

Safety data sheet

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BASF Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 17.02.2026

Version: 4.0

Product: **Ceroval**

(ID no. 30678971/SDS_CPA_KZ/EN)

Date of print 23.08.2026

1. Identification

Product identifier

Ceroval

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

Relevant identified uses: crop protection product, fungicide

Details of the supplier of the safety data sheet

Company:

BASF Central Asia LLP
Medeyskii district, Kynaeva street 77,
050010-Almaty
KAZAKHSTAN

Telephone: +7 727 323 23 33

E-mail address: EHS-Central-Asia@basf.com

Emergency telephone number

LOCAL EMERGENCY NUMBER (KAZAKHSTAN):
112, 103

International emergency number:
Telephone: +49 180 2273-112

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

Acute Tox. 3 (oral)

Eye Dam./Irrit. 1

Skin Sens. 1

Carc. 2

Aquatic Acute 1

Aquatic Chronic 1

For the classifications not written out in full in this section the full text can be found in section 16.

Label elements

Globally Harmonized System (GHS)

Pictogram:



Signal Word:

Danger

Hazard Statement:

H318	Causes serious eye damage.
H301	Toxic if swallowed.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statement:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P201	Obtain special instructions before use.
P261	Avoid breathing dust or fume.
P202	Do not handle until all safety precautions have been read and understood.
P272	Contaminated work clothing should not be allowed out of the workplace.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

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P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P330	Rinse mouth.
P391	Collect spillage.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

According to UN GHS criteria

Hazard determining component(s) for labelling: dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3- dicarbonitrile

Other hazardsAccording to UN GHS criteria

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/Information on Ingredients**Substances**

Not applicable

MixturesChemical nature

crop protection product, fungicide, water dispersible granules

Hazardous ingredients (GHS)

According to UN GHS criteria

dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3- dicarbonitrile

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Content (W/W): 70 %
 CAS Number: 3347-22-6
 EC-Number: 222-098-6
 INDEX-Number: 613-021-00-0

Acute Tox. 2 (Inhalation - dust)
 Acute Tox. 4 (oral)
 Eye Dam. 1
 Skin Sens. 1A
 Carc. 2
 Aquatic Acute 1
 Aquatic Chronic 1
 M-factor acute: 100
 M-factor chronic: 10
 H302, H317, H318, H330, H351, H400, H410

Ammonium sulphate

Content (W/W): < 10 %
 CAS Number: 7783-20-2
 EC-Number: 231-984-1

Acute Tox. 5 (oral)
 Aquatic Acute 3
 H303, H402

Kaolin

Content (W/W): < 5 %
 CAS Number: 1332-58-7
 EC-Number: 310-194-1

For the classifications not written out in full in this section the full text can be found in section 16.

4. First-Aid Measures

Description of first aid measures

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

On skin contact:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures**Extinguishing media**

Suitable extinguishing media:
dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:
carbon dioxide, water jet

Special hazards arising from the substance or mixture

Carbon monoxide, Carbon dioxide, nitrogen oxides, sulfur oxides, silicon oxides
The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures**Personal precautions, protective equipment and emergency procedures**

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Avoid dust formation.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

7. Handling and Storage

Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Remove contaminated clothing and protective equipment before entering eating areas.

Protection against fire and explosion:

Dust can form an explosive mixture with air. Avoid dust formation. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight.

Storage stability:

Storage duration: 60 Months

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Control parameters

Components with occupational exposure limits

1332-58-7: Kaolin

TWA value 8 mg/m³ (GN MAC (KZ)), dust

7783-20-2: Ammonium sulphate

CLV 10 mg/m³ (GN MAC (KZ)), aerosol

Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with high efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P3 or FFP3).

Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact
(Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter:	solid	
Form:	solid	
Colour:	brown	
Odour:	characteristic	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
Melting point:	> 20 °C The statements are based on the properties of the individual components.	
Boiling point:	The product has not been tested.	
Flammability:	not highly flammable	(Regulation 440/2008/EC, A.10)
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Flash point:	not applicable, the product is a solid	
Auto-ignition temperature:	not applicable, the product is a solid	

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Thermal decomposition:	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
SADT:	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
	Heat accumulation / Dewar 500 ml (SADT, UN-Test H.4, 28.4.4)
pH value:	approx. 3 - 5 (1 %(m), approx. 20 °C) (as suspension)
Viscosity, kinematic:	not applicable, the product is a solid
Viscosity, dynamic:	not applicable, the product is a solid
Thixotropy:	not applicable
Solubility in water:	dispersible
Partitioning coefficient n-octanol/water (log Kow):	not applicable for mixtures
Vapour pressure:	The value has not been determined because of the high melting point.
Relative vapour density (air):	not applicable

Particle characteristics

Particle size distribution: > 50 µm

9.2. Other information**Information with regard to physical hazard classes**Explosives

Explosion hazard: not explosive (Directive 92/69/EEC, A.14)

Oxidizing properties

Fire promoting properties: not fire-propagating (Regulation 440/2008/EC, A.17)

Self-heating substances and mixtures

Self heating ability: It is not a substance capable of spontaneous heating.

Other safety characteristicsBulk density: 528 - 600 kg/m³
(20 °C)

Evaporation rate: not applicable

10. Stability and Reactivity**Reactivity**

No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid

See SDS section 7 - Handling and storage.

Incompatible materials

Substances to avoid:

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information**Information on toxicological effects**Acute toxicity

Assessment of acute toxicity:

Of pronounced toxicity after single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Experimental/calculated data:

LD50 rat (oral): 273 mg/kg (Directive 84/449/EEC, B.1)

LC50 rat (by inhalation):

Not inhalable due to the physico-chemical properties of the product. An aerosol was tested.

LD50 rat (dermal): > 4.000 mg/kg (OECD Guideline 402)

No mortality was observed.

Irritation

Assessment of irritating effects:

May cause severe damage to the eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (Directive 84/449/EEC, B.4)

Serious eye damage/irritation rabbit: irreversible damage (Directive 84/449/EEC, B.5)

Respiratory/Skin sensitization

Assessment of sensitization:

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The product has not been tested. The statement has been derived from the properties of the individual components. Sensitization after skin contact possible.

Information on: dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile

Experimental/calculated data:

Guinea pig maximization test guinea pig: skin sensitizing (OECD Guideline 406)

An aqueous solution was tested.

Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile

Assessment of carcinogenicity:

Indication of possible carcinogenic effect in animal tests.

Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile

Assessment of teratogenicity:

The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses which impaired body weight gain in parental animals.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile

Assessment of repeated dose toxicity:

Repeated exposure may affect certain organs. Damages the kidneys.

Information on: Kaolin

Assessment of repeated dose toxicity:

Repeated inhalative uptake of particles/dust reaching the alveoli may cause damage to the lungs.

Aspiration hazard

No aspiration hazard expected.

The product has not been tested. The statement has been derived from the properties of the individual components.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish:

LC50 (96 h) 0,033 mg/l, Oncorhynchus mykiss

Aquatic invertebrates:

EC50 (48 h) 0,157 mg/l, Daphnia magna

Aquatic plants:

EC50 (72 h) 0,091 mg/l, Selenastrum capricornutum

Chronic toxicity to fish:

LC50 (28 d) 0,002 mg/l, Oncorhynchus mykiss

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile

Assessment biodegradation and elimination (H₂O):

According to OECD criteria the product is not readily biodegradable but inherently biodegradable.

Bioaccumulative potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile

Bioaccumulation potential:

Bioconcentration factor: 28 (3 d), Oncorhynchus mykiss (OECD Guideline 305 E)

Does not accumulate in organisms.

Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile

Assessment transport between environmental compartments:

Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Other adverse effects

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal Considerations

Waste treatment methods

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Land transport

ADR

UN number or ID number: UN2588

UN proper shipping name: PESTICIDE, SOLID, TOXIC, N.O.S. (DITHIANON)

Transport hazard class(es): 6.1, EHSM

Packing group: III

Environmental hazards: yes

Special precautions for user: Tunnel code: E

RID

UN number or ID number: UN2588

UN proper shipping name: PESTICIDE, SOLID, TOXIC, N.O.S. (DITHIANON)

Transport hazard class(es): 6.1, EHSM

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

Inland waterway transport

ADN

UN number or ID number: UN2588

UN proper shipping name: PESTICIDE, SOLID, TOXIC, N.O.S. (DITHIANON)

Transport hazard class(es): 6.1, EHSM

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

Transport in inland waterway vessel

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Not evaluated

Sea transport

IMDG

UN number or ID number: UN 2588

UN proper shipping name: PESTICIDE, SOLID, TOXIC, N.O.S. (DITHIANON)

Transport hazard class(es): 6.1, EHSM

Packing group: III

Environmental hazards: yes

Marine pollutant: YES

Special precautions for user: EmS: F-A; S-A

Air transport

IATA/ICAO

UN number or ID number: UN 2588

UN proper shipping name: PESTICIDE, SOLID, TOXIC, N.O.S. (DITHIANON)

Transport hazard class(es): 6.1

Packing group: III

Environmental hazards: No Mark as dangerous for the environment is needed

Special precautions for user: None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

15. Regulatory Information**Safety, health and environmental regulations/legislation specific for the substance or mixture**

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Acute Tox.	Acute toxicity
Eye Dam./Irrit.	Serious eye damage/eye irritation
Skin Sens.	Skin sensitization
Carc.	Carcinogenicity
Aquatic Acute	Hazardous to the aquatic environment - acute

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Aquatic Chronic	Hazardous to the aquatic environment - chronic
Eye Dam.	Serious eye damage
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H303	May be harmful if swallowed.
H402	Harmful to aquatic life.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.