

Technical Data

SAFEGUARD UNIVERSAL



Product description

Safeguard Universal is a two-pack corrosion preventing epoxy vinyl-based coating. Available with two different hardeners for varying substrate temperatures, Standard (Std) and Cold Climate (CC).

Recommended use

Safeguard Universal is normally used as undercoat in combination with epoxy and polyurethane systems. It gives a very good adhesion for various topcoats (not alkyds) as well as self-polishing antifouling.

Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry (μm)	50	200	150
Film thickness, wet (μm)	75	310	230
Theoretical spreading rate (m^2/l)	13	3.2	4.3

Comments

As a sealer coat, (dry film thickness 50 μm) additional thinner may be necessary (5-10%)
Spreading rates shown for standard version only.

Physical properties

Colour	Red and Grey.
Solids (vol %)*	65 \pm 2 Standard climate hardener 62 \pm 2 Cold climate hardener
Flash point	27°C \pm 2 (Setaflash)
	lbs/gal (330 gms./ltr.) USA-EPA Method 24 263 gms./ltr.UK-PG6/23(92).Appendix 3
Gloss	Semigloss
Water resistance	Excellent
Abrasion resistance	Good
Solvent resistance	Good
Chemical resistance	Good
Flexibility	Good

*Measured according to ISO 3233:1998 (E)

Surface preparation

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504.

Bare steel

Cleanliness: Blast cleaning to Sa 2½ (ISO 8501-1:1988). Roughness: using abrasives suitable to achieve grade Fine to Medium G (30-85 µm, Ry5) (ISO 8503-2)

Coated surfaces

Clean, dry and undamaged compatible primer. Contact your local Jotun office for more information.

Other surfaces

The coating may be used on other substrates. Please contact your local Jotun office for more information.

Condition during application

The temperature of the substrate should be minimum +10°C (Std) (-5°C in CC) and at least 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. Good ventilation is required in confined areas to ensure proper drying. The coating should not be exposed to oil, chemicals or mechanical stress until cured.

Application methods

Spray	Use airless spray
Brush	Recommended for stripe coating and small areas, care must be taken to achieve the specified dry film thickness.

Application data

Mixing ratio (volume)	8,5 parts Comp. A (base) to 1 part Standard Comp. B (curing agent) 5,7 parts Comp. A (base) to 1 part Cold Climate Comp. B (curing agent)
Pot life (23°C)	2 hours (Reduced at higher temp.)
Thinner/Cleaner	Jotun Thinner No. 17
Guiding data airless spray	
Pressure at nozzle	15 MPa (150 kp/cm ² 2100 psi)
Nozzle tip	0.53-0.78 mm (0.021-0.031")
Spray angle	65-80°
Filter	Check to ensure that filters are clean.
Note	* The temperature of the mixture of base and curing agent is recommended to be at least 15°C, otherwise extra solvent may be required to obtain correct viscosity. * Too much solvent results in lower sag resistance and slower cure. * Thinner should be added after mixing components.

Drying time

Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with:

* Good ventilation (Outdoor exposure or free circulation of air)

* Typical film thickness

* One coat on top of inert substrate

Safeguard Universal Standard:

Substrate temperature	10° C	23° C	40° C
Surface dry	6 h	3 h	1.5 h
Through dry	20 h	8 h	3.5 h
Cured	14 d	7 d	3 d
Dry to recoat, minimum	20 h	8 h	3.5 h
Dry to recoat, maximum ¹			

Safeguard Universal Cold Climate:

Substrate temperature	0° C	5° C	10° C	23° C
Surface dry	15 h	10 h	5 h	2 h
Through dry	24 h	18 h	12 h	5 h
Cured	14 d	7 d	3 d	2 d
Dry to recoat, minimum ¹	24 h	18 h	12 h	5 h
Dry to recoat, maximum	-	-	-	-

1. The surface should be free from chalking and contamination prior to application. For interior exposure, note that best intercoat adhesion occurs when the subsequent coat is applied before the preceding coat is cured.

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

Typical paint system

Jotamastic 87 Aluminium 1 x 200 µm (Dry Film Thickness)
Safeguard Universal 1 x 150 µm (Dry Film Thickness)

Antifouling as required

Other systems may be specified, depending on area of use

Storage

The product must be stored in accordance with national regulations. Storage conditions are to keep the containers in a dry, cool, well ventilated space and away from source of heat and ignition. Containers must be kept tightly closed.

Handling

Handle with care. Stir well before use.

Packing size

17 L. Comp. A and 2 L. Standard Comp. B or 3 L. Cold Climate Comp. B.

Packing may vary from country to country according to local requirements.

Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not breathe or inhale mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately.

For detailed information on the health and safety hazards and precautions for use of this product, we refer to the Material Safety Data Sheet.

DISCLAIMER

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product is often used under conditions beyond our control, we cannot guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice.

Head Office & Nordic

Jotun Paints
P.O. Box 2021
N-3248 Sandefjord
Norway
Phone +47 33 45 70 00
Fax +47 33 46 46 13

Europe

Jotun Paints (Europe) Ltd.
Stather Road, Flixborough
North Lincolnshire DN15 8RR
United Kingdom
Phone +44 172 44 00 000
Fax +44 172 44 00 100

Middle East

Jotun U.A.E Ltd. LLC.
Al Quoz Industrial Area
P.O Box 3671
Dubai U.A.E
Phone +971 4 3 39 50 00
Fax +971 4 3 38 06 66

South East Asia

Jotun (Singapore) Pte. Ltd.
No 11-15, Sixth Lok Yang
Road
Jurong
Singapore 628 111
Phone +65 6265 4711
Fax +65 6265 7484

Jotun is a World Wide company with factories, sales offices and stocks in more than 50 countries. For your nearest local Jotun address please contact the nearest regional office or visit our website at www.jotun.com

ISSUED 14 FEBRUARY 2002 BY JOTUN PAINTS
THIS DATA SHEET SUPERSEDES THOSE PREVIOUSLY ISSUED