

CARAPAX ZINC M

Moisture curing polyurethane primer

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

- **Date of compilation:** 20.05.2014
- **1.1 Product identifier**
- **Trade name:** CARAPAX ZINC M
- **Article number(s):** SIS CP 00 210PR
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:** Paint
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**
SISTEC Coatings GmbH
Mausersstraße 6/1
71640 Ludwigsburg
GERMANY
- **E-mail address of the competent person responsible for the Safety Data Sheet:**
info@sistec-coatings.de
- **Informing department:** Laboratory
- **1.4 Emergency telephone number:**
As above or next toxicological information centre.
+49 (0)30 - 45 05 35 55

SECTION 2: HAZARDS IDENTIFICATION

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



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very 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

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R10: Flammable.

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

Vapours of the product are heavier than air and may accumulate on the ground, in mines, drains or cellars with higher concentration.

Heightened risk of fire and danger of explosion at accumulation in lower-lying or closed rooms.

• **Classification system:**

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.

• **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.

H410 Very toxic to aquatic life with long lasting effects.

• **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P243 Take precautionary measures against static discharge.

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

P233 Keep container tightly closed.

P273 Avoid release to the environment.

P391 Collect spillage.

• **Additional information:**

Contains isocyanates. May produce an allergic reaction.

Contains p-toluenesulphonyl isocyanate. May produce an allergic reaction.

• **2.3 Other hazards**

• **Results of PBT and vPvB assessment**

• **PBT:** Not applicable.













• **vPvB:** Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.2 Chemical characterization: Mixtures

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

- **Dangerous components:**

CAS: 7440-66-6	Zinc powder - Zinc dust (stabilized)	50 - 100%
EINECS: 231-175-3	 N R50/53	
Index number: 030-001-01-9	 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
CAS: 64742-95-6	Solvent naphtha (petroleum), light arom.	3-<10%
EINECS: 265-199-0	 Xn R65;  N R51/53	
	R10-66-67	
Index number: 649-356-00-4	 Flam. Liq. 3, H226;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;	
	 STOT SE 3, H336	
CAS: 4083-64-1	p-toluenesulphonyl isocyanate	< 1%
EINECS: 223-810-8	 Xi R36/37/38;  Xn R42	
	R14	
Index number: 615-012-00-7	 Resp. Sens. 1, H334;  Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	

- **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

- **General information:**

Immediately remove any clothing contaminated by the product.

- **After inhalation:**

Supply fresh air; consult doctor in case of symptoms.

- **After skin contact:**

Instantly wash with water and soap and rinse thoroughly.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.

- **After eye contact:**

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

- **After swallowing:**

Do not induce vomiting; instantly call for medical help.
In case of persistent symptoms 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** symptomatic treatment

SECTION 5: FIREFIGHTING MEASURES

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder, foam - do not use water.
- **For safety reasons unsuitable extinguishing agents** Water
- **5.2 Special hazards arising from the substance or mixture**
Can form explosive vapour-air mixtures.
Carbon monoxide (CO) and Carbon dioxide (CO₂)
Zinc oxide fumes
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**
Cool endangered containers with water spray jet.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
If without risk possible, move drums with material away from dangerous area.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Remove all ignition sources.
Do not breathe vapour.
Avoid contact with skin, eyes and clothes.
- **6.2 Environmental precautions:**
Do not allow to enter drainage system, surface or ground water.
Inform respective authorities in case product reaches water or sewage system.
Prevent material from reaching sewage system, holes and cellars.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable containers.
Dispose of the material collected according to regulations.
- **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 information on disposal.

SECTION 7: HANDLING AND STORAGE

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Ensure good interior ventilation, especially at floor level (fumes are heavier than air).
Use only in well ventilated areas.
Do not breathe vapour/spray.
Do not get in eyes, on skin, or on clothing.
Make sure that all applicable workplace limits are observed.

• **Information about protection against explosions and fires:**

- Fumes can combine with air to form an explosive mixture.
- Flammable fume/air mixtures may be formed in empty containers.
- 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 containers:**

- Observe regulations for storage of flammable liquids.
- Observe all local and national regulations for storage of water polluting products.

• **Information about storage in one common storage facility:**

- Store away from foodstuffs.
- Store away from oxidizing agents.

• **Further information about storage conditions:**

- Store container in a well ventilated position.
- Store in cool, dry conditions in well sealed containers.
- Protect from heat and direct sunlight.

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7.

• **8.1 Control parameters**

• **Components with critical values that require monitoring at the workplace:**

- Applicable PEL/OEL for hydrocarbons to be observed.

• **8.2 Exposure controls**

• **Personal protective equipment**

• **General protective and hygienic measures**

- Keep away from foodstuffs, beverages and food.
- Do not eat, drink or smoke while working.
- Do not inhale gases / fumes / aerosols.
- Avoid contact with the eyes and skin.
- Do not carry cleaning cloths impregnated with the product in trouser pockets.

• **Breathing equipment:**

- If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

• **Protection of hands:**

- Protective gloves
- To avoid skin problems reduce the wearing of gloves to the required minimum.
- Sensibilization by the components in the glove materials is possible.
- Check the permeability prior to each renewed use of the glove.
- 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 application.

• **Penetration time of glove material**

Protective gloves should be replaced at first signs of wear.

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 safety glasses

• **Body protection:** Body protection must be chosen depending on activity and possible exposure.

• **Limitation and supervision of exposure into the environment**

Do not allow to enter drainage system, surface or ground water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

• 9.1 Information on basic physical and chemical properties

• General Information

• Appearance:

Form: liquid

Colour: grey

• **Smell:** solvent-like

• **Odour threshold:** not determined

• **pH-value:** not determined

• Change in condition

Melting point/Melting range: not determined

Boiling point/Boiling range: not determined

• **Flash point:** > 23 °C

• **Inflammability (solid, gaseous)** not applicable

• **Ignition temperature:** not determined

• **Decomposition temperature:** Not determined.

• **Self-inflammability:** Product is not selfigniting.

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

• Critical values for explosion:

Lower: not determined

Upper: not determined

• **Oxidizing properties** none

• **Vapor pressure:** Not determined.

• **Density at 20 °C:** ~ 2.7 g/cm³

• **Relative density at 20 °C** ~ 2.7 g/cm³ (H₂O = 1)

• **Vapour density (AIR = 1):** Not determined.

- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with Water:** not miscible or difficult to mix
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - dynamic:** not determined
 - kinematic at 20 °C:** ~ 50 s (ISO 6 mm)
- **9.2 Other information** No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

- **10.1 Reactivity** see 10.3
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
Avoid impact, friction, heat, sparks, electrostatic charges.
- **10.3 Possibility of hazardous reactions**
Flammable vapour-air mixtures may develop.
Used empty containers may contain product gases which form explosive mixtures with air.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Strong oxidizing agents
- **10.6 Hazardous decomposition products:** Carbon monoxide (CO) and Carbon dioxide (CO₂), Zinc oxide fumes

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	> 6800 mg/kg (rat)
Dermal	LD50	> 3400 mg/kg (rabbit)
Inhalativ	LC50/4 h	> 10,2 mg/l (rat)
- **Primary irritant effect:**
- **on the skin:** Long or repeated contact can defat skin and may cause dermatitis.
- **on the eye:** Short time, reversible irritating effect.
- **Subacute to chronic toxicity:** not classified
- **Sensitisation** Contains a sensitising substance. May produce an allergic reaction.
- **Repeated dose toxicity** not classified
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
According to present knowledge no CMR-effects known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

- **Aquatic toxicity:**
7440-66-6 Zinc powder - Zinc dust (stabilized)
EC50/48 h (static) 0,139 - 0,908 mg/l (water flea (daphnia magna))
EC50/72 h (static) 0,09 - 0,125 mg/l (algae (pseudokirchneriella subcapitata))
EC50/96 h (static) 0,11 - 0,271 mg/l (algae (pseudokirchneriella subcapitata))
- **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.
- **Additional ecological information:**
- **General notes:**
Very toxic to aquatic life with long lasting effects.
Water hazard class 2 (Self-assessment): hazardous for water
- **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** Disposal must be made according to official regulations.
- **European waste catalogue:**
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packagings:**
- **Recommendation:**
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

SECTION 14: TRANSPORT INFORMATION

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1263
- **14.2 UN proper shipping name**
- **ADR** UN1263 PAINT, ENVIRONMENTALLY HAZARDOUS, SPECIAL PROVISION 640E
- **IMDG** PAINT (Naphtha (petroleum), hydrodesulfurized heavy), MARINE POLLUTANT
- **IATA** PAINT
- **14.3 Transport hazard class(es)**
- **ADR**



- Class 3 (F1) Flammable liquids
- Label 3
- IMDG



- Class 3 Flammable liquids.
- Label 3
- IATA



- Class 3 Flammable liquids
- Label 3
- 14.4 Packing group
- ADR, IMDG, IATA III
- 14.5 Environmental hazards:
- Marine pollutant: YES
Symbol (fish and tree)
- Special marking (ADR): Symbol (fish and tree)
- 14.6 Special precautions for user Warning: Flammable liquids.
- Kemler Number: 30
- EMS Number: F-E,S-E
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.
- Transport/Additional information: Transport by post may be prohibited or restricted.
- ADR
- Excepted quantities (EQ): E1
- Limited quantities (LQ): 5L
- Transport category: 3
- Tunnel restriction code: D/E
- UN "Model Regulation": UN1263, PAINT, SPECIAL PROVISION 640E, ENVIRONMENTALLY HAZARDOUS, 3, III

SECTION 15: REGULATORY INFORMATION

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

- **National regulations**
- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.
- **Decree to be applied in case of technical fault:**
Quantity limits according to "EC Seveso directive" should be observed.
- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases

The(se) R- resp. H-phrase(s) are those of the ingredient(s) and do(es) not necessarily represent the classification of the preparation/mixture.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

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.

R10 Flammable.

R14 Reacts violently with water.

R36/37/38 Irritating to eyes, respiratory system and skin.

R42 May cause sensitisation by inhalation.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

- Department issuing MSDS:

SISTEC Coatings GmbH

Mauserstraße 6/1

71640 Ludwigsburg

GERMANY

- 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 Harmonized 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Asp. Tox. 1: Aspiration hazard, Hazard 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