

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** 4CR 70-125 KH One-coat lacquer HB Premium silk-gloss/70
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Paint
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
4CR International GmbH & Co. KG
Donnerstrasse 10b
22763 Hamburg
Tel.: +49 (0) 40 69 60 99 30
E-Mail: Info@4CR.com
www.4CR.com
- **1.4 Emergency telephone number:** +49(0)700 24112112 (CRM)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



Flam. Liq. 3 H226 Flammable liquid and vapour.



Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
maleic anhydride
Cobalt bis(2-ethylhexanoate)
Phthalic anhydride
Fatty acids, C14-18 and C16-18-unsatd., maleated
- **Hazard statements**
H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.

(Contd. on page 2)

Trade name: 4CR 70-125 KH One-coat lacquer HB Premium silk-gloss/70

(Contd. of page 1)

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P403+P235 Store in a well-ventilated place. Keep cool.

Additional information:

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards
Results of PBT and vPvB assessment

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients
3.2 Mixtures

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

Dangerous components:

| | | |
|--|--|-------------|
| CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29 | n-Butyl acetate Flam. Liq. 3, H226; STOT SE 3, H336, EUH066 | 5-<10% |
| CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32 | Xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 | 5-<10% |
| CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29 | 2-Methoxy-1-methylethyl acetate Flam. Liq. 3, H226; STOT SE 3, H336 | 2.5-<10% |
| CAS: 64742-95-6 EC number: 918-668-5 Reg.nr.: 01-2119455851-35 | Hydrocarbons, C9, aromatics Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336, EUH066 | 2.5-<5% |
| EC number: 919-857-5 Reg.nr.: 01-2119463258-33 | Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H336, EUH066 | 2.5-<10% |
| CAS: 7779-90-0 EINECS: 231-944-3 Reg.nr.: 01-2119485044-40 | Trizinc bis(orthophosphate) Aquatic Acute 1, H400; Aquatic Chronic 1, H410 | ≥0.25-<2.5% |
| CAS: 100-41-4 EINECS: 202-849-4 Reg.nr.: 01-2119489370-35 | Ethylbenzene Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412 | <2.5% |
| CAS: 112-07-2 EINECS: 203-933-3 Reg.nr.: 01-2119475112-47 | 2-Butoxyethyl acetate Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332 | 1-<2.5% |
| CAS: 136-52-7 EINECS: 205-250-6 Reg.nr.: 01-2119524678-29 | Cobalt bis(2-ethylhexanoate) Repr. 1B, H360Fd; Aquatic Acute 1, H400; Eye Irrit. 2, H319; Skin Sens. 1A, H317; Aquatic Chronic 3, H412 | ≥0.25-<0.3% |
| CAS: 85711-46-2 EINECS: 288-306-2 Reg.nr.: 01-2119976378-19 | Fatty acids, C14-18 and C16-18-unsatd., maleated Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317 | ≥0.1-<1% |

(Contd. on page 3)

Trade name: 4CR 70-125 KH One-coat lacquer HB Premium silk-gloss/70

| | | (Contd. of page 2) |
|---|---|--------------------|
| CAS: 85-44-9 EINECS: 201-607-5 Reg.nr.: 01-2119457017-41 | <i>Phthalic anhydride</i> ⚠ Resp. Sens. 1, H334; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335 | ≥0.1-<1% |
| CAS: 108-31-6 EINECS: 203-571-6 Reg.nr.: 01-2119472428-31 | <i>maleic anhydride</i> ⚠ Resp. Sens. 1, H334; STOT RE 1, H372; ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Skin Sens. 1A, H317, EUH071 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 % | ≥0.001-<0.1% |

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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

(Contd. on page 4)

Trade name: 4CR 70-125 KH One-coat lacquer HB Premium silk-gloss/70

See Section 13 for disposal information.

(Contd. of page 3)

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Use only in well ventilated areas.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.

· **Information about storage in one common storage facility:** Store away from foodstuffs.

· **Further information about storage conditions:** Keep container tightly sealed.

· **Storage class:** 3

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

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

123-86-4 n-Butyl acetate

WEL Short-term value: 966 mg/m³, 200 ppm

Long-term value: 724 mg/m³, 150 ppm

1330-20-7 Xylene

WEL Short-term value: 441 mg/m³, 100 ppm

Long-term value: 220 mg/m³, 50 ppm

Sk; BMGV

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

Sk

112-07-2 2-Butoxyethyl acetate

WEL Short-term value: 332 mg/m³, 50 ppm

Long-term value: 133 mg/m³, 20 ppm

Sk

136-52-7 Cobalt bis(2-ethylhexanoate)

WEL Long-term value: 0.1 mg/m³

as Co; Carc, Sen

108-31-6 maleic anhydride

WEL Short-term value: 3 mg/m³

Long-term value: 1 mg/m³

Sen

(Contd. on page 5)

Trade name: 4CR 70-125 KH One-coat lacquer HB Premium silk-gloss/70

(Contd. of page 4)

· **Ingredients with biological limit values:**

1330-20-7 Xylene

| | |
|------|---------------------------------|
| BMGV | 650 mmol/mol creatinine |
| | Medium: urine |
| | Sampling time: post shift |
| | Parameter: methyl hippuric acid |

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

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

· **Respiratory protection:**

Filter A/P2 (EN 141, EN 143)



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.

· **Hand protection**



Protective gloves (EN 374)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Fluorocarbon rubber (Viton)

Recommended thickness of the material: ≥ 0.7 mm

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 application.

· **Breakthrough time of glove material**

For the mixture of chemicals the penetration time has to be at least 10 minutes (Permeation according to EN 374 Part 3: Level 1).

· **Eye/face protection**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Fluid

· **Colour:**

According to product specification

· **Odour:**

Characteristic

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

Undetermined.

(Contd. on page 6)

Trade name: 4CR 70-125 KH One-coat lacquer HB Premium silk-gloss/70

(Contd. of page 5)

| | |
|---|---------------------------------------|
| · Boiling point or initial boiling point and boiling range | 124-128 °C (123-86-4 n-Butyl acetate) |
| · Flammability | Flammable. |
| · Lower and upper explosion limit | |
| · Lower: | 1.7 Vol % |
| · Upper: | 7.5 Vol % |
| · Flash point: | 29 °C (DIN 53213) |
| · Auto-ignition temperature: | 315 °C (DIN 51794) |
| · Decomposition temperature: | Not determined. |
| · pH | Not determined. |
| · Viscosity: | |
| · Kinematic viscosity | Not determined. |
| · Dynamic at 20 °C: | 10,000 mPas |
| · Solubility | |
| · water: | Not miscible or difficult to mix. |
| · Partition coefficient n-octanol/water (log value) | Not determined. |
| · Vapour pressure at 20 °C: | 10.7 hPa |
| · Density and/or relative density | |
| · Density at 20 °C: | 1.377 g/cm ³ (DIN 53217) |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |

| | |
|--|---|
| · 9.2 Other information | |
| · Appearance: | |
| · Form: | Fluid |
| · Important information on protection of health and environment, and on safety. | |
| · Ignition temperature: | Product is not selfigniting. |
| · Explosive properties: | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| · Solvent content: | |
| · VOC (EC) | 28.49 % |
| · Solids content (weight-%): | 71.5 % |
| · Change in condition | |
| · Evaporation rate | Not determined. |

| | |
|--|------------------------------|
| · Information with regard to physical hazard classes | |
| · Explosives | Void |
| · Flammable gases | Void |
| · Aerosols | Void |
| · Oxidising gases | Void |
| · Gases under pressure | Void |
| · Flammable liquids | Flammable liquid and vapour. |
| · Flammable solids | Void |
| · Self-reactive substances and mixtures | Void |
| · Pyrophoric liquids | Void |
| · Pyrophoric solids | Void |
| · Self-heating substances and mixtures | Void |
| · Substances and mixtures, which emit flammable gases in contact with water | Void |
| · Oxidising liquids | Void |
| · Oxidising solids | Void |
| · Organic peroxides | Void |
| · Corrosive to metals | Void |

(Contd. on page 7)

Trade name: 4CR 70-125 KH One-coat lacquer HB Premium silk-gloss/70

(Contd. of page 6)

· **Desensitised explosives**

Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) : 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.
Harmful to aquatic organisms

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.


(Contd. on page 8)

Trade name: 4CR 70-125 KH One-coat lacquer HB Premium silk-gloss/70

(Contd. of page 7)

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN number or ID number**
· **ADR, IMDG, IATA** UN1263
 - **14.2 UN proper shipping name**
· **ADR** UN1263 PAINT
· **IMDG, IATA** PAINT
 - **14.3 Transport hazard class(es)**
· **ADR**
- 
- **Class** 3 (F1) Flammable liquids.
 - **Label** 3

- **IMDG, IATA**
- 
- **Class** 3 Flammable liquids.
 - **Label** 3

- **14.4 Packing group**
· **ADR, IMDG, IATA** III

- **14.5 Environmental hazards:**
· **Marine pollutant:** No

- **14.6 Special precautions for user** Warning: Flammable liquids.
- **Hazard identification number (Kemler code):** 30
- **EMS Number:** F-E,S-E
- **Stowage Category** A

- **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.

· **Transport/Additional information:**

- **ADR**
- **Limited quantities (LQ)** 5L
- **Transport category** 3
- **Tunnel restriction code** D/E
- **Remarks:** ≤ 450 l: 2.2.3.1.5 ADR

- **IMDG**
- **Limited quantities (LQ)** 5L
- **Remarks:** ≤ 5 l: 2.2.3.1.5 IMDG

- **UN "Model Regulation":** UN 1263 PAINT, 3, III

GB

(Contd. on page 9)

Trade name: 4CR 70-125 KH One-coat lacquer HB Premium silk-gloss/70

(Contd. of page 8)

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **Seveso category P5c FLAMMABLE LIQUIDS**

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials, Annex II:**

| Class | Share in % |
|-------|------------|
| I | <1 |
| NK | 25-50 |

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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 phrases**

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H360Fd May damage fertility. Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH071 Corrosive to the respiratory tract.

· **Classification according to Regulation (EC) No 1272/2008**

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

(Contd. on page 10)



Trade name: 4CR 70-125 KH One-coat lacquer HB Premium silk-gloss/70

(Contd. of page 9)

EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds (USA, EU)
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 2: Flammable liquids – Category 2
 Flam. Liq. 3: Flammable liquids – Category 3
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Resp. Sens. 1: Respiratory sensitisation – Category 1
 Skin Sens. 1: Skin sensitisation – Category 1
 Skin Sens. 1A: Skin sensitisation – Category 1A
 Skin Sens. 1B: Skin sensitisation – Category 1B
 Repr. 1B: Reproductive toxicity – Category 1B
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 Asp. Tox. 1: Aspiration hazard – Category 1
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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