

SAFETY DATA SHEET

according to 1907/2006/EC, article 31

CBright 1000 Si, Cbright 1100 Si, CBright 3214 Si, CBright 5212 Si



Revision date: 2019-11-14

Version: 4, revision 3

Replace: 2019-06-18

SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier

Product name: CBright 1000 Si, Cbright 1100 Si, CBright 3214 Si, CBright 5212 Si

Substance: ALUMINIUM PIGMENT FOR COATINGS

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

Identified uses: Pigments

1.3 Details of the supplier of the safety data sheet.

Manufacturer: CARLFORS BRUK AB
BOX 44
SE-561 21 HUSKVARNA SWEDEN
Tel: +46 36389500
E-mail: cb@carlfors.se

1.4 Emergency telephone number.

Emergency number: +46 8337043

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Classification according to: CLP/GHS EC No 1272/2008.

Eye Irrit. 2 H319

Aquatic Chronic 3. H412

Note T regulation (EC) No 1272/2008: This product may be marketed in a form which does not have the physical hazards as indicated in the entry in part 3. Tests were done according to Transport of dangerous goods, Manual of tests and criteria.

Additional Information: See dection 16.

2.2 Label elements:

Label elements according to Regulation (EC) No 1272/2008 (CLP).

Hazard pictograms: GHS07



Signal word: Warning

Hazard Statements:

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H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

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

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation occurs: Get medical advice/attention.

P370 + P378 In case of fire: Use sand, mineral wool or special powder for metal fire, never use water, halones, foam or carbon dioxide.

P402 + P404 Store in a dry place. Store in a closed container.

2.3 Other hazards:

No additional information available.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Chemical name	Cas-no:	Einecs no:	REACH registration no:	Contents %
Aluminium powder	7429-90-5	231-072-3	01-2119529243-45-0051	79-81
GHS/CLP-classification:*	Flam. Sol. 1, H228. refer to note T in EC 1272/2008. Test method in Transport of dangerous goods, Manual of tests and criteria section 33.4, has been used.			

Chemical name	Cas-no:	Einecs no:	REACH registration no:	Contents %
Alcohols, C9-11 Ethoxilated	64839-46-3		Polymer	4-6
GHS/CLP-classification:*	Skin Irrit. 2. H315, Eye dam. 1. H318, Acute Tox 4. H302			

Chemical name	Cas-no:	Einecs no:	REACH registration no:	Contents %
Trizinc bis(ortophosphate)	7779-90-0	231-944-3		0,25-0,5
GHS/CLP-classification:*	Aquatic acute 1. H400, Aquatic Chronic 1. H410			

Chemical name	Cas-no:	Einecs no:	REACH registration no:	Contents %
Zinc oxide	1314-13-2	215-222-5		0,25-0,5
GHS/CLP-classification:*	Aquatic acute 1. H400, Aquatic Chronic 1. H410			

* See section 16.

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SECTION 4. FIRST-AID MEASURES

4.1 Description of first aid measures:

General information: No additional information available.

Inhalation: Supply fresh air, consult doctor in case of complaints.

Skin contact: Take off contaminated clothes, wash skin with water and soap.

Eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Ingestion: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed: No further relevant information.

4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing agents: Extinguish fire with sand and mineral wool. Can also be extinguished with foam or carbon dioxide during the first minutes when the solvent in the aluminium paste is burning. After a short time, when the solvent has burned, it is a metal fire, and then only use sand, mineral wool or special powder for metal fires.

Unsuitable extinguishing agents: Do not use water.

5.2 Special hazards arising from the substance or mixture: No further relevant information available.

5.3 Advice for firefighters: No special measures required.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Eliminate fire risk by keeping ignition sources out of the area.

6.2 Environmental precautions:

Do not allow product to reach sewage system or water resources. Inform authorities in case product reaches water or sewage system.

6.3 Methods and material for containment and cleaning up:

Collect mechanically. Absorb with liquid binding material (sand, diatomite, universal binders, sawdust) and put in a dry receptacle. Do not flush with water or aqueous cleaning agents. Dispose of waste material in accordance with local, state or federal regulations.

6.4 Reference to other sections:

See section 7 for safe handling. See section 8 for protective equipment. See section 13 for waste treatment methods.

SECTION 7. HANDLING AND STORAGE

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7.1 Precautions for safe handling:

Mechanical ventilation and local exhaust can be needed. Keep drums closed as far as possible. Avoid direct contact with aluminium paste. No smoking, fire, sparks or welding. Prevent sparks arising from static electricity.

Wash hands during breaks and at the end of the work. Keep away from foodstuffs, beverages and feed. Do not eat, drink, smoke or sniff while working. Water for eye flushing to be available.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated, dry place in tightly closed containers. Protect from direct sunlight. Keep away from sources of ignition-No smoking.

7.3 Specific end use(s):

See section 1, identified uses.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

DNEL long-term, worker, for aluminium metal powder/dust is 3,72 mg aluminium/m³.

PNEC-values from 46-17800 µg/l depending on water chemistry.

Occupational exposure limits (limit value - eight hours):

	Aluminium powder
Austria	10 mg/m ³
Canada - Québec	10 mg/m ³
Denmark	5 mg/m ³ (inhalable aerosol) 2 mg/m ³ (respirable)
France	10 mg/m ³ (inhalable aerosol) 5 mg/m ³ (respirable aerosol)
Germany	4 mg/m ³ (inhalable aerosol) 1,5 mg/m ³ (respirable aerosol)
Hungary	6 mg/m ³ (respirable aerosol)
Spain	5 mg/m ³ (respirable aerosol) 10 mg/m ³ (inhalable aerosol)
United Kingdom	4 mg/m ³ (respirable aerosol) 10 mg/m ³ (inhalable aerosol)
USA	15 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)

8.2 Exposure controls:

General protective and hygienic measures: Wash hands during breaks and at the end of the work. Keep away from foodstuffs, beverages and feed. Do not eat, drink, smoke or sniff while working.

Personal protective equipment:

Breathing equipment: Not required.

Protection of hands: Wear suitable gloves (EN 374), for example nitrile rubber. Change protective gloves regularly.

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Eye protection: Protective goggles if there is a risk of splashing.

Skin protection: Protective clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance	Pasty, silver grey
Odour	Fish-like
Odour threshold	Not determined
pH	NA
Melting point/freezing point (°C)	Not determined
Initial boiling point/boiling range (°C)	361
Flash point (°C)	> 100
Evaporation rate	No information
Flammability (solid, gas)	Not classified as flammable solid.
Upper/lower flammability/explosive limits	Not determined
Vapour pressure (kPa)	NA
Vapour density (air=1)	NA
Density (g/cm ³)	2,03-2,08
Solubility in water (weight-%)	Insoluble
Partition coefficient, log Pow	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	NA
Explosive properties	Not determined
Oxidising properties	No information
9.2 Other information:	No additional information available.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:

Not classified as flammable solid.

10.2 Chemical Stability:

The product is stable if used and stored according to specifications.

10.3 Possibility of hazardous reactions:

No dangerous reactions known.

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10.4 Conditions to avoid:

No further relevant information available.

10.5 Incompatible material:

No further relevant information available.

10.6 Hazardous decomposition products:

No dangerous decomposition products known.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Aluminium powder: Oral LD50 (rat) > 2000 mg/kg bw. Inhalation LC50 (rat) > 888 mg/m³. Inhalation NOAEC (rat) = 10 mg/m³.

Trizinc bis(orthophosphate): Oral LD50 (rat) > 5000 mg/kg.

Zinc oxide: Oral LD50 (rat) > 5000 mg/kg.

Inhalation: -

Skin contact: Causes skin irritation.

Eyes: Causes serious eye irritation.

Ingestion: -

Skin corrosion/irritation. Based on available data the classification criteria are not met.

Respiratory or skin sensitization: Based on available data the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): Based on available data the classification criteria are not met.

STOT – single and repeated exposure: Based on available data the classification criteria are not met.

Aspiration hazard: Based on available data the classification criteria are not met.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity:

Aluminium powder is not classified as dangerous for the environment.

Trizinc bis(orthophosphate) and zinc oxide are very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability:

No information

12.3 Bioaccumulative potential:

No information.

12.4 Mobility in soil:

Aluminium paste is a solid material and is not expected to penetrate into the soil.

12.5 Results of PBT and vPvB assessments:

This product is not, or does not contain, a substance that is a PBT or a vPvB.

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12.6 Other adverse effects:

Wayer hazard class 1 (German regulation).

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Dispose of waste material in accordance with local, state or federal regulations. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

European waste catalogue: 12 01 04 – Non-ferrous metal dust and particles.

Empty contaminated packaging thoroughly. They can be recycled after thorough and proper cleaning.

SECTION 14. TRANSPORT INFORMATION

	ADR/RID	IATA	IMDG
14.1 UN No			
14.3 Transport hazard class(es)			
14.4 Packing group			
EmS No			
Tunnel category			

Not classified as dangerous goods.

14.2 UN proper shipping name:

-

14.5 Environmental hazards: No

14.6 Special precautions for user:

Handling and storage according to section 7.

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

NA

SECTION 15. REGULATORY INFORMATION

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

Reference: EC no. 1907/2006, EC no. 1272/2008, EC no. 453/2010, (EU) 2015/830, IFA-databases on hazardous substances (GESTIS), CSR for aluminium and Material safety data sheets for alcohols C6-12 ethoxylate, zinc oxide and trizinc bis(orthophosphate).

15.2 Chemical safety assessment: No

SECTION 16. OTHER INFORMATION

H228 Flammable solid.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H18 Causes serious eye damage.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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H412 Harmful to aquatic life with long lasting effects.

Flam. Sol. 1 = Flammable solid, category 1

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

Acute Tox. 4 = Acute toxicity, category 4

Aquatic Chronic 1 = Hazardous to the aquatic environment, category 1

Aquatic acute 1 = Hazardous to the aquatic environment, category 1

Aquatic Chronic 3 = Hazardous to the aquatic environment, category 3

List of abbreviations

ADR Accord Européen relatif au transport international des marchandises dangereuses par Route.

CAS No. Chemical abstracts service number.

CLP Regulation on Classification, Labelling and packaging of Substances and Mixtures.

CSR Chemical safety report

DNEL Derived NO-Effect Level.

EINECS European Inventory of Existing Commercial Substances.

EWG European Waste Catalogue.

IATA International Air Transport Association

ICAO International Civil Aviation Organization

IMDG International Maritime Dangerous Goods

IMO International Maritime Organization

LC Lethal Concentration

LD Lethal Dose

Marpol International Convention for the Prevention of Pollution from ships.

NOAL No observable adverse effect level.

NOEL/NOEC No observed – effect level/concentration.

PBT Persistent, biaccumulative, toxic.

PNEC Predicted No-Effect Concentration.

REACH Registration, Evaluation, Authorisation, and restriction of Chemicals.

RID Règlement concernant le transport international ferroviaire de marchandises dangereuses.

TWA Time-weighted average.

vPvB Very persistent, very biaccumulative

Revision has been done under section 2, 3, 4, 8, 11, 15 and 16. Take the place of 2019-06-18.