TECHNICAL DATA SHEET

HS-2260

500°C High-Temperature Spray Coating

Two-part, low-viscosity, heat-cured protective coating for spray or brush application to metal and ceramic surfaces.

Product data

Property	Supplied specification
Components / appearance	A: colourless or pale white liquid B: transparent liquid
Cured appearance	Colourless to milky-white hard film
Continuous service temperature	-