

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** **4CR 7416 Aluminium Spray**
- **Application of the substance / the preparation** metal spray
- **Manufacturer/Supplier:**
4CR Vertriebsgesellschaft mbH
Donaustraße 2
94469 Deggendorf
Tel.: +49 (0) 4841/665015
Fax: +49 (0) 4841/665016
e-Mail: 4cr@b2bmail.eu
- **Information in case of emergency:** +49(0)700 24112112 (MIP)

2 Hazards identification

- **Hazard description:**



Xi Irritant
F+ Extremely flammable

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Warning! Pressurized container.

Has a narcotizing effect.

R 12 Extremely flammable.

R 15 Contact with water liberates extremely flammable gases.

R 36 Irritating to eyes.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3 Composition/information on ingredients

- **Chemical characterization**

- **Description:** Mixture of substances listed below with nonhazardous additions.










- **Dangerous components:**

CAS: 67-64-1 EINECS: 200-662-2	acetone Xi, F; R 11-36-66-67	25-50%
CAS: 1330-20-7 EINECS: 215-535-7	xylene Xn, Xi; R 10-20/21-38	10-25%
CAS: 106-97-8 EINECS: 203-448-7	butane F+; R 12	2.5-10%

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CAS: 74-98-6 EINECS: 200-827-9	propane  F+; R 12	2.5-10%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate  Xi; R 10-36	2.5-10%
CAS: 7429-90-5 EINECS: 231-072-3	aluminium powder (pyrophoric)  F; R 10-15-17	≤ 2.5%
CAS: 100-41-4 EINECS: 202-849-4	Ethylbenzene  Xn,  F; R 11-20	≤ 2.5%
CAS: 64742-48-9 EINECS: 265-150-3	Naphtha (petroleum), hydrotreated heavy, benzene content: < 0,1%  Xn; R 65-66	≤ 2.5%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom.  Xn,  Xi,  N; R 10-37-51/53-65-66-67	≤ 2.5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire-fighting measures

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:**
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.

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- Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
 - Keep container tightly sealed.
 - Do not seal receptacle gas tight.
 - Store in cool, dry conditions in well sealed receptacles.
 - Protect from heat and direct sunlight.
- **Storage class:** 2B

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

67-64-1 acetone

WEL () Short-term value: 3620 mg/m³, 1500 ppm
Long-term value: 1210 mg/m³, 500 ppm

1330-20-7 xylene

WEL () Short-term value: 441 mg/m³, 100 ppm
Long-term value: 220 mg/m³, 50 ppm
Sk; BMGV

106-97-8 butane

WEL () Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm
Carc (if more than 0.1% of buta-1.3-diene)

108-65-6 2-methoxy-1-methylethyl acetate

WEL () Short-term value: 548 mg/m³, 100 ppm
Long-term value: 274 mg/m³, 50 ppm
Sk

100-41-4 Ethylbenzene

WEL () Short-term value: 552 mg/m³, 125 ppm
Long-term value: 441 mg/m³, 100 ppm

- **Additional information:** The lists valid during the making were used as basis.

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

- **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Use suitable respiratory protective device in case of insufficient ventilation.

- **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the

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application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form: Aerosol
Colour: According to product specification
Odour: Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: -44°C

· **Flash point:** Not applicable, as aerosol.

· **Ignition temperature:** 315°C (DIN 51794)

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

Lower: 1.1 Vol %
Upper: 13.0 Vol %

· **Vapour pressure at 20°C:** 8300 hPa

· **Density at 20°C:** 0.77 g/cm³ (DIN 53217)

· **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

· **Solvent separation test:** < 3 %

· **Solvent content:**

Organic solvents: 85.5 %
VOC (EC) 683.0 g/l

· **Solids content (weight-%):** 14.5 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** Contact with water releases flammable gases.
- **Dangerous decomposition products:** Carbon monoxide

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11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
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64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (rat)
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Dermal	LD50	>3400 mg/kg (rab)
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Inhalative	LC50/4 h	>10.2 mg/l (rat)
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· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

12 Ecological information

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

08 01 11	waste paint and varnish containing organic solvents or other dangerous substances
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15 01 04	metallic packaging
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14 06 03	other solvents and solvent mixtures
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· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **Land transport ADR/RID (cross-border)**



· **ADR/RID class:** 2 5F Gases.

· **Danger code (Kemler):** -

· **UN-Number:** 1950

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- **Packaging group:** -
- **Hazard label:** 2.1
- **Description of goods:** 1950 AEROSOLS

· **Maritime transport IMDG:**



- **IMDG Class:** 2
- **UN Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** No
- **Proper shipping name:** AEROSOLS

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **Proper shipping name:** AEROSOLS, flammable

15 Regulatory information

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**

Xi Irritant
F+ Extremely flammable

· **Risk phrases:**

12 Extremely flammable.
15 Contact with water liberates extremely flammable gases.
36 Irritating to eyes.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.

· **Safety phrases:**

2 Keep out of the reach of children.
3 Keep in a cool place.
9 Keep container in a well-ventilated place.
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
46 If swallowed, seek medical advice immediately and show this container or label.
51 Use only in well-ventilated areas.

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· **Special labelling of certain preparations:**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

· **National regulations:**

· **Information about limitation of use:**

100-41-4	Ethylbenzene	3A
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Class	Share in %
NK	50-100

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant R-phrases**

10 Flammable.

11 Highly flammable.

12 Extremely flammable.

15 Contact with water liberates extremely flammable gases.

17 Spontaneously flammable in air.

20 Harmful by inhalation.

20/21 Harmful by inhalation and in contact with skin.

36 Irritating to eyes.

37 Irritating to respiratory system.

38 Irritating to skin.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Laboratory

· **Contact:** Ingo Bolls

· *** Data compared to the previous version altered.**