

Trade name: Kalii dichromas crist

Substance number: 064600 Version: 3 / CH Date revised: 20.03.12

Replaces Version: 2 / CH Date of printing: 13.08.12

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Kalii dichromas crist

Item-No. 06460000

1.3. Details of the supplier of the safety data sheet

Address

Hänseler AG Industriestrasse 35 9101 Herisau

Telephone no. 0041 (0)71 353 58 58 E-mail address of sdb@haenseler.ch

person responsible for this SDS

1.4. Emergency telephone number

Switzerland:145 / Abroad +41 (0)44 251 51 51

2. Hazards identification ***

2.1. Classification of the substance or mixture Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 3 H301 Aquatic Acute 1 H400 Skin Sens. 1 H317 Resp. Sens. 1 H334 Skin Corr. 1B H314 STOT RE 1 H372 Aquatic Chronic 1 H410 Acute Tox. 2 H330 Repr. 1B H360FD Muta. 1B H340 Carc. 1B H350 Ox. Sol. 2 H272 Acute Tox. 4 H312

Classification in accordance with EC directives

Classification Carc.Cat.2, R45

Muta.Cat.1, R46 Repr.Cat.2, R60-R61

T+, R26 T, R25-R48/23 Xn, R21 C, R34 R42/43 N, R50/53 O, R8

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms ***



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Signal Word ***

Danger

Hazard statements ***

H317 May cause an allergic skin reaction.

H272 May intensify fire; oxidiser.

H350 May cause cancer.

H340 May cause genetic defects.

H360FD May damage fertility. May damage the unborn child.

H330 Fatal if inhaled. H301 Toxic if swallowed.

H372 Causes damage to organs through prolonged or repeated exposure:

H312 Harmful in contact with skin.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H410 Very toxic to aquatic life with long lasting effects.H314 Causes severe skin burns and eye damage.

Precautionary statements

P201 Obtain special instructions before use.

P220 Keep/Store away from clothing/.../combustible materials.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 Wear respiratory protection.

Labelling in accordance with EC directives 1999/45/EC and 67/548/EEC

The product is classified and labelled in accordance with EC directives/the relevant national laws.

Hazard symbols



Dangerous for the environment



Very toxic



Oxidizing

R phrases

45	May cause cancer.
46	May cause heritable genetic damage.
60	May impair fertility.

61 May cause harm to the unborn child.

Harmful in contact with skin.
Toxic if swallowed.
Very toxic by inhalation.

34 Causes burns.

42/43 May cause sensitization by inhalation and skin contact.

48/23 Toxic: danger of serious damage to health by prolonged exposure through

inhalation.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

8 Contact with combustible material may cause fire.

S phrases



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%

50

Avoid exposure - obtain special instructions before use.

45 In case of accident or if you feel unwell, seek medical advice immediately (show

the label where possible).

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment. Refer to special instructions/Safety data

sheets.

Hazardous component(s) to be indicated on label

contains Potassium dichromate

Special labelling for certain preparations

"Restricted to professional users"

3. Composition/information on ingredients

Hazardous ingredients

Potassium dichromate

CAS No. 7778-50-9 EINECS no. 231-906-6

Concentration

Classification Repr.Cat.2, R60-R61

Muta.Cat.1, R46 Carc.Cat.2, R45

Xn, R21 T+, R26 T, R25-R48/23 O, R8 N, R50/53

C, R34 R42/43

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 3 H301 Aquatic Acute 1 H400 Skin Sens. 1 H317 Resp. Sens. 1 H334 Skin Corr. 1B H314 STOT RE 1 H372 H410 Aquatic Chronic 1 Acute Tox. 2 H330 Repr. 1B H360FD Muta. 1B H340 Carc. 1B H350 Ox. Sol. 2 H272 Acute Tox. 4 H312

Concentration limits (Regulation (EC) No. 1272/2008)

STOT SE 3 H335 >= 5

4. First aid measures

4.1. Description of first aid measures

General information

Seek medical advice immediately. In any case show the physician the Safety Data Sheet.

After inhalation



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Remove the casualty into fresh air and keep him calm. Irregular breathing/no breathing: artificial respiration. Seek medical advice immediately.

After skin contact

Remove contaminated, soaked clothing immediately and dispose of safely. Wash off with soap and water. Summon a doctor immediately.

After eye contact

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Summon a doctor immediately.

After ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Seek medical advice immediately.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, Dry chemical extinguisher, Alcohol-resistant foam, Water spray jet

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Use self-contained breathing apparatus.

Other information

Cool endangered containers with water spray jet.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Respiratory protection. Avoid dust formation. Do not inhale vapours. Ensure adequate ventilation. Remove persons to safety. Do not inhale dust.

6.2. Environmental precautions

Do not allow to enter drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically and collect in suitable container for disposal. When picked up, treat material as prescribed under heading "Disposal".

6.4. Reference to other sections

Information regarding Waste Disposal, see chapter 13.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes and clothing. Avoid dust formation. Avoid formation of aerosols. Avoid longer or repeated exposition. Observe safety references and application instructions mentioned on can. Provide suitable exhaust ventilation at processing machines. Keep away from heat and sources of ignition.

Advice on protection against fire and explosion

Keep away from sources of ignition - refrain from smoking.

7.2. Conditions for safe storage, including any incompatibilities



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Requirements for storage rooms and vessels

Keep tightly closed in a dry and cool place.

Hints on storage assembly

Do not store with acids.

8. Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Potassium dichromate

List SUVA Type MAK

Value 0,05 mg/m³

Skin resorption / sensibilisation: H; Status: 2011; Remarks: B

8.2. Exposure controls

General protective and hygiene measures

Avoid contact with eyes and skin. Wash thoroughly after work. Remove contaminated, soaked clothing immediately and dispose of safely.

Respiratory protection

Self-contained breathing apparatus. Full mask

Hand protection

Chemical resistant gloves

Eye protection

Safety glasses; Face shield

Body protection

Clothing as usual in the chemical industry.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

 $\begin{array}{ccccc} \textbf{pH} & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$

Value 390 ℃

crystalline

Boiling point

Form

Remarks Not applicable

Flash point

Value $\mathbb C$ Remarks Not applicable

Vapour pressure

Remarks Not applicable

Solubility in water

Value appr. 29.4 g/l

Temperature 20 ℃



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Octanol/water partition coefficient (log Pow)

log Pow

Efflux time

Remarks Not applicable

10. Stability and reactivity

10.5. Incompatible materials

Reactions with organic substances. Acids, Reactions with metals in powder form.

10.6. Hazardous decomposition products

potassium oxide, Chromium(VI)-oxide

11. Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

Species rat

LD50 25 mg/kg

Species rat

LD50 25 mg/kg

Acute dermal toxicity

Species rabbit

LD50 14 mg/kg

Acute inhalational toxicity

Species rat (female)

LC50 29 mg/m³

Duration of exposure 4

Skin corrosion/irritation

Remarks No data available.

Serious eye damage/irritation

Remarks No data available.

Sensitization

Potassium dichromate Reference substance

Route of exposure inhalational

May cause allergic reactions of respiratory system. Remarks

Potassium dichromate Reference substance

Route of exposure dermal

May cause allergic skin reactions. Remarks

Mutagenicity

Route of exposure oral **Species** rat

Dose 1 mg/kg Duration of exposure 19

Information on genotoxicity in vivo available. valuation

Reproduction toxicity

Remarks May cause adverse reproductive effects.

Carcinogenicity

Species Human

valuation Can cause cancer.

IARC Source



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Experience in practice

May be harmful by inhalation, ingestion, skin adsorption. The product has a strong caustic effect on the skin, eyes and mucous membranes.

Other information

The toxiclogical data are those of the pure product.

12. Ecological information

12.1. Toxicity

Fish toxicity

Species Bluegill (Lepomis macrochirus)

LC50 0.131 mg/l

Duration of exposure 96 h

Species Fathead minnow (Pimephales promelas)

6 mg/l

Duration of exposure 7 d

Daphnia toxicity

Species Daphnia

0.016 to 0.064 mg/l

Duration of exposure 7 d

Species Daphnia magna

EC50 0.035 mg/l

Duration of exposure 48 h

Algae toxicity

Species Pseudokirchneriella subcapitata

EC50 0.31 mg/l

Duration of exposure 72 h

12.3. Bioaccumulative potential

Octanol/water partition coefficient (log Pow)

log Pow 5

12.6. Other adverse effects

General information / ecology

Very toxic for aquatic organismes.

13. Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

In accordance with regulations for special waste, must be taken after pretreatment to an authorised special waste disposal site or incineration plant.

Disposal in compliance with local and national regulations.

Disposal recommendations for packaging

Dispose of as unused product.

14. Transport information

Land transport ADR/RID

14.1. UN number

UN 3086

14.2. UN proper shipping name



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TOXIC SOLID, OXIDIZING, N.O.S

Danger releasing substance Potassium dichromate

14.3. Transport hazard class(es)

Class 6.1

Label 6.1 5.1

14.4. Packing group

Packing group

Marine transport IMDG/GGVSee

14.1. UN number

UN 3086

14.2. UN proper shipping name

TOXIC SOLID, OXIDIZING, N.O.S

Danger releasing substance Potassium dichromate

14.3. Transport hazard class(es)

Class 6.1 Subsidiary risk 5.1

14.4. Packing group

Packing group I

14.5. Environmental hazards

no

Air transport ICAO/IATA

14.1. UN number

UN 3086

14.2. UN proper shipping name

TOXIC SOLID, OXIDIZING, N.O.S

Danger releasing substance Potassium dichromate

14.3. Transport hazard class(es)

Class 6.1 Subsidiary risk 5.1

14.4. Packing group

Packing group I

15. Regulatory information

16. Other information

R-phrases listed in chapter 3

21 Harmful in contact with skin.

Toxic if swallowed.Very toxic by inhalation.

34 Causes burns.

42/43 May cause sensitization by inhalation and skin contact.

45 May cause cancer.

46 May cause heritable genetic damage.

48/23 Toxic: danger of serious damage to health by prolonged exposure through

inhalation.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in

the aquatic environment.

60 May impair fertility.

May cause harm to the unborn child.

8 Contact with combustible material may cause fire.

Hazard statements listed in chapter 3

H272 May intensify fire; oxidiser.

H301 Toxic if swallowed.



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H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H340	May cause genetic defects.
H350	May cause cancer.
H360FD	May damage fertility. May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure:
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: *** This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.