09	Ox. Sol. 2, H272
Potassium dihydrogenphosphate	CAS-No.: 7778-77-0 EC-No.: 231-913-4 REACH-no: 01-2119490224-41	14,79	Not classified
Ammonium sulphate	CAS-No.: 7783-20-2 EC-No.: 231-984-1 REACH-no: 01-2119455044-46-xxxx	13,4	Not classified
Magnesium sulphate anhydrous	CAS-No.: 7487-88-9 EC-No.: 231-298-2	12,16	Not classified

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcium chloride	CAS-No.: 10043-52-4 EC-No.: 233-140-8 EC Index-No.: 017-013-00-2 REACH-no: 01-2119494219-28	11,32	Eye Irrit. 2, H319
Sodium nitrate	CAS-No.: 7631-99-4 EC-No.: 231-554-3	9,24	Ox. Sol. 3, H272 Eye Irrit. 2, H319

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

- Symptoms/effects after eye contact : Eye irritation.

### 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 : Water spray. Dry powder. Foam.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : - COx. - NOx. - SOx. - POx.

### 5.3. Advice for firefighters

- Firefighting instructions : Prevent fire fighting water from entering the environment.  
Protection during firefighting : Wear proper protective equipment. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid raising powdered materials into airborne dust.

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Wear suitable protective clothing. Avoid contact with skin and eyes.

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### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. Sweep up dry powder and dispose properly.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid dust formation. Handle in accordance with good industrial hygiene and safety procedures. Avoid contact with skin and eyes. Wear personal protective equipment.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store at room temperature. Store in dry, well-ventilated area. Hygroscopic.

### 7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

#### Calcium chloride (10043-52-4)

##### Czech Republic - Occupational Exposure Limits

Local name	Chlorid vápenatý
PEL (OEL TWA)	2 mg/m <sup>3</sup>
NPK-P (OEL C)	4 mg/m <sup>3</sup>
Remark	I - dráždí sliznice (oči, dýchací cesty) resp. kůži.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 330/2023 Sb.)

##### Latvia - Occupational Exposure Limits

Local name	Kalcija hlorīds
OEL TWA	2 mg/m <sup>3</sup>
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)

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Ammonium sulphate (7783-20-2)	
<b>Bulgaria - Occupational Exposure Limits</b>	
Local name	Амониев сулфат
OEL TWA	10 mg/m <sup>3</sup>
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
<b>Latvia - Occupational Exposure Limits</b>	
Local name	Hroma-amonija sulfāts, pēc Cr (hroma-amonija alauns)
OEL TWA	0,02 mg/m <sup>3</sup>
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)
Potassium nitrate (7757-79-1)	
<b>Bulgaria - Occupational Exposure Limits</b>	
Local name	Калиев нитрат
OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
<b>Latvia - Occupational Exposure Limits</b>	
Local name	Kālija nitrāts
OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)
<b>Lithuania - Occupational Exposure Limits</b>	
Local name	Kalio nitratas
IPRV (OEL TWA)	5 mg/m <sup>3</sup>
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

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### 8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses	Dust		EN 166

#### 8.2.2.2. Skin protection

**Skin and body protection:**

In case of possible repeated skin contact wear protective clothing

**Hand protection:**

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11		EN ISO 374

#### 8.2.2.3. Respiratory protection

Respiratory protection			
Device	Filter type	Condition	Standard
Dust mask	Type P1	Dust protection	EN 143

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: White to slightly yellow.
Appearance	: Powder.
Odour	: Characteristic. Weak.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable

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Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Readily soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions of storage, handling and use.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Moisture.

### 10.5. Incompatible materials

Strong oxidizers.

