

SAFETY DATA SHEET

5500 Solventfree Epoxy System (Base)

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

- Product name and/or code** : 5500 Solventfree Epoxy System (Base)
- Manufacturer** : Rust-Oleum Netherlands BV, PO. Box 138, NL-4700 AC Roosendaal, The Netherlands
NV Martin Mathys, Kolenberg 23, B-3545 Zelem, Belgium
- Emergency telephone number** : Rust-Oleum: (+31)165-593636; Fax (+31)165-593600
Martin Mathys: (+32)13-460200; Fax (+32)13-460201
- Product use** : Base for 2-component paint.
Protective coatings for industrial buildings and castings.

2. Composition/information on ingredients

Substance/preparation : Preparation

Chemical name*	CAS No.	%	EC number	Classification
Europe				
Bisphenol-A-epoxy resin avg.mol.wght. < 700		25 - 50	500-033-5	Xi; R36/38 R43
Bisphenol-F-epoxy resin avg.mol.wght. < 700		10 - 25	500-006-8	N; R51/53 Xi; R36/38 R43
C12-C15 Alkylglycidylether	68609-97-2	5 - 10	271-846-8	N; R51/53 Xi; R36/38 R43
See section 16 for the full text of the R Phrases declared above				

* Occupational Exposure Limit(s), 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.

Classification : R36/38- Irritating to eyes and skin.
R43- May cause sensitization by skin contact.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The preparation may be a skin sensitizer. It also might be a skin irritant and repeated contact might increase this effect.

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** : Inhalation not likely under normal use conditions.
- Skin Contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized 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 this container or label. Keep person warm and at rest. Do not induce vomiting.
- Notes to physician** : Persons with a history of skin sensitization problems should not be employed in any process in which this preparation is used.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

- Extinguishing Media** : Recommended: alcohol resistant foam, CO₂, powders, water spray.
Not to be used : waterjet.
- 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.
- Special fire-fighting procedures** : Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Hazardous thermal decomposition products** : In a fire, the following can be released: carbon oxides (CO, CO₂), halogenated compounds and nitrogen oxides (NO, NO₂...). In certain fire conditions, traces of other toxic gases may be emitted.

6. Accidental release measures

- Personal precautions** : Provide adequate ventilation. Refer to protective measures listed in sections 7 and 8.
- Spill** : Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth, and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses. Clean preferably with a detergent; avoid use of solvents. 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

- Handling** : Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.
- Avoid contact with skin and eyes. 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: oxidizing agents, strong alkalis, strong acids.
No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.
Do not empty into drains..

8. Exposure controls/personal protection

- Engineering measures** : No special measures are required. General ventilation is typically sufficient. Provide eye wash and quick drench shower close to work station. Provide a readily accessible eyewash facility and quick drench safety shower.
- Hygiene measures** : Keep away from food, drink and animal feeding stuffs. Never eat, drink or smoke in work areas. Practice good personal hygiene when using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. Separate contaminated work clothes from street clothes. Launder before reuse. Remove material from shoes and clean personal protective equipment. Ensure that eyewash stations and safety showers are close to the work-station location. It is generally recognized that contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury.
- Occupational exposure limits** : Not available.
- Recommended monitoring procedures** : No special measures are required. General ventilation is typically sufficient. Provide eye wash and quick drench shower close to work station.

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Occupational exposure controls : Keep in a cool, well-ventilated place. Avoid contact with eyes, skin and clothing. During formulation follow good industrial hygiene practice. No special ventilation requirements. Product does not contain relevant quantities of materials with exposure values that have to be monitored. Provide an eye wash in the area if eye contact may occur.

Personal protective equipment

Respiratory system : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

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.

Skin and body : Personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers.

Eyes : Use safety eyewear designed to protect against splash of liquids.

9. Physical and chemical properties

Physical state : Liquid. (Paste.)
Color : Depending on productnumber
Odor : Odorless.
Specific gravity : 1.3 to 1.5 (Water = 1)
pH : Basic.
Melting point : -10°C (14°F)
Boiling point : >200°C (392°F)
Auto-ignition temperature : >400°C (752°F)
Flash point : Closed cup: >130°C (266°F).
This material will not burn or burns with difficulty.
Solubility : Insoluble in cold water, hot water.
Viscosity : Dynamic: >5000 cP
Volatility (%) : 0% (v/v). 0% (w/w).
VOC (W/W): : 0 (g/l).

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.

Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

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 Chapters 2 and 15 for details.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Based on the properties of epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitizer and a severe irritant. It contains epoxy-based reactive diluents which are moderately to severely irritating to eyes, mucous membranes and skin and are strong sensitizers. Repeated skin contact may lead to irritation and to hypersensitivity, possibly with cross-sensitization to other epoxies. Single oral exposure to doses of the epoxy-based reactive diluents at or close to the lethal dose has been shown to cause transient neurotoxic effects in animals in some cases. However, uptake through skin and by inhalation has not caused such effects in animals. Prolonged exposure to high concentrations may cause adverse effects in target organs such as the liver and kidneys.

Contains (Bisphenol-A-epoxy resin avg.mol.wght. < 700, Bisphenol-F-epoxy resin avg.mol.wght. < 700, Oxirane, mono [(C12-C16-alkyloxy)methyl] derivatives). May produce an allergic reaction.

Potential acute health effects

Ingestion : Ingestion is not a reasonably foreseeable route of exposure with the intended use of this product.
Inhalation : Inhalation not likely under normal use conditions.
Skin contact : Harmful in contact with skin. Irritating to skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. May cause sensitization by skin contact.
Eye contact : This product may irritate eyes upon contact. Inflammation of the eye is characterized by redness, watering, and itching.
Other adverse effects : Adverse symptoms may include: allergic reaction, cross-sensitization.
Other toxic effects on humans : May cause sensitization by skin contact. The onset of symptoms may be delayed. Repeated exposure may cause allergic skin rash, itching, swelling.

Acute Data (LD₅₀, LC₅₀) - Toxicity to Test Animals

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<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Bisphenol-A-epoxy resin avg.mol.wght. < 700	LD50	13600 mg/kg	Oral	Rat
	LD50	20000 mg/kg	Oral	Mouse
	LD50	>2000 mg/kg	Dermal	Rabbit
C12-C15 Alkylglycidylether	LD50	>10000 mg/kg	Oral	Rat
Carcinogenicity	: No known significant effects or critical hazards.			
Mutagenicity	: No known significant effects or critical hazards.			
Reproductive toxicity	: No known significant effects or critical hazards.			

12. Ecological information

There is no data available on the preparation itself.
Do not allow to enter drains or watercourses.

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>Result</u>	<u>Period</u>	<u>Species</u>
Bisphenol-A-epoxy resin avg.mol.wght. < 700	fathead minnow Fathead minnow (pimephales promelas)	24 hour(s)	3.1 mg/l
	zebra fish zebra fish (brachydanio rerio)	24 hour(s)	9.4 mg/l
	daphnia (EC50)	24 hour(s)	1 mg/l
C12-C15 Alkylglycidylether	Daphnia (EC50)	48 hour(s)	1 to 10 mg/l

<u>Ingredient name</u>	<u>Persistence/degradability</u>						<u>Bioaccumulative potential</u>		
	BOD ₅	COD	ThOD	Aquatic half-life	Photolysis	Biodegradability	LogP _{ow}	BCF	Potential
Bisphenol-A-epoxy resin avg.mol.wght. < 700						Not readily	>3		high
Bisphenol-F-epoxy resin avg.mol.wght. < 700						Not readily			
C12-C15 Alkylglycidylether							>3		high

Mobility : Non-volatile.

13. Disposal considerations

Do not allow to enter drains or watercourses.
Dispose of according to all federal, state and local applicable regulations.

Methods of disposal ; : Type: Hazardous chemical waste.
Waste of residues ; : Location: not available
Contaminated packaging : Classification: H12 (Environmentally hazardous)
Disposal.: via incineration
Storage: * (No specific storage is required. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded. Storage of controlled substances must comply with applicable regulatory security requirements.)
Recycling: * (Not applicable.)

European waste catalogue (EWC) : 080111

14. Transport information

International transport regulations

<u>Regulatory Information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>Packing group</u>	<u>Label</u>	<u>Additional information</u>
ADR/RID Class	3082	Environmentally hazardous substance, liquid, n.o.s. Limited quantity	9	III		Hazard identification number 90 Limited quantity LQ28 CEFIC Tremcard 90G01 Remarks Limited Quantity - ADR/IMDG 3.4.6

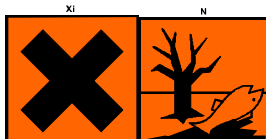
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IMDG Class	3082	Environmentally hazardous substance, liquid, n.o.s. Limited quantity	9	III		Emergency schedules (EmS) F-A, S-F Remarks Limited Quantity - ADR/IMDG 3.4.6
IATA-DGR Class	3082	Environmentally hazardous substance, liquid, n.o.s. (epoxyresin)	9	III		Packaging instruction 914

15. Regulatory information

EU Regulations : The product is labelled as follows, in accordance with local regulations:

Hazard symbol(s) :



Irritant, Dangerous for the environment.

Risk Phrases :

R36/38- Irritating to eyes and skin.
R43- May cause sensitization by skin contact.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases :

S24/25- Avoid contact with skin and eyes.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37- Wear suitable gloves.
S56- Dispose of this material and its container at hazardous or special waste collection point.
S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains :

Bisphenol-A/F-epoxy resin avg.mol.wght. < 700 500-033-5
C12-C15 Alkylglycidylether 271-846-8

Product use :

Classification and labeling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amendments and the intended use.
- Industrial applications.

Additional warning phrases :

Contains epoxy constituents. See information supplied by the manufacturer. This information is provided by the current Safety Data Sheet.

EC Statistical classification (Tariff Code) :

3824 90 70

16. Other information

Full text of R-phrases appearing in section 2:

R36/38- Irritating to eyes and skin.
R43- May cause sensitization by skin contact.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Designation of symbols in Section 2 :

Xi - Irritant
N - Dangerous for the environment.

HISTORY

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Prepared by : RPM Europe - Department Environment, Health and Safety

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