

SAFETY DATA SHEET



Resist 78/86 - Comp. B

1. Identification of the substance/preparation and company/undertaking

Product name and/or code : Resist 78/86 - Comp. B
Label No. : 4446
Supplier/Manufacturer : Jotun Paints (Europe) Ltd.
Stather Road
Flixborough, Scunthorpe
North Lincolnshire
DN15 8RR
England

Tel: +44 17 24 40 00 00
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Emergency telephone number : Contact National Poison Centre via Hospital or Registered Medical Practitioner

Product use : Coatings: Zinc Powder.

2. Composition/information on ingredients

Chemical name*	CAS no.	EC number	%	Classification
zinc stabilized	7440-66-6	231-175-3	50 - 100	N; R50/53
zinc oxide	1314-13-2	215-222-5	2.5 - 10	N; R50/53
See section 16 for the full text of the R-phrases declared above				

Occupational exposure limits, if available, are listed in section 8.

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.



Dangerous for the environment.

4. First-aid measures

First-aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious, place in recovery position and seek medical advice.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do not use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.

5. Fire-fighting measures

- Extinguishing media** : Recommended: alcohol-resistant foam, CO₂ blanket, water spray or mist.
Not to be used : water jet.
- Recommendations** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to sewers or waterways.

6. Accidental release measures

- Personal precautions** : Exclude sources of ignition and ventilate the area. Avoid breathing dust. Refer to protective measures listed in sections 7 and 8.
- Spill** : Contain and collect spillage with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

Persons suffering from respiratory problems or allergic responses should not be exposed to or handle powder coatings.

- Handling** : Precautions should be taken to prevent the formation of dusts in concentrations above flammable, explosive or occupational exposure limits.

Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources.

To dissipate static electricity during transfer, earth drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Put on appropriate personal protective equipment (see section 8).

Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

- Storage** : Store in accordance with local regulations. Observe label precautions. Store in a cool, well-ventilated area away from incompatible materials and ignition sources.

Keep away from: oxidising agents, strong alkalis, strong acids.

No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Do not empty into drains..

8. Exposure controls/personal protection

- Engineering measures** : Do not breathe dust. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain exposure to dusts below the OEL, suitable respiratory protection must be worn.

Ingredient name

zinc stabilized

Occupational exposure limits

EH40-OES (United Kingdom (UK), 2002).

STEL: 10 mg/m³ 15 minute/minutes. Form: Fume

TWA: 5 mg/m³ 8 hour/hours. Form: Fume

Personal protective equipment

Respiratory system

- : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. If dust is generated and ventilation is inadequate, use respirator that will protect against dust/mist. (P2).

Skin and body

- : Personnel should wear protective clothing. Care should be taken in the selection of protective clothing to ensure that inflammation and irritation of the skin at the neck and wrists through contact with the powder are avoided.

- Hands** : For prolonged or repeated handling, use gloves: nitrile.
- Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.
- Eyes** : Safety eyewear should be used when there is a likelihood of exposure.

9. Physical and chemical properties

- Physical state** : Solid.
- Odour** : Characteristic.
- Colour** : Various colours.
- Flash point** : Closed cup: 100°C (212°F).
- Density** : 7.1 g/cm³
- Solubility** : Insoluble in cold water, hot water.

10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7).

Hazardous decomposition products: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

11. Toxicological information

There is no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 15 for details.

Coating powders can cause localised skin irritation in folds of the skin or under tight clothing.
Inhalation of zinc fumes may induce influenza (zinc fever), which usually may last for two days.

12. Ecological information

There is no data available on the preparation itself.
Coating powder residues should not be allowed to enter drains or watercourses or be deposited where they could affect ground or surface waters.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See Sections 2 and 15 for details.

Ecotoxicity data

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
zinc stabilized	Daphnia magna (EC50)	48 hour/hours	2.8 mg/l
	Pimephales promelas (LC50)	96 hour/hours	0.238 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	0.24 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	0.41 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	0.56 mg/l
	Daphnia magna (LC50)	96 hour/hours	0.57 mg/l
zinc oxide	Daphnia magna (EC50)	48 hour/hours	>1000 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	1.1 mg/l
	Lepomis macrochirus (LC50)	96 hour/hours	>320 mg/l
	Pimephales promelas (LC50)	96 hour/hours	2246 mg/l

13. Disposal considerations

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

European waste catalogue (EWC) : 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

14. Transport information

International transport regulations

- Proper shipping name** : Environmentally hazardous substance, solid, n.o.s. (zinc stabilized, zinc oxide)
- UN Number** : 3077
- Class** : 9
- Sub-risk** : -
- Packing group** : III

Label :

**Additional information**

ADR / RID : Hazard identification number: 90
Special provisions: 274

IMDG : Emergency schedules (EmS): F-A, S-F
Marine pollutant: No.

IATA : -

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

These zinc types have been tested according to the criteria for classes 4.1, 4.2 and 4.3. The test results shows that these types do not meet the criterias for classifying in class 4.1, 4.2, 4.3 : BAM, 2005 Report II.2-916/04.

15. Regulatory information**EU regulations** : The product is classified and labelled for supply in accordance with the Directive 1999/45/EC as follows:**Hazard symbol/symbols** :

Dangerous for the environment.

Risk phrases : R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**Safety phrases** : S7/8- Keep container tightly closed and dry.**16. Other information****CEPE Classification** : 3**Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)** : R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**Notice to reader****History****Date of printing** : 08.12.2005.**Date of issue** : 08.12.2005.**Date of previous issue** : 08.12.2005.**Version** : 5**Prepared by** : Jotun Group Product Safety Department

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

 Indicates information that has changed from previously issued version.

Version 5

Page: 4/4