### 10.6. Hazardous decomposition products

Thermal decomposition generates : - COx. - NOx. - SOx. - POx.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Sodium nitrate (7631-99-4)	
LD50 oral rat	≈ 3430 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 5000 mg/kg Source: ECHA

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<b>Sodium nitrate (7631-99-4)</b>	
LC50 Inhalation - Rat (Dust/Mist)	> 5 mg/l Source: OSHRI GLP toxicity test
<b>Calcium chloride (10043-52-4)</b>	
LD50 oral	2120 mg/kg bodyweight Animal: rat
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit
<b>Magnesium sulphate anhydrous (7487-88-9)</b>	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: other:
<b>Ammonium sulphate (7783-20-2)</b>	
LD50 oral rat	2840 mg/kg
LD50 oral	640 mg/kg (mouse)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 434 (Acute Dermal Toxicity - Fixed Dose Procedure)
<b>Potassium dihydrogenphosphate (7778-77-0)</b>	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LC50 Inhalation - Rat	> 0,83 mg/l air Animal: rat, Guideline: EPA OPP 81-3 (Acute inhalation toxicity), Guideline: other:, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: other:
<b>Potassium nitrate (7757-79-1)</b>	
LD50 oral rat	> 2000 mg/kg OECD 425
LD50 oral	> 2000 mg/kg bodyweight Animal:
LD50 dermal rat	> 5000 mg/kg OECD 402
LC50 Inhalation - Rat	> 0,527 mg/l/4h OECD 403
Skin corrosion/irritation	: Not classified
<b>Sodium nitrate (7631-99-4)</b>	
pH	5,5 Source: GESTIS
<b>Calcium chloride (10043-52-4)</b>	
pH	≥ 8 – ≤ 10
<b>Potassium dihydrogenphosphate (7778-77-0)</b>	
pH	≈ 4,4 (50 g/l, 20 °C)
<b>Potassium nitrate (7757-79-1)</b>	
pH	0 (5 – 7,5) (50 g/l at 20 °C)
Serious eye damage/irritation	: Causes serious eye irritation.



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<b>Sodium nitrate (7631-99-4)</b>	
pH	5,5 Source: GESTIS
<b>Calcium chloride (10043-52-4)</b>	
pH	≥ 8 – ≤ 10
<b>Potassium dihydrogenphosphate (7778-77-0)</b>	
pH	≈ 4,4 (50 g/l, 20 °C)
<b>Potassium nitrate (7757-79-1)</b>	
pH	0 (5 – 7,5) (50 g/l at 20 °C)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
<b>Ammonium sulphate (7783-20-2)</b>	
NOAEL (chronic, oral, animal/male, 2 years)	256 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (chronic, oral, animal/female, 2 years)	284 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
<b>Sodium nitrate (7631-99-4)</b>	
NOAEL (oral, rat, 90 days)	≥ 1500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
<b>Potassium dihydrogenphosphate (7778-77-0)</b>	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
<b>Potassium nitrate (7757-79-1)</b>	
NOAEL (oral, rat, 90 days)	≥ 1500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Aspiration hazard	: Not classified
<b>Macro-salt mixture Gamborg's B5 Medium</b>	
Viscosity, kinematic	Not applicable

## 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The substance/mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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### 11.2.2. Other information

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

<b>Sodium nitrate (7631-99-4)</b>	
LC50 - Fish [1]	1354 mg/l Source: EHCA
LC50 - Fish [2]	1354 mg/l Test organisms (species): other:
EC50 - Crustacea [1]	3581 mg/l
<b>Calcium chloride (10043-52-4)</b>	
LC50 - Fish [1]	4630 mg/l Test organisms (species): Pimephales promelas
LOEC (chronic)	240 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	481 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	230 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '25 d'
<b>Magnesium sulphate anhydrous (7487-88-9)</b>	
LC50 - Fish [1]	680 mg/l Test organisms (species): Pimephales promelas
<b>Ammonium sulphate (7783-20-2)</b>	
LC50 - Fish [1]	420 mg/l Danio rerio (zebrafish)
LC50 - Fish [2]	57,2 mg/l Test organisms (species): Prosopium williamsoni
EC50 - Crustacea [1]	169 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	121,7 mg/l Test organisms (species): other:
<b>Potassium dihydrogenphosphate (7778-77-0)</b>	
LC50 - Fish [1]	> 100 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	> 100 mg/l EC50 48h - Daphnia magna [mg/l]
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
<b>Potassium nitrate (7757-79-1)</b>	
LC50 - Fish [1]	> 98,9 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	490 mg/l EC50 48h - Daphnia magna [mg/l]

