

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

Version: 5.0 en

Replaces version of: 03.03.2024

Version: (4)

date of compilation: 07.10.2016

Revision: 04.09.2024

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

1.1 Product identifier

Identification of the substance	Potassium chlorate ≥99 %, p.a., ACS
Article number	HN27
Registration number (REACH)	01-2119494917-18-xxxx
Index number in CLP Annex VI	017-004-00-3
EC number	223-289-7
CAS number	3811-04-9

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

Relevant identified uses:	Laboratory chemical Laboratory and analytical use
Uses advised against:	Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household). Food, drink and animal feeding-stuffs.

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 sheet: Department Health, Safety and Environment

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

1.4 Emergency telephone number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.14	Oxidising solid	1	Ox. Sol. 1	H271
3.10	Acute toxicity (oral)	3	Acute Tox. 3	H301

For full text of abbreviations: see SECTION 16

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: **HN27**

2.2 Label elements

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

Signal word

Pictograms

GHS03, GHS06



Hazard statements

H271 May cause fire or explosion; strong oxidiser
H301 Toxic if swallowed

Precautionary statements

Precautionary statements - prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P220 Keep/store away from combustible materials
P261 Avoid breathing dust
P273 Avoid release to the environment
P280 Wear protective gloves/protective clothing/eye protection/face protection

Labelling of packages where the contents do not exceed 125 ml

Signal word: **Danger**
Hazard pictogram(s):



H271 May cause fire or explosion; strong oxidiser.
H301 Toxic if swallowed.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 Keep/store away from combustible materials.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Labelling of packages where the contents do not exceed 10 ml

Signal word: Not required

Hazard pictogram(s):



Hazard statements: Not required
Precautionary statements: Not required

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	Potassium chlorate
Molecular formula	KClO ₃
Molar mass	122,6 g/mol
REACH Reg. No	01-2119494917-18-xxxx
CAS No	3811-04-9
EC No	223-289-7
Index No	017-004-00-3

Substance, Specific Conc. Limits, M-factors, ATE

Specific Conc. Limits	M-Factors	ATE	Exposure route
-	-	100 mg/kg	oral

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 all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Localised redness, Cough, Gastrointestinal complaints, Irritant effects

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings!
water, foam, alcohol resistant foam, dry extinguishing powder, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Explosive when mixed with combustible material. Oxidising property. Non-combustible.

Hazardous combustion products

In case of fire may be liberated: Hydrogen chloride (HCl)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. 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

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe dust.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains. Take up mechanically.

Advice 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.

6.4 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

Avoid dust formation. Clear contaminated areas thoroughly.

Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits. Keep away from combustible material.

Advice on general occupational hygiene

When using do not eat or drink. Thorough skin-cleansing after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place.

Incompatible substances or mixtures

Observe hints for combined storage. Incompatible materials: see section 10. Keep/store away from

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

clothing/combustible materials. Take any precaution to avoid mixing with combustibles.

Consideration of other advice:

Store locked up.

Ventilation requirements

Use local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °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)

This information is not available.

Human health values

Relevant DNELs and other threshold levels				
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	0,7 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
DNEL	5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Environmental values

Relevant PNECs and other threshold levels				
End-point	Threshold level	Organism	Environmental compartment	Exposure time
PNEC	1,15 mg/l	aquatic organisms	freshwater	short-term (single instance)
PNEC	1,15 mg/l	aquatic organisms	marine water	short-term (single instance)
PNEC	115 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
PNEC	4,14 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
PNEC	4,14 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
PNEC	3,83 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

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. The times are approximate values from measurements at 22 °C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

NBR (Nitrile rubber)

• material thickness

>0,3 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• 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). P3 (filters at least 99,95 % 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

Physical state	solid
Form	crystalline
Colour	white
Odour	odourless
Melting point/freezing point	356 °C (ECHA)
Boiling point or initial boiling point and boiling range	400 °C (dec.)
Flammability	non-combustible
Lower and upper explosion limit	not relevant (solid)
Flash point	not applicable
Auto-ignition temperature	not determined

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

Decomposition temperature

>400 °C

pH (value)

5,6 (in aqueous solution: 73 g/l, 20 °C)

Kinematic viscosity

not relevant

Solubility(ies)

Water solubility

69,9 g/l at 20 °C 555 g/l at 100 °C (ECHA)

Partition coefficient

Partition coefficient n-octanol/water (log value):

-2,9 (pH value: 0, 20 °C) (ECHA)

Vapour pressure

not determined

Density and/or relative density

Density

2,34 g/cm³ at 23 °C (ECHA)

Relative vapour density

not relevant (solid)

Bulk density

1.200 – 1.400 kg/m³

Particle characteristics

No data available.

