



XGE-901 solvent-free moisture resistant epoxy coating

General Description XGE-901 is an extremely high performance solvent-free heavy duty modified epoxy coating for steel surfaces. XGE-901 is an environmentally friendly formulation and is designed to be applied directly to dry or wet surfaces compatible with old and new steel, adheres tightly to rust spots, and is compatible with old coatings that have a strong surface bond. XGE-901 can be used as a primer, intermediate coat or topcoat.

No harmful solvent vapors, high impact resistance, non-flammable, excellent chemical resistance, no dew point restrictions, no relative humidity problems, excellent corrosion resistance, strong adhesion to the substrate, saving surface treatment costs, no special surface treatment requirements to create good adhesion.

Recommended applications: Shipbuilding, seaports, offshore metal structures, metal structures and underground pits: bridges, hydropower equipment, vehicles, military facilities and other metal structures, as well as underground plant underground pits, tunnels and other concrete surface anti-corrosion waterproof coating pipes and storage tanks, suitable for direct coating on the inside and outside walls of drinking water pipes, fuel oil pipelines or oil pipelines and various storage tanks.

Technical parameters

Paint type/pigment type Modified epoxy resin/amine - special pigment

Color XGE-901100 white XGE-901110 gray XGE-901199 black

Surface Semi-gloss

Mixing ratio Weight ratio: 5(base material):1(curing agent)

Curing agent XGE-A100

Specific gravity approx. 1.4 kg/l

Volumetric solids 100% (theoretical value)

Flash point Base material: >100°C(>212°F); Curing agent: >100°C(>212°F)

Mixing and use period 40 minutes (23°C/73.4°F)

Coating rate 6.7 m²/l at 150 microns (6 mils)

Single layer film thickness Wet film: 150 microns (6 mils), Dry film: 150 microns (6 mils)

Application method Brush, roller, airless spray.

Spray hole 0.48-0.79mm

Outlet pressure ≥25 MPa

Thinner Material: None; Cleaner: UM-TH03

VOC No VOC, 100% solids epoxy product

Drying time Surface drying: approx. 4 hours (23°C/73.4°F)

Re-coating time Min: 16 hours(23°C/73.4°F)Max:5 days,if exceed the maximum time limit,the surface should be roughened

Recommended primer Self-made primer, or recommended

Ambient temperature Min:5°C(41°F)- Max:40°C(104°F)

Substrate temperature Min: 5°C(41°F)- Max: 40°C(104°F).

Packaging Two-component, package sizes available: 5 -20 Kg pack



Storage and product expiry date Product storage must be in line with international guidelines. The product should be stored in a well ventilated place and protected from high temperatures. The container must be kept tightly closed. Expiration date: 1 year.

Main performance

Abrasion test (1kg load/1000rpm)	Weight loss 150mg
Adhesion (pull-off method, sandblasted steel plate Sa2.5)	>20Mpa
Salt spray test - single coating 200 microns 3000 hours	
Surface corrosion	No
Surface blistering (no
Humidity test (water vapor condensation) 3000 hours	
Surface corrosion	None

Construction guidance

Surface treatment XGE-901 is applied with high pressure resistant water blasting, wet and dry sandblasting and mechanical treatment of the surface with the following standards: sandblasting: Sa2 (ISO8501-1:2007).

Ultra-high pressure water blasting: Wj2-M (SSPC SP12-VIS4(I) /NACE N0 7 standard.

Mechanical treatment: St3 (ISO 8501-1:1988).

Mixing and dilution XGE-901, a two-component product, the ratio of the various components in use is clearly fixed, and all components must be stirred and mixed together when used. Firstly, stir the base material to reach smoothness for no more than 2 minutes. After the base material reaches a uniform state, slowly add the curing agent and stir continuously for 3 minutes. It is recommended to use an electric mixer with adjustable speed, do not over mix as it will accelerate the curing and reduce the life of the product. Do not dilute this material.

Higher temperatures reduce the active period of the mix. Lower temperature makes it longer.

Construction XGE-901, can be applied by airless spray, brush or roller. When using airless spraying, it is recommended to use a 60:1 or larger pump and a 0.48-0.79mm diameter nozzle will give good jet flow. For best results, make sure the equipment and liquid flow lines are clean and free of water or solvents. If the line is too long or cold increase the pump ratio. Apply carefully to obtain proper and uniform film thickness.

Ventilation: For the safety of construction personnel and proper performance of this product, provide good ventilation in all parts of the construction area.

SAFETY MEASURES WARNING: Can cause eye and skin irritation. Vapors may cause respiratory irritation in people with allergies. May cause allergic skin reactions. Avoid breathing vapors. Do not touch eyes or skin. Use eye, ear and skin protection and a suitable mask to



avoid potential respiratory irritation. Wash skin thoroughly with water after use. Consult a doctor if you feel unwell. Wash clothing before reuse. If not breathing perform artificial respiration, preferably mouth-to-mouth, and consult a physician. Burns: Exothermic reactions can cause the product to become hotter than normal. Handle with care after mixing. Use gloves. First aid: If you accidentally come into contact with your eyes, immediately flush with water for at least 15 minutes, remove contaminated clothing and shoes, and wash the skin after contact with soap.

Please note that this document is not an official technical document and the information listed is reliable. Each value provided is calculated as theoretical data from the formulation of the product. If desired, SGTECH can advise any of the common internal measurement determination methods for the data given above. As the conditions of use are beyond the control of the manufacturer, the information herein is not guaranteed. The products are intended for professional use only and any questions should be directed to your local SGTECH agent.