### 12.2. Persistence and degradability

No additional information available

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### 12.3. Bioaccumulative potential

<b>Sodium nitrate (7631-99-4)</b>	
Bioconcentration factor (BCF REACH)	120
Partition coefficient n-octanol/water (Log Pow)	-3,8
<b>Calcium chloride (10043-52-4)</b>	
Partition coefficient n-octanol/water (Log Pow)	0,0500006

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The substance/mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

### 12.7. Other adverse effects

Additional information : Prevent entry to sewers and public waters. Avoid release to the environment

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable
No supplementary information available		

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### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### Explosives Precursors Regulation (2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported within 24 hours.

Name	CAS-No.	Combined Nomenclature code (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Potassium nitrate	7757-79-1	2834 21 00	ex 3824 99 96
Sodium nitrate	7631-99-4	3102 50 00	ex 3824 99 96

Please see [https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives\\_en](https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives_en)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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### 15.1.2. National regulations

Ensure all national/local regulations are observed.

#### Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).  
Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed  
SZW-lijst van mutagene stoffen : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Regulatory framework	Added	
	Flammability	Added	
	Adverse health effects caused by endocrine disrupting properties	Added	
	Revision date	Added	
	Supersedes	Added	
	Issue date	Modified	
	UN-No. (RID)	Added	
	Number of blue cones/lights (ADN)	Added	
	Equipment required (ADN)	Added	
	Excepted quantities (ADN)	Added	
	Limited quantities (ADN)	Added	
	Danger labels (ADN)	Added	
	Classification code (ADN)	Added	
	Proper Shipping Name (RID)	Added	
	Hazard identification number (RID)	Added	
	Colis express (express parcels) (RID)	Added	
	Special provisions for carriage - Loading, unloading and handling (RID)	Added	
	Special provisions for carriage – Bulk (RID)	Added	
	Transport category (RID)	Added	

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Indication of changes			
Section	Changed item	Change	Comments
	Special provisions for RID tanks (RID)	Added	
	Tank codes for RID tanks (RID)	Added	
	Portable tank and bulk container special provisions (RID)	Added	
	Portable tank and bulk container instructions (RID)	Added	
	Mixed packing provisions (RID)	Added	
	Special packing provisions (RID)	Added	
	Packing instructions (RID)	Added	
	Excepted quantities (RID)	Added	
	Limited quantities (RID)	Added	
	Packing group (RID)	Added	
	Classification code (RID)	Added	
	ERG code (IATA)	Added	
	Special provisions (RID)	Added	
	CAO max net quantity (IATA)	Added	
	CAO packing instructions (IATA)	Added	
	PCA max net quantity (IATA)	Added	
	PCA packing instructions (IATA)	Added	
	PCA limited quantity max net quantity (IATA)	Added	
	PCA Limited quantities (IATA)	Added	
	PCA Excepted quantities (IATA)	Added	
	Danger labels (IATA)	Added	
	Proper Shipping Name (IATA)	Added	
	Properties and observations (IMDG)	Added	
	Proper Shipping Name (IMDG)	Added	
	Danger labels (IMDG)	Added	
	EmS-No. (Spillage)	Added	
	EmS-No. (Fire)	Added	
	Limited quantities (IMDG)	Added	
	Segregation (IMDG)	Added	
	Stowage category (IMDG)	Added	
	Tank special provisions (IMDG)	Added	
	Tank instructions (IMDG)	Added	
	IBC special provisions (IMDG)	Added	

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Indication of changes			
Section	Changed item	Change	Comments
	IBC packing instructions (IMDG)	Added	
	Excepted quantities (IMDG)	Added	
	Special provisions for carriage - Packages (RID)	Added	
	Special provisions for carriage - Loading, unloading and handling (ADR)	Added	
	Special provisions for carriage - Bulk (ADR)	Added	
	Tank special provisions (ADR)	Added	
	Tank code (ADR)	Added	
	Portable tank and bulk container special provisions (ADR)	Added	
	Portable tank and bulk container instructions (ADR)	Added	
	Mixed packing provisions (ADR)	Added	
	Special packing provisions (ADR)	Added	
	Packing instructions (ADR)	Added	
	Vehicle for tank carriage	Added	
	Special provisions for carriage - Packages (ADR)	Added	
1.1	Product group	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.1	Adverse physicochemical, human health and environmental effects	Added	
2.2	Extra phrases	Added	
2.2	Precautionary statements (CLP)	Modified	
2.2	Hazard statements (CLP)	Modified	
2.2	Signal word (CLP)	Modified	
2.2	Hazard pictograms (CLP)	Modified	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures after ingestion	Modified	
4.1	First-aid measures after inhalation	Modified	
4.1	First-aid measures after skin contact	Modified	
4.2	Symptoms/effects after eye contact	Modified	
4.3	Other medical advice or treatment	Added	
5.1	Suitable extinguishing media	Modified	

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Indication of changes			
Section	Changed item	Change	Comments
5.2	Hazardous decomposition products in case of fire	Modified	
5.2	Fire hazard	Added	
5.3	Protection during firefighting	Modified	
5.3	EAC code	Added	
6.1	Protective equipment	Added	
6.1	Emergency procedures	Modified	
6.2	Environmental precautions	Modified	
6.3	Other information	Added	
6.3	Methods for cleaning up	Modified	
6.4	Reference to other sections (8, 13)	Added	
7.1	Hygiene measures	Added	
7.1	Precautions for safe handling	Modified	
7.2	Storage conditions	Modified	
7.2	Incompatible materials	Added	
8.2	Appropriate engineering controls	Added	
8.2	Environmental exposure controls	Added	
8.2	Hand protection	Added	
9.1	Auto-ignition temperature	Added	
9.1	Explosive limits (vol %)	Added	
9.1	Flash point	Added	
9.1	Freezing point	Added	
9.1	Viscosity, kinematic	Added	
10.3	Possibility of hazardous reactions	Added	
10.6	Hazardous decomposition products	Modified	
12.1	Ecology - general	Added	
12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added	
13.1	Waste treatment methods	Modified	
14.1	UN-No. (IATA)	Added	
14.1	UN-No. (IMDG)	Added	
14.1	UN-No. (ADN)	Added	
14.1	UN-No. (ADR)	Added	
14.2	Proper Shipping Name (ADN)	Added	
14.2	Proper Shipping Name (ADR)	Added	



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Indication of changes			
Section	Changed item	Change	Comments
14.3	Danger labels (RID)	Added	
14.3	Danger labels (ADR)	Added	
14.3	Class (ADR)	Added	
14.4	Packing group (ADN)	Added	
14.4	Packing group (IATA)	Added	
14.4	Packing group (IMDG)	Added	
14.4	Packing group (ADR)	Added	
14.6	Special provisions (ADR)	Added	
14.6	Packing instructions (IMDG)	Added	
14.6	Transport category (ADR)	Added	
14.6	Excepted quantities (ADR)	Added	
14.6	Limited quantities (ADR)	Added	
14.6	Tunnel restriction code (ADR)	Added	
14.6	Hazard identification number (Kemler No.)	Added	
14.6	Classification code (ADR)	Added	
14.6	Special provisions (ADN)	Added	
15.2	Chemical safety assessment	Added	
16	Abbreviations and acronyms	Modified	
16	Data sources	Modified	

Abbreviations and acronyms:	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number

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<b>Abbreviations and acronyms:</b>	
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. ECHA (European Chemicals Agency). Supplier's safety documents. TNO (Netherlands Organisation for Applied Scientific Research).

<b>Full text of H- and EUH-statements:</b>	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H272	May intensify fire; oxidiser.
H319	Causes serious eye irritation.
Ox. Sol. 2	Oxidising Solids, Category 2
Ox. Sol. 3	Oxidising Solids, Category 3

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.