Other safety parameters

Oxidising properties

9.2 Other information

Information with regard to physical hazard classes:

There is no additional information.

Other safety characteristics:

There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

It's a reactive substance. Oxidising property.

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

Explosive properties,
=> Aluminium, Combustible materials, Fluorine, Arsenic, Ammonium compounds, Ethanol, Germanium, Potassium, Magnesium, Metal, Organic materials, Kerosene, Phosphorus, Sulphur,
Violent reaction with: Ammonia (NH₃), Chromium, Hydrogen iodide (HI), Sulphur dioxide (SO₂), Alkali metal, Alcohol, Carbon, Nitrate, Reducing agents, Sulphuric acid, Nitric acid and nitrous acid

10.4 Conditions to avoid

Keep away from heat. Decomposition takes place from temperatures above: >400 °C. Risk of explosion by shock, friction, fire or other sources of ignition.

10.5 Incompatible materials

There is no additional information.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Toxic if swallowed.

Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	>5.000 mg/kg	rat		ECHA
inhalation: dust/mist	LC50	>5,1 mg/l/4h	rat		ECHA
dermal	LD50	>2.000 mg/kg	rabbit		ECHA

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitisier.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

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

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**

abdominal pain, nausea

- **If in eyes**

slightly irritant but not relevant for classification

- **If inhaled**

cough, pain, choking, and breathing difficulties

- **If on skin**

Data are not available.

- **Other information**

none

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)				
Endpoint	Value	Species	Source	Exposure time
LC50	>1.000 mg/l	fish	ECHA	96 h
EC50	>1.000 mg/l	aquatic invertebrates	ECHA	48 h
ErC50	1,9 mg/l	algae	ECHA	72 h

Aquatic toxicity (chronic)				
Endpoint	Value	Species	Source	Exposure time
EC50	>1.000 mg/l	microorganisms	ECHA	3 h
NOEC	≥500 mg/l	fish	ECHA	36 d

12.2 Persistence and degradability

Process of degradability		
Process	Degradation rate	Time
carbon dioxide generation	1 %	28 d

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)	-2,9 (pH value: 0, 20 °C) (ECHA)
---------------------------	----------------------------------

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

12.7 Other adverse effects

Data are not available.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

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.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

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.

Properties of waste which render it hazardous

HP 2 oxidising

HP 6 acute toxicity

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. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number or ID number

ADR	UN 1485
IMDG-Code	UN 1485
ICAO-TI	UN 1485

14.2 UN proper shipping name

ADR	POTASSIUM CHLORATE
IMDG-Code	POTASSIUM CHLORATE
ICAO-TI	Potassium chloride

14.3 Transport hazard class(es)

ADR	5.1
IMDG-Code	5.1
ICAO-TI	5.1

14.4 Packing group

ADR	II
IMDG-Code	II
ICAO-TI	II

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information

Proper shipping name

POTASSIUM CHLORATE

Particulars in the transport document

UN1485, POTASSIUM CHLORATE, 5.1, II, (E)

Classification code

O2

Danger label(s)

5.1



Excepted quantities (EQ)

E2

Limited quantities (LQ)

1 kg

Transport category (TC)

2

Tunnel restriction code (TRC)

E

Hazard identification No

50

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name

POTASSIUM CHLORATE

Particulars in the shipper's declaration

UN1485, POTASSIUM CHLORATE, 5.1, II

Marine pollutant

-

Danger label(s)

5.1



Special provisions (SP)

-

Excepted quantities (EQ)

E2

Limited quantities (LQ)

1 kg

EmS

F-H, S-Q

Stowage category

A

Segregation group

4 - Chlorates

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name

Potassium chlorate

Particulars in the shipper's declaration

UN1485, Potassium chlorate, 5.1, II

Danger label(s)

5.1

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27



Excepted quantities (EQ)	E2
Limited quantities (LQ)	2,5 kg

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)

Restrictions according to REACH, Annex XVII

not listed

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

not listed

Seveso Directive

2012/18/EU (Seveso III)

No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
P8	oxidising liquids and solids	50 200	55)

Notation

55) Oxidising liquids, category 1, 2 or 3, or oxidising solids, category 1, 2 or 3

Deco-Paint Directive

VOC content	0 %
VOC content	0 g/l

Industrial Emissions Directive (IED)

VOC content	0 %
VOC content	0 g/l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Potassium chlorate >=99 %, p.a., ACS	Metals and their compounds		a)	

Legend

a) Indicative list of the main pollutants

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

Regulation on the marketing and use of explosives precursors

Explosives precursors which are subject to restrictions

Name of substance	CAS No	Wt%	Type of registration	Re-marks	Limit value	Upper limit value for the purpose of licensing under Article 5(3)
Potassium chlorate >=99 %, p.a., ACS	3811-04-9	100	Annex I		40 % w/w	No licensing permitted

Legend

Annex I Substances which shall not be made available to members of the general public on their own, or in mixtures or substances including them, except if the concentration is equal to or lower than the limit values set out below

Additional statements

If the product is passed on to third parties, in accordance with Article 7 "Notification of the supply chain" of Regulation EU 2019/1148, the information obligation is subject to the entire supply chain and all other provisions mentioned in Article 7 on restricted and regulated raw materials.

Regulation on drug precursors

not listed

Regulation on substances that deplete the ozone layer (ODS)

not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

chemicals subject to the international prior informed consent (PIC) procedure (the 'PIC procedure').
not listed

Name of substance	Name acc. to inventory	CAS No	Wt%	Category / subcategory	Use limitation
Potassium chlorate >=99 %, p.a., ACS	chlorate		100	p(1)	b
Potassium chlorate >=99 %, p.a., ACS	chlorate		100	p	b

Legend

b Use limitation: ban (for the sub-category or sub-categories concerned) according to Union legislation

p Category: p - pesticides

p(1) Sub-category: p(1) - pesticide in the group of plant protection products

Regulation on persistent organic pollutants (POP)

not listed

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

Country	Inventory	Status
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

Legend

AIIC	Australian Inventory of Industrial Chemicals
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical safety assessment

According to REACH, Article 14 (1) a chemical safety assessment has been carried out for this substance or components of this mixture when the substance has been registered in quantities of 10 tonnes or more per year per registrant.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.1		Classification according to Regulation (EC) No 1272/2008 (CLP): change in the listing (table)	yes
2.1	The most important adverse physicochemical, human health and environmental effects: Spillage and fire water can cause pollution of watercourses.		yes
2.2		Pictograms: change in the listing (table)	yes
2.2		Hazard statements: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Hazard pictogram(s):	yes
2.2		Hazard pictogram(s)::	yes

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
		change in the listing (table)	
2.2		Hazard pictogram(s):: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 10 ml	yes
2.2		Signal word: Not required	yes
2.2		Hazard pictogram(s):	yes
2.2		Hazard pictogram(s):: change in the listing (table)	yes
2.2		Hazard statements: Not required	yes
2.2		Precautionary statements: Not required	yes
14.5	Environmental hazards: hazardous to the aquatic environment	Environmental hazards: non-environmentally hazardous acc. to the dangerous goods regulations	yes
14.8	Particulars in the transport document: UN1485, POTASSIUM CHLORATE, 5.1, II, (E), environmentally hazardous	Particulars in the transport document: UN1485, POTASSIUM CHLORATE, 5.1, II, (E)	yes
14.8	Danger label(s): 5.1, "Fish and tree"	Danger label(s): 5.1	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8	Environmental hazards: yes (hazardous to the aquatic environment)		yes
14.8	Particulars in the shipper's declaration: UN1485, POTASSIUM CHLORATE, 5.1, II, MARINE POLLUTANT	Particulars in the shipper's declaration: UN1485, POTASSIUM CHLORATE, 5.1, II	yes
14.8	Marine pollutant: yes (hazardous to the aquatic environment)	Marine pollutant: -	yes
14.8	Danger label(s): 5.1, "Fish and tree"	Danger label(s): 5.1	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8	Environmental hazards: yes (hazardous to the aquatic environment)		yes
15.1		List of pollutants (WFD): change in the listing (table)	yes
15.1		Explosives precursors which are subject to restrictions: change in the listing (table)	yes
15.1		Regulation concerning the export and import of hazardous chemicals (PIC): change in the listing (table)	yes

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
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
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
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
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
SVHC	Substance of Very High Concern
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Potassium chlorate ≥99 %, p.a., ACS

article number: HN27

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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

Code	Text
H271	May cause fire or explosion; strong oxidiser.
H301	Toxic if swallowed.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.