

METALURE CHROME Blue

Version 4.0

Revision Date 18.08.2021

Print Date 02.12.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name : METALURE CHROME Blue
Material number : 024502QR0

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

This information is not available.

1.3 Details of the supplier of the safety data sheet

Company : ECKART GmbH
Guntersthal 4
91235 Hartenstein
Telephone : +499152770
Telefax : +499152777008
E-mail address : msds.eckart@altana.com
Responsible/issuing person

1.4 Emergency telephone number**NCEC:**

(contract no.: ECKART29003-NCEC)

+44 1235 239671 (Middle East/Africa, call and response in your language)

+1 215 207 0061 (Americas, call and response in your language)

+65 3158 1074 (Asia-Pacific, call and response in your language)

SECTION 2: Hazards identification**GHS Classification**

: Flammable liquids, Category 2, H225
Serious eye damage/eye irritation, Category 2A, H319
Specific target organ toxicity - single exposure, Category 3,

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Central nervous system, H336

GHS-Labeling

Symbol(s)



Signal word

: Danger

Hazard statements

 : H225: Highly flammable liquid and vapour.
 H319: Causes serious eye irritation.
 H336: May cause drowsiness or dizziness.

Precautionary statements

 : **Prevention:**
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 Keep container tightly closed.
 P240 Ground and bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
 P242 Use non-sparking tools.
 P243 Take action to prevent static discharges.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
Response:
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water.
 P304 + P340 + P319 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help if you feel unwell.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P337 + P317 If eye irritation persists: Get medical help.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label

Identification	CAS-No.
n-butyl acetate	123-86-4
ethyl acetate	141-78-6
acetone	67-64-1

SECTION 3: Composition/information on ingredients

Substance No. :

Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
n-butyl acetate	123-86-4 204-658-1	Flam. Liq.;3;H226 STOT SE;3;H336	25 - 50
ethyl acetate	141-78-6 205-500-4	Flam. Liq.;2;H225 Eye Irrit.;2A;H319 STOT SE;3;H336	25 - 50

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aluminium powder (stabilised)	7429-90-5 231-072-3	Flam. Sol.;1;H228	1 - 10
acetone	67-64-1 200-662-2	Flam. Liq.;2;H225 Acute Tox.;5;H303 Acute Tox.;5;H313 Eye Irrit.;2A;H319 STOT SE;3;H336	1 - 10

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures
4.1 Description of first aid measures

General advice	: Move out of dangerous area. Show this safety data sheet to the doctor in attendance.
If inhaled	: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	: Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	: Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

This information is not available.

4.3 Indication of any immediate medical attention and special treatment needed

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This information is not available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media : Alcohol-resistant foam, Carbon dioxide (CO₂), Dry chemical

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive

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concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform
respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible
absorbent material, (e.g. sand, earth, diatomaceous earth,
vermiculite) and place in container for disposal according to
local / national regulations (see section 13).

6.4 Reference to other sections

This information is not available.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use. Avoid
contact with skin and eyes. For personal protection see
section 8. Smoking, eating and drinking should be prohibited
in the application area. Take precautionary measures against
static discharges. Provide sufficient air exchange and/or
exhaust in work rooms. Open drum carefully as content may
be under pressure. Dispose of rinse water in accordance with
local and national regulations.

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material.
Take necessary action to avoid static electricity discharge
(which might cause ignition of organic vapours). Use only
explosion-proof equipment. Keep away from open flames, hot
surfaces and sources of ignition.

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Hygiene measures : When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection
8.1 Control parameters
Germany:

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
ethyl acetate	141-78-6	AGW	200 ppm 730 mg/m ³	2017-06-08	DE TRGS 900
Peak-limit: excursion factor (category)		2;(l)			
Further information		Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).European Union (The EU has established a limit value: deviations in value and peak limit are possible)When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
ethyl acetate	141-78-6	STEL	400 ppm	2017-02-01	2017/164/EU

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			1 468 mg/m3		
Further information		Indicative			
ethyl acetate	141-78-6	TWA	200 ppm 734 mg/m3	2017-02-01	2017/164/EU
Further information		Indicative			
aluminium powder (stabilised)	7429-90-5	AGW (Inhalable fraction)	10 mg/m3	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
aluminium powder (stabilised)	7429-90-5	AGW (Alveolate fraction)	1,25 mg/m3	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
acetone	67-64-1	TWA	500 ppm 1 210 mg/m3	2000-06-16	2000/39/EC
Further information		Indicative			
acetone	67-64-1	AGW	500 ppm 1 200 mg/m3	2015-03-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(I)			
Further information		Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).European Union (The EU has established a limit value: deviations in value and peak limit are possible)When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

United States of America (USA):

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Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
n-butyl acetate	123-86-4	TWA	150 ppm	2007-01-01	
n-butyl acetate	123-86-4	STEL	200 ppm	2007-01-01	
n-butyl acetate	123-86-4	ST	200 ppm 950 mg/m ³	2005-09-01	
n-butyl acetate	123-86-4	TWA	150 ppm 710 mg/m ³	2005-09-01	
n-butyl acetate	123-86-4	TWA	150 ppm 710 mg/m ³	1997-08-04	
n-butyl acetate	123-86-4	TWA	150 ppm 710 mg/m ³	1989-01-19	
n-butyl acetate	123-86-4	STEL	200 ppm 950 mg/m ³	1989-01-19	
ethyl acetate	141-78-6	TWA	400 ppm	2013-03-01	
ethyl acetate	141-78-6	TWA	400 ppm 1 400 mg/m ³	2013-10-08	
ethyl acetate	141-78-6	TWA	400 ppm 1 400 mg/m ³	1997-08-04	
ethyl acetate	141-78-6	TWA	400 ppm 1 400 mg/m ³	1989-01-19	
ethyl acetate	141-78-6	PEL	400 ppm 1 400 mg/m ³	2014-11-26	
29H,31H-phthalocyaninato(2-)-N ₂₉ ,N ₃₀ ,N ₃₁ ,N ₃₂ copper	147-14-8	TWA (dust and mists)	1 mg/m ³	2005-09-01	
29H,31H-phthalocyaninato(2-)-N ₂₉ ,N ₃₀ ,N ₃₁ ,N ₃₂ copper	147-14-8	TWA	1 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	

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aluminium powder (stabilised)	7429-90-5	TWA (Respirable)	5 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m ³	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (total)	10 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m ³	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	PEL (Total dust)	10 mg/m ³	2014-11-26	
aluminium powder (stabilised)	7429-90-5	PEL (respirable dust fraction)	5 mg/m ³	2014-11-26	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable particulate matter)	1 mg/m ³	2008-01-01	
aluminium powder (stabilised)	7429-90-5	TWA	5 mg/m ³	2005-09-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total)	15 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	5 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m ³	2011-07-01	
aluminium powder	7429-90-5	TWA (respirable fraction)	5 mg/m ³	2011-07-01	

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(stabilised)					
aluminium powder (stabilised)	7429-90-5	TWA (Total dust)	15 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (respirable dust fraction)	5 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (welding fumes)	5 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (pyro powders)	5 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable particulate matter)	1 mg/m ³	2013-03-01	
aluminium powder (stabilised)	7429-90-5	TWA (Fumes)	5 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	PEL (Welding fumes)	5 mg/m ³	2017-10-02	
aluminium powder (stabilised)	7429-90-5	PEL (Pyro powders)	5 mg/m ³	2017-10-02	
acetone	67-64-1	TWA	250 ppm	2016-03-01	
acetone	67-64-1	STEL	500 ppm	2016-03-01	
acetone	67-64-1	TWA	250 ppm 590 mg/m ³	2013-10-08	
acetone	67-64-1	TWA	1 000 ppm 2 400 mg/m ³	1997-08-04	
acetone	67-64-1	TWA	750 ppm 1 800 mg/m ³	1989-01-19	
acetone	67-64-1	STEL	1 000 ppm 2 400 mg/m ³	1989-01-19	
acetone	67-64-1	STEL	750 ppm 1 780 mg/m ³	2014-11-26	
acetone	67-64-1	C	3 000 ppm	2014-11-26	

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acetone	67-64-1	PEL	500 ppm 1 200 mg/m ³	2014-11-26	
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8.2 Exposure controls
Personal protective equipment

- Eye protection : Wear face-shield and protective suit for abnormal processing problems.
- Hand protection
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Environmental exposure controls

- General advice : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties
9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : blue
- Odour : characteristic
- pH : substance/mixture is non-soluble (in water)
- Freezing point : No data available

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Boiling point/boiling range	: 76 °C
Flash point	: -4 °C
Bulk density	: No data available
Flammability (solid, gas)	: No data available
Auto-flammability	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: No data available
Solubility(ies)	
Water solubility	: insoluble
Miscibility with water	: immiscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity**10.1 Reactivity**

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No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

Hazardous decomposition products : No data available

Other information : No data available

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Components:****ethyl acetate :**

Acute oral toxicity : Rat: 5 620 mg/kg

Acute inhalation toxicity : LC50 Rat: 56 mg/l

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Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : LD50 Rabbit: > 18 000 mg/kg

acetone :

Acute oral toxicity : LD50 Rabbit: 4 700 - 5 800 mg/kg

Mouse: 3 000 mg/kg

Rat: 9 800 mg/kg

Acute inhalation toxicity : LC50 Rat: 76 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : LD50 Rabbit: > 2 000 mg/kg

Skin corrosion/irritation**Product**

May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

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Product

Eye irritation

Respiratory or skin sensitisation

No data available

Carcinogenicity

No data available

Toxicity to reproduction/fertility

No data available

Reprod.Tox./Development/Teratogenicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information**Product**

Solvents may degrease the skin.

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SECTION 12: Ecological information**12.1 Toxicity****Components:****ethyl acetate (141-78-6) :**Toxicity to daphnia and other : (Daphnia (water flea)): 717 mg/l
aquatic invertebrates**acetone (67-64-1) :**Toxicity to daphnia and other : (Daphnia magna (Water flea)): 21 600 mg/l
aquatic invertebrates**12.2 Persistence and degradability**

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects**Product:**Additional ecological : No data available
information

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SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Product	:	Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. In accordance with local and national regulations.
Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum. In accordance with local and national regulations.

SECTION 14: Transport information**14.1 UN number**

ADR	:	1210
TDG	:	1210
CFR	:	1210
IMDG	:	1210
IATA	:	1210

14.2 Proper shipping name

ADR	:	PRINTING INK
TDG	:	PRINTING INK
CFR	:	PRINTING INK
IMDG	:	PRINTING INK

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IATA : PRINTING INK**14.3 Transport hazard class****ADR** : 3**TDG** : 3**CFR** : 3**IMDG** : 3**IATA** : 3**14.4 Packing group****ADR**

Packaging group : II

Classification Code : F1

Hazard Identification Number : 33

Labels : 3

Tunnel restriction code : (D/E)

TDG

Packaging group : II

Labels : 3

CFR

Packaging group : II

Labels : 3

IMDG

Packaging group : II

Labels : 3

EmS Number : F-E, S-D

IATA

Packing instruction (cargo) : 364

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aircraft)

Packing instruction : 353
(passenger aircraft)

Packing instruction (LQ) : Y341

Packaging group : II

Labels : 3

14.5 Environmental hazards

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	: Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	: Not applicable
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	:
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	: Banned and/or restricted (n-butyl acetate) (ethyl acetate) (aluminium powder (stabilised)) (acetone)

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15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements

H225	: Highly flammable liquid and vapour.
H226	: Flammable liquid and vapour.
H228	: Flammable solid.
H303	: May be harmful if swallowed.
H313	: May be harmful in contact with skin.
H319	: Causes serious eye irritation.
H336	: May cause drowsiness or dizziness.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.