

CHIN CHA-ROEN INTERCHEM CO.,LTD.

899/69 MOO15 THEPARAK RD., BANGSAOTHONG, AM-PUR BANGSAOTHONG, SAMUTPRAKARN 10570 THAILAND TEL.662 706-4470-2 FAX.662 706-4427 www.chin-charoen.com, e-mail: ga@chin-charoen.com

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Material Safety Data Sheet According to 91/155 EC

Printing date 23.04.2002

Reviewed on 04.05.1999

1 Identification of substance:

- · Product details :
- Trade name :UNIZINC CYZ 511 4X
- · Article number: 89332
- · Manufacturer /Supplier:

Kunz Gmbh Untergasse 47 D - 65468 Trebur - Geinsheim Telefon: 06147/50130 Telefax: 06147/501319

Further information obtainable from : Department laboratory

2 Composition/Data on components:

- · Chemical characterization :
- · Description: Mixture of substances without specific hazardous.

Polyvinyl Alcohol derivate Cas no: 9002-89-5, Nicotinic acid reaction product Cas no: 59-67-6,

Epichlorohydrin-derivate Cas no: 26587-37-1

Dangerous components : Void

3 Hazard identification:

- Hazard description: not applicable
- Information concerning to particular hazards to man and environment not applicable

4 First aid measures:

- · General information No special measures required.
- 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.
- After swallowing Drink plenty of water and provide fresh air. Call for a doctor immediately.

5 Fire fighting measure:

· Suitable extinguishing agents

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards caused by the substance, its products of combustion or resulting gases:

Formation of toxic gases is possible during heating or in case of fire.

· Protective equipment: Mount respiratory protective device.

6 Accidental release measures:

- Person related safety precautions: Wear protective clothing.
- · Measures for environmental protection:

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

· Measures for cleaning / collecting :

Absorb with liquid - binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Additional information: No dangerous substances are released.

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7 Handling and storage

- · Handling
- · Information for safe handling: No special measures required.
- · Information about fire and explosion protection: No special measures required.
- 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: None.
- · Storage class
- · Class according to regulation on flammable liquids: Void

8 Exposure controls and personal protection gear

- · Additional information about design of technical facilities:
 - No further data; see item 7.
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

- · Respiratory protection: Not required.
- · Protection of hands:



Protective gloves.

· Eye protection:



Safety glasses

· Body protection: Protective work clothing.

9 Physical and chemical properties:

· Form: Fluid

Colour: Red Characteristic

· Change in condition

Melting point/Melting range: undetermined

Boiling point/Boiling range: 100°C

Flash point: Not applicable

Self-igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Vapour pressure at 20°C: 23 hPa

Density at 20°C: ca. 1.12 g/cm3

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· Solubility in / Miscibility with

Water:

Fully miscible

· pH-value at 20°C:

5.5 - 7.0

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
 - No decomposition if used according to specifications.
- · Dangerous reactions No dangerous reactions known
- · Dangerous decomposition products: No dangerous decomposition products known

11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information:

- · Information about elimination (persistence and degradability):
- · Other information: No data available
- General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

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

Product containes AOX-Ingrediants

13 Disposal considerations

- · Product:
- · Recommendation Must be specially treated adhering to official regulations.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

- Land transport ADR/RID (cross-border)
- · ADR/RID class:
- · Maritime transport IMDG:
- · IMDG Class:
- · Marine pollutant: No

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- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class: -

15 Regulations

- · Labelling according to EU guidelines:
- Observe the general safety regulations when handling chemicals
 The product is not subject to identification regulations under EU Directives and the
 Ordinance on Hazardous Materials (German GefStoffV).

 National regulations
- · Classification according to VbF: Void
- · Waterhazard class: WGK 3 (Self-assessment): strong hazardous for water

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.

· Department issuing MSDS: Department laboratory