

Simacover Tar Epoxy 3404-00*Product Data Sheet**Last update: September 2021*

Description	Two components polyamine adduct cured coal tar epoxy.
Principal Characteristics	Excellent corrosion resistance Excellent adhesion Excellent abrasion and impact resistance Good chemical, oil and solvent resistance Can be used over power tool cleaned surfaces in atmospheric exposures
Recommended use	As primer coat and finish coat for use in new construction and maintenance in severely corrosive marine and industrial environment, both for immersion in water (steel ship's bottom, boot top, tidal and splash zones on offshore structure etc) and for atmospheric exposure (top side, steel structures etc).
Specification data on 20 °C	
Gloss	Eggshell
Colour	Black and Brown
Specific gravity	1.50 ± 0.15 [g/mL]
Solids by volume	71 ± 2 %
Recommended	Dry film thickness : 100 micron Wet film thickness : 141 micron
Coverage theoretical	7.1 m ² / litre - 100 micron
Drying time	Touch dry : 3 hours at 30°C Hard dry : 15 Hours
Full cure	7 days
Potlife	6 Hours (after mixing components)
Painting interval	Min : 6 hours ; max : unlimited
VOC	177 g/litre (Base), 275 g/litre (hardener)
Shelf Life	12 months (cool and dry place)
Flash point (DIN 53213)	Base = 17,8 °C, Hardener = 33.4 °C
Service Temperature	Up to 90°C in dry surroundings

Surface Preparation

- For immersion in water, with cathodic protection :
 - Steel; blast cleaned to SSPC-SP 10
 - Steel with zinc silicate shop primer; power tool cleaned to SSPC-SP 3
 - Existing coal tar epoxy coating; sufficiently roughened and free from any contaminant.
- For immersion in water, without cathodic protection :
 - Steel; blast cleaned to SSPC-SP 10
 - Steel with approved shop primer; sweep blasted or power tool cleaned to SSPC-SP 3
 - Existing coal tar epoxy coating; sufficiently roughened and free from any contaminant
- For atmospheric exposure conditions :
 - Steel; blast cleaned to SSPC-SP 6 or SSPC-SP 10
 - Steel with approved shop primer; power tool cleaned to SSPC-SP 2 or 3
 - Existing coal tar epoxy coating; sufficiently roughened and free from any contaminant
- For In order to obtain the maximum resistance against the chemicals and mechanical influences the substrate temperature should be above 5°C during application and curing.

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- Application at temperatures down to -5°C is possible but curing to hardness takes considerably longer and complete resistance will be reached when temperature increase.

If SIMACOVER TAR EPOXY is applied in one coat application at DFT of 400 - 500 microns, this must preferable by done on a preheated substrate of 40°C in order to achieve faster curing, better solvent release and earlier resistance to handling.

Preceding coat : SIMACOVER EP PRIMER or according to specification

Application instruction

Condition	Recommended		
Temperatur	Min 5°C, max 50°C		
Relative humidity	Max 85 %		
Substrate temperature	should be at least 3°C above dew point.		
Mixing ratio	Base : Hardener = 4 : 1 [byvolume] temperature of the mixture should be above 15°C		
Thinner	Sima Thinner 44-01 should be added after mixing the components, and stir well before use preferable by means of mechanical mixer. Too much solvent result in lower sag resistance and slower cure.		
Method of application 1. Airless spray 2. Air Spray 3. Brush	Thinner	Nozzle Orifice	Nozzle Pressure
	Max 10 %	0.021 (0.53 mm)	15 Mpa (150 Bar / 2100 psi)
	5-15%	3 mm	4 Bar / 57 psi
	Max 5 %	-	-

Over coating for DFT up to 250 microns

	Substrate temperature				
	5°C	10°C	15°C	20°C	32°C
Min. interval	24 hours	18 hours	12 hours	6 hours	4 hours
Max. interval when expose to direct sunshine with simacover tar epoxy	25 days	25 days	20 days	14 days	10 days
Max. interval when expose to direct sunshine with other compatible paints	25 days	15 days	10 days	5 days	3 days

- Surface should be cleaned from chalking and contaminants
- When overcoated with other paints tar bleeding will occur
- When overcoating work to be carried out on coats thicker than 250 microns applied in one coat, the minimum over coating interval must be extended as follows :
 - # For 300 microns : 2 time as long
 - # For 400 microns : 3 time as long
 - # For 500 microns : 4 time as long
- Adequate ventilation is required during application and curing
- When application has to be executed at low temperature care should be taken that the temperature of the mixed paints is at least 15°C, the induction should be at least 1°C

Curing table :

	Substrate temperature				
	5°C	10°C	20°C	32°C	40°C
Initial cure (for exposure to sea water and to slightly polluted atmosphere)	96 hours	48 hours	24 hours	18 hours	12 hours
Full cure (for immersion in polluted water of crude oil)	-	15 days	7 days	3 days	2 days

Dry dockings :

- Exposure to sea water is permitted after the initial curing time
- If SIMACOVER TAR EPOXY has been applied by means of hot airless spray, exposure to sea water is permitted after an initial cure of 4 hours
- The mechanical strength, when cures at low temperature is low initially, but will increase quickly when exposed to seawater.

Packing and size instruction

Packing size (two packs product) : 5 and 20 litres

Storage The product must be storage in accordance with national regulation. Preferred storage condition are to keep the containers in the dry space provided with adequate ventilation. The containers should be sealed tightly.

Safety Precaution Wear suitable protective clothing such as overalls, goggles, dust mask and gloves. Ventilation shall be maintained from coating application until the completion of curing in order to remove residue of solvents and promote curing. Do not breathe the vapour or spray. This product is flammable. Keep away from sources of ignition. Do not smoke.

HEALTH AND SAFETY: For detailed information on the health and safety hazards and precaution for use of this product, please see the SAFETY DATA SHEET (SDS).

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