

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.01.2015

Version: 5

Revision: 19.01.2015

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

- **1.1 Product identifier**
- **Trade name:** Thermaguard™ CUI 650
- **Article number:** H18-1
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Product category** PC9a Coatings and paints, thinners, paint removers
- **Application of the substance / the mixture** solvent based, one component silicone coating
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Performance Polymers b.v.
 Keizersgracht 62-64
 1015CS Amsterdam
 Tel +31(0)208208370
 Fax +31(0)208208368
- **Further information obtainable from:** msds@pp-bv.com
- **1.4 Emergency telephone number:**
 National Poisoning Information Center (NVIC) - Bilthoven, the Netherlands
 + 31 (0)30 2748888 (only intended to inform physicians of accidental poisonings)

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.
 Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
 N; Dangerous for the environment
 R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R10: 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.
- **Classification system:**
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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



GHS02 GHS09

- **Signal word** Warning
- **Hazard statements**
 H226 Flammable liquid and vapour.
 H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**
 P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P241 Use explosion-proof electrical/ventilating/lighting/equipment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P240 Ground/bond container and receiving equipment.
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

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

· Dangerous components:

Percentages of the components are expressed as a percentage by weight

CAS: 7440-66-6 EINECS: 231-175-3 Index number: 030-001-01-9 Reg.nr.: 01-2119467174-37-xxxx	zinc powder -zinc dust (stabilized) ☠ N R50/53 ----- ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	2,5-10%
EC number: 918-668-5 Reg.nr.: 01-2119455851-35	Hydrocarbons, C9, aromatics ☠ Xn R65; ☠ Xi R37; ☠ N R51/53 R10-66-67 ----- ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H332; STOT SE 3, H335-H336	2,5-10%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32	xylene ☠ Xn R20/21-48/20-65; ☠ Xi R36/37/38 R10 ----- ⚠ 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	2,5-10%
CAS: 1314-13-2 EINECS: 215-222-5 Index number: 030-013-00-7 Reg.nr.: 01-2119463881-32-xxxx	zinc oxide ☠ N R50/53 ----- ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	≤ 1,0%

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **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, sand, extinguishing powder. Do not use water.
- **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:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

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- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Work only in fume cupboard.
- **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:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

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

1330-20-7 xylene

IOELV	Short-term value: 442 mg/m ³ , 100 ppm
	Long-term value: 221 mg/m ³ , 50 ppm
	Skin

· **DNEL (Derived No Effect Level) for workers:**

7440-66-6 zinc powder -zinc dust (stabilized)

Dermal	Long-term - systemic effects, worker	83 mg/kg bw/day (worker)
Inhalative	Long-term - systemic effects, worker	5 mg/m ³ (worker)

Hydrocarbons, C9, aromatics

Dermal	Long-term - systemic effects, worker	25 mg/kg bw/day (worker)
Inhalative	Long-term - systemic effects, worker	150 mg/m ³ (worker)

1330-20-7 xylene

Dermal	Long-term - systemic effects, worker	180 mg/kg bw/day (worker)
Inhalative	Acute - local effects, worker	289 mg/m ³ (worker)
	Acute - systemic effects, worker	289 mg/m ³ (worker)
	Long-term - systemic effects, worker	77 mg/m ³ (worker)

1314-13-2 zinc oxide

Dermal	Long-term - systemic effects, worker	83 mg/kg bw/day (worker)
Inhalative	Long-term - systemic effects, worker	5 mg/m ³ (worker)

· **DNEL (Derived No Effect Level) for the general population:**

7440-66-6 zinc powder -zinc dust (stabilized)

Oral	Long-term - systemic effects, general population	0,83 mg/kg bw/day (general population)
Dermal	Long-term - systemic effects, general population	83 mg/kg bw/day (general population)
Inhalative	Long-term - systemic effects, general population	2,5 mg/m ³ (general population)

Hydrocarbons, C9, aromatics

Oral	Long-term - systemic effects, general population	11 mg/kg bw/day (general population)
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Dermal	Long-term - systemic effects, general population	11 mg/kg bw/day (general population)
Inhalative	Long-term - systemic effects, general population	32 mg/m ³ (general population)
1330-20-7 xylene		
Oral	Long-term - systemic effects, general population	1,6 mg/kg bw/day (general population)
Dermal	Long-term - systemic effects, general population	108 mg/kg bw/day (general population)
Inhalative	Acute - local effects, general population	174 mg/m ³ (general population)
	Acute - systemic effects, general population	174 mg/m ³ (general population)
	Long-term - systemic effects, general population	14,8 mg/m ³ (general population)
1314-13-2 zinc oxide		
Oral	Long-term - systemic effects, general population	0,83 mg/kg bw/day (general population)
Dermal	Long-term - systemic effects, general population	83 mg/kg bw/day (general population)
Inhalative	Long-term - systemic effects, general population	2,5 mg/m ³ (general population)

· PNEC (Predicted No Effect Concentration) values:

7440-66-6 zinc powder -zinc dust (stabilized)	
Aquatic compartment - freshwater	0,0206 mg/L (not specified)
Aquatic compartment - marine water	0,0061 mg/L (not specified)
Aquatic compartment - sediment in freshwater	117,8 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water	56,5 mg/kg sed dw (not specified)
Sewage treatment plant	0,1 mg/L (not specified)
Terrestrial compartment - soil	35,6 mg/kg dw (not specified)
1330-20-7 xylene	
Aquatic compartment - freshwater	0,327 mg/L (not specified)
Aquatic compartment - marine water	0,327 mg/L (not specified)
Aquatic compartment - sediment in freshwater	12,46 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water	12,46 mg/kg sed dw (not specified)
Aquatic compartment - water, intermittent releases	0,327 mg/L (not specified)
Sewage treatment plant	6,58 mg/L (not specified)
Terrestrial compartment - soil	2,31 mg/kg dw (not specified)
1314-13-2 zinc oxide	
Aquatic compartment - freshwater	0,0206 mg/L (not specified)
Aquatic compartment - marine water	0,0061 mg/L (not specified)
Aquatic compartment - sediment in freshwater	117,8 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water	56,5 mg/kg sed dw (not specified)
Sewage treatment plant	0,1 mg/L (not specified)
Terrestrial compartment - soil	35,6 mg/kg dw (not specified)

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

· 8.2 Exposure controls
· Personal protective equipment:
· General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· 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.

Filter type A, for (grindings) dust type P

· Protection of hands:


Protective gloves

Chemical resistant gloves (EN 374)

Check protective gloves prior to each use for their proper condition.

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

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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- **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.

Fluorocarbon rubber (Viton)

- **Penetration time of glove material**

KCL Vitoject 890

breakthrough time > 480 min.

thickness: 0,7 mm

at limited contact

KCL Camatril 730

breakthrough time 30 min.

thickness: 0,4 mm

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

- **Not suitable are gloves made of the following materials:** All other materials

- **Eye protection:**



Tightly sealed goggles

Safety glasses according to EN 166 or equivalent

- **Body protection:**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved before the product is used by a specialist.

If there is a risk of ignition by static electricity, anti-static protective clothing should be worn. For the best protection against static discharge, clothing should consist of anti-static overalls, boots and gloves.

For further information on materials and design requirements and test methods consult the European standard EN 1149.

SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form: Fluid

Colour: According to product specification

- **Odour:** Characteristic

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 137 °C

- **Flash point:** 30 °C

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 450 °C

- **Decomposition temperature:** Not determined.

- **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: 7,0 Vol %

- **Vapour pressure at 20 °C:** 6,7 hPa

- **Density at 20 °C:** 2,01 g/cm³

- **Relative density** Not determined.

- **Vapour density** Not determined.

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- | | |
|---|--|
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| Dynamic at 20 °C: | 550 mPas |
| Kinematic: | Not determined. |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **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:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values relevant for classification:		
7440-66-6 zinc powder -zinc dust (stabilized)		
Oral	LD50	>2000 mg/kg (rat)
Hydrocarbons, C9, aromatics		
Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10,2 mg/l (rat)
1330-20-7 xylene		
Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)
1314-13-2 zinc oxide		
Oral	LD50	> 5000 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitisation:** No sensitising effects known.

SECTION 12: Ecological information

- **12.1 Toxicity**

· Aquatic toxicity:	
7440-66-6 zinc powder -zinc dust (stabilized)	
LC50/48 h	0,068 mg/l (Daphnia magna)
	0,645 - 1 mg/l (Penaeus chinensis (fleshy prawn))
LC50/96 h	0,24 mg/l (Oncorhynchus mykiss)
1330-20-7 xylene	
EC50/48 h	1-10 mg/l (Daphnia magna)
EC50/72 h	1-10 mg/l (Algae, Growth inhibition test)
LC50/96 h	1-10 mg/l (Oncorhynchus mykiss)

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1314-13-2 zinc oxide

EC50/48 h	0,67 mg/l (Ceriodaphnia dubia)
EC50/72 h	0,21 mg/l (Algae, Growth inhibition test)




- **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.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional 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.
 Also poisonous for fish and plankton in water bodies.
 Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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

SECTION 14: Transport information

Transport in accordance with ADR/RID, IMDG and ICAO/IATA.

· 14.1 UN-Number · ADR, IMDG, IATA	UN1263
· 14.2 UN proper shipping name · ADR · IMDG · IATA	1263 PAINT, ENVIRONMENTALLY HAZARDOUS PAINT (zinc powder -zinc dust (stabilized), Hydrocarbons, C9, aromatics), MARINE POLLUTANT PAINT
· 14.3 Transport hazard class(es) · ADR, IMDG	<div style="display: flex; align-items: center; gap: 10px;">   </div>
· Class · Label	3 Flammable liquids. 3
· IATA	
<div style="display: flex; align-items: center; gap: 10px;">  </div>	
· Class · Label	3 Flammable liquids. 3

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<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): 	Product contains environmentally hazardous substances: zinc powder -zinc dust (stabilized) Yes Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: 	Warning: Flammable liquids. 30 F-E, <u>S</u> -E
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code 	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 D/E
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<ul style="list-style-type: none"> · UN "Model Regulation": 	UN1263, PAINT, ENVIRONMENTALLY HAZARDOUS, 3, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **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.

- **Contact:** S. Reynolds
- **Abbreviations and acronyms:**
 ADR: Accord européen sur le transport 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
 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)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 Flam. Liq. 3: Flammable liquids, Hazard Category 3
 Acute Tox. 4: Acute toxicity, Hazard Category 4
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
 Asp. Tox. 1: Aspiration hazard, Hazard Category 1
 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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