

This safety data sheet was created in accordance with EU Directive 91/155/EC, amended in accordance with Regulation (EC) No. 1907/2006 (REACH) - Germany - Switzerland - Austria

Color like Chromium EC SAFETY DATA SHEET



CLC component 1 (concentrate)

1. Substance/preparation and company name

Product name and/or code: Color like Chromium (CLC component 1 (concentrate))

Manufacturer: WT - Direct GmbH
Thujastrasse 45
D-73614 Schorndorf

Phone number.: + 49(0) 7181 98 54 84-0
Fax number: + 49(0) 7181 98 54 84 22
E-mail address: info@wt-direct.de

Company emergency number: + 49(0) 7181 98 54 84-0

Product use: FOR INDUSTRIAL USE ONLY.

2. Potential dangers

2.1 Classification of the substance or mixture

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

May be corrosive to metals, H290 Skin irritation, Category 2, H315 Eye irritation, Category 2, H319
Acute aquatic toxicity, Category 1, H400 Chronic aquatic toxicity, Category 1, H410

For the full text of the hazard statements listed in this section, see Section 16.

Classification (67/548/EEC or 1999/45/EC) N
Dangerous for the environment R50/53

The full text of the H-phrases mentioned here can be found in Section 16.

For the full text of the hazard statements listed in this section, see Section 16.

2.2 Labeling elements

Labeling (REGULATION (EC) No. 1272/2008) Hazard pictograms



Signal word
Danger
Danger warnings

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H290 can be corrosive against Metal. H315
Causes skin irritation.
H319 Causes serious eye irritation.
H410 - Very toxic for water organisms with long-term effect.

safety instructions

Prevention

Do not breathe vapour/aerosol/mist. (P260) Avoid release to the environment. (P273) Wear protective gloves/protective clothing/eye protection. (P280)

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. (P301 + P330 + P331) IF ON SKIN (or hair): Take off immediately all contaminated clothing. Wash skin with water/shower. (P303 + P361 + P353)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if possible. Continue rinsing. (P305 + P351 + P338)

reaction

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if possible. Continue rinsing.

For the full text of the hazard statements listed in this section, see Section 16.

Classification (67/548/EEC or 1999/45/EC) C

corrosive H315,

N Dangerous for the environment H413

The full text of the H-phrases mentioned here can be found in Section 16.

3. Composition/Information on Ingredients

Ingredients that are hazardous to health or the environment within the meaning of the Directive (REGULATION (EC) No. 1272/2008).

Chemical Designation*	CAS no.	%	EC number	classification
Silver nitrate	7761-88-8	0.5 - < 5%	231-853-9	Oxidizing solid, category 2, H272 Skin corrosion, category 1B, H314 Acute aquatic toxicity, Category 1, H400 Chronic aquatic toxicity, Category 1, H410 M factor: 100

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Ammoniac spirit	1336-21-6	0.5 - < 5%	215-647-6	Skin Corr. 1B, H314; Aquatic Acute 1, H400; STOT SE 3, H335
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Ingredients that are hazardous to health or the environment within the meaning of Directive 67/548/EEC.

Silver nitrate	7761-88-8	0.5 - < 5%	231-853-9	C, N R34 R 51/53
Ammoniac spirit See Section 16 for the full text of the above R- sentences	1336-21-6	0.5 - < 5%	215-647-6	C, N R34 R50

4. First aid measures

First aid measures:

General information:	If symptoms occur or if in doubt, seek medical advice. If you are unconscious, do not give anything by mouth.
After inhalation:	Supply fresh air, put the affected person in a resting position and keep them warm. Initiate artificial respiration if breathing is irregular or has stopped breathing. If unconscious, place in a stable position on your side and seek medical advice.
after skin contact:	Immediately remove all soiled and contaminated clothing. Clean wetted skin thoroughly with soap and water or use a suitable cleaning agent. Do not use solvents or thinners!
after eye contact:	Remove contact lenses, keep eyelids open and rinse liberally with clean, running water for at least 15 minutes. Seek medical advice.
after swallowing:	Drink a lot of water immediately (several liters if necessary), avoid vomiting (risk of perforation). Call in a doctor. No attempts at neutralization.

5. Firefighting measures

Suitable extinguishing agents:	Adapt to the environment.
Special dangers:	Non-flammable. Explosive with air when heated in vapor/gaseous state. Dangerous fumes may be generated due to surrounding fire. In the event of fire, the following can occur: Nitrogen oxides.
Special protective equipment for firefighting:	Staying in the area of danger only with respiratory protection device independent of circulating air. Avoid skin contact by maintaining a safe distance or wearing suitable protective clothing.
Other notes:	Cool containers with water spray from a safe distance. Precipitate escaping vapors with water. Avoid penetration of extinguishing water into surface water or groundwater.

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6. Accidental release measures

Personal

Precautions: Do not inhale vapors/aerosols. Avoid contact with substances. In closed rooms for fresh air concerns.

Environmental Protection-

measures: Do not allow to enter drains.

Cleaning/reception procedures:

Absorb with liquid-binding and neutralizing material, e.g. Chemisorb® OH (Merck Art.101596). Send for disposal. Follow-up cleaning.

7. Handling and Storage

Handling: Eating, drinking and smoking should be prohibited in areas where this product is used, stored or processed. Persons handling the substance must wash their hands and face before eating, drinking or smoking.

Storage: Tightly sealed. Store at +2°C to +25°C. Under protection from light

8. Exposure controls and personal protective equipment

Technical measures: Ensure adequate ventilation. Where reasonably practicable this can be done using local exhaust ventilation and good general ventilation. If this is not enough to control the particle and
To keep the solvent vapor concentration below the MAK limit values, suitable respiratory protection must be worn.

Exposure limits

EC

Surname	ammonia
Values	20 ml/m ₃ 14 mg/m ₃

Short-term value (< 15 min.)	50 ml/m ₃ 36 mg/m ₃
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Limiting and monitoring exposure in the workplace

TRGS 900

Surname:	Silver salt
Values:	0.01 mg/m ₃ inhalable fraction. The limit value refers to the metal content as an analytical calculation basis
Peak limitation:	Exceedance factor: 2 (I)

Personal protective equipment:

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The design of body protective equipment depends on the concentration of hazardous substances and - select quantity specific to the workplace. The chemical resistance of the protective agents should be clarified with their suppliers.

Respiratory protection: required when vapors/aerosols occur; Filter K required,
Eye protection: wear safety glasses

Hand protection: With full contact:
Glove material: Butyl rubber
Layer thickness: 0.7mm
Breakthrough time: > 480min.
In case of splash contact:
Glove material: Butyl rubber
Layer thickness: 0.7mm
Breakthrough time: > 480min.

The protective gloves to be used must meet the specifications of the EC Directive 89/686/EEC and the resulting standard EN374, for example KCL 898 Butoject® (full contact), 898 Butoject® (splash contact). This recommendation only applies to the product specified in the safety data sheet that we supply and the intended use specified by us. When dissolving in or mixing with other substances and under conditions other than EN374, you must contact the supplier of CE approved gloves.

Other protective measures: appropriate protective clothing.

Information on industrial hygiene:

Change contaminated clothing immediately. Preventive skin protection. Wash your hands and face after finishing work and before breaks. Do not smoke, drink, eat or take sniffs while working.

Limiting and monitoring environmental exposure Do not discharge into drains or rivers.

9. Physical and chemical properties

Physical condition: Liquid.

Color: Colorless.

Odor: typical of the species

Safety-relevant information:

	Value	Unit	method
Flash point:	not available	°C	DIN 53213
Ignition temperature:	not available	°C	
Explosion limit	not available		
Vapor pressure:	695	hPa at 20°C	
Density:	1.0	g/cm ³ at 20°C	
Water solubility:	water miscible		
Viscosity:	n/a	at 20°C	DIN 53211
Solvent content:	0%		
PH value:	8.5 - 10.0		
boiling temperature	110°C		
lied Pow	- 1.38 (experimental) (anhydrous substance)		

10. Stability and reactivity

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Conditions to avoid: Heating.

Substances to avoid:

There is a risk of explosion and/or risk of toxic gas formation with the following substances: strong alkalis (ammonia can be formed), acrolein, hydrogen antimony/heat, boron, hydrogen bromide, chlorates, hydrogen chloride, chromium (VI) oxide (CrO₃), chromyl chloride, Dimethyl sulfate, ethylene oxide (polymerization), hydrogen fluoride, halogens, halogen-halogen compounds, halogen oxides, carbon dioxide, air, oxidizing agents, phosgene, phosphorus oxides, mercury / water, nitric acid, oxygen, acids, sulfur dioxide, hydrogen sulfide, silver compounds (when stored), nitrogen oxides, nitrogen trichloride (decomposition), hydrogen peroxide, silver, lead, zinc, heavy metals, heavy metal salts.

Dangerous decomposition products in the event of fire: see Chapter 5.

More information

incompatible with various metals and metal alloys (including zinc, copper; aluminum, lead, nickel). Explosive with air when heated in vapor/gaseous state.

11. Toxicological information

acute toxicity

We do not have any quantitative data on the toxicity of this product.

Other Information

The following applies to soluble silver compounds: they are only slightly absorbable through the gastrointestinal tract. Severe irritation after eye and skin contact.

The following applies to nitrites/nitrates in general: after absorption of large amounts of methemoglobinemia.

Germ cell mutagenicity

Genotoxicity in vitro

Ames test

Salmonella typhimurium

Result: negative

(third-party safety data sheet)

LC₅₀ (inhalation, rat): 1.4 mg/l /4 h (anhydrous substance) (RTECS) 350

LD₅₀ (oral, rat): mg/kg (29% solution ammonia) (RTECS) 43 mg/

LDLo (oral, human): kg (29% solution) (RTECS).

Specific symptoms in animal experiments:

Eye Irritation Test (Rabbit): Severe Irritation (29% Solution) (RTECS). Skin Irritation

Test (Rabbit): Severe Irritation (29% Solution) (RTECS).

The literature data available to us does not correspond to the labeling required by the EC. The EC has dossiers that have not been published.

Subacute to chronic toxicity

Sensitization:

Sensitization test (guinea pig): negative. (anhydrous substance) (IUCLID)

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Bacterial mutagenicity: Salmonella typhimurium negative. (anhydrous substance) (IUCLID)

Bacterial mutagenicity: Escherichia coli: negative (anhydrous substance) (IUCLID)

Further toxicological information:

Properties to be expected based on components of the preparation: After inhalation

of vapors / aerosols:

Mucous membrane irritation, cough and shortness of breath

Possible symptoms: cough, bronchitis, pulmonary edema. Chemical burns (dermatitis, necrosis).

After skin contact:

After eye contact:

Acid burns. Risk of blindness or risk of corneal discoloration.

After swallowing:

Chemical burns in the mouth, throat, esophagus and gastrointestinal tract. There is a risk of perforation for the esophagus and stomach. After swallowing large quantities: nausea, vomiting, stomach cramps, diarrhea, dizziness, unconsciousness, death.

Other notes:

The following applies to soluble silver compounds: they are only slightly absorbable through the gastrointestinal tract. Severe irritation after eye and skin contact.

More information

Other dangerous properties cannot be ruled out. The product should be handled with the usual care when dealing with chemicals.

After swallowing: Burns in the mouth, throat, esophagus and gastrointestinal tract. Abdominal pain, nausea, bloody vomit, collapse, shock, shortness of breath, loss of consciousness. There is a risk of perforation of the esophagus and stomach.

12. Ecological information

Ecotoxic effects:

We do not have any quantitative data on the ecological impact of this product.

Biological effects:

Toxic to aquatic organisms. May cause drowsiness and dizziness. Not easily degradable.

Further information about ecology:

The following applies to silver compounds in general: Biological effects: Silver ions toxic to aquatic organisms: Bacteria: Ps. putida toxic from 0.006 mg/l; Protozoa: U. parduczi toxic from 0.1 mg/l; Arthropods: D. magna EC: 0.004 mg/l; Algae: M. aeruginosa toxic from 0.0007 mg/l; Sc. quadricauda toxic from 0.009 mg/l. Danger to drinking water. Fish: LC50: > 500 mg/l. Do not allow it to enter waterways, wastewater or soil! The following applies to nitrates in general: They can contribute to the eutrophication of water bodies.

The following applies to ammonium ions: Biological effects: toxic from 0.3 mg/L; Fish nutrients: toxic from 0.3 mg/L. Damage caused by pH shift, still forms toxic mixtures despite dilution

The following applies to ammonia:

Fish toxicity: Onchorhynchus mykiss LC₅₀: 0.53mg/L/96 h (anhydrous substance).

Daphnia toxicity: Daphnia pulicaria EC₅₀: 1.16 mg/L/48 h (anhydrous substance).

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Daphnia magna EC₅₀: 24/L/48 h (anhydrous substance).

Bacterial toxicity: Photobacterial phosphoreum EC₅₀: 2 mg/L/5min (anhydrous substance).

Abiotic degradation:
Slow degradation

Biodegradation: Not easily degradable. Behavior in environmental compartments: Distribution: log Pow: - 1.38 (experimental) (anhydrous substance). Bioaccumulation is not expected (log Pow <1).

13. Disposal instructions

Do not discharge into drains or rivers.
When disposing of waste, all relevant federal, state and local regulations must be observed.

Waste no.	Waste name:
161001	aqueous liquid waste containing hazardous substances

Empty containers must be sent for scrap recycling or reconditioning. Containers that are not properly emptied are hazardous waste.

14. Transport information

Land route - road/rail: UN number :

3082

Shipping document name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS 9

ADR/RID class:

Packaging group:

III

Inland waterway vessel ADN, ADNR not checked.

Lake:

UN number : 3082

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS F- AS -

EMS No.: B

IMDG class: 9

Packaging group: III

Marine pollutant: n/a

Air:

UN number : 3082

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS

ICAO/IATA classification : 3

Packing group : III

The transport regulations are quoted according to the international regulations and in the form in which they are applied in Germany. Possible deviations in other countries are not taken into account.

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15. Regulations

The information is based on our current state of knowledge, but does not constitute a guarantee of product properties and does not constitute a contractual legal relationship.

Full text of hazard statements in sections 2 and 3.

H290 May be corrosive to metals H315
Causes skin irritation.

H335 May affect the respiratory system

H319 Causes serious eye irritation. H400 Very
toxic to aquatic organisms.

H410 - Very toxic for water organisms with long-term effect.

Prevention

P260 Do not breathe vapour/aerosol/mist.

Avoid the release of P273 into the environment.

P280 Wear protective gloves/protective clothing/eye protection.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. P303 + P361 +
P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Wash skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if possible.
Continue rinsing. (P305 + P351 + P338)

reaction

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
lenses, if possible. Continue rinsing.

Special labeling of certain preparations:

n/a

Note on employment restrictions: Maternity protection
and youth labor protection must be observed.

Major accident regulations:

Classification according to former VbF: na

Technical instructions for air:

Class I: 0% II: 0% III: 0%

Water hazard class 2

(hazardous to water) VwVwSAAnh. 4

Storage class:

VCI 10-13

Information sheet BG-Chemie

M053 Occupational safety measures for handling hazardous substances

Observe employment restrictions for young people according to § 22 JArbSchG!

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16. Other information

general revision

Further information

The information in this safety data sheet corresponds to our current state of knowledge and complies with national and EU legislation. The product may not be used for any purpose other than that stated in Chapter 1 without written permission. The user is responsible for compliance with all necessary legal regulations. The information in this safety data sheet describes the safety requirements of our product and does not constitute a guarantee of product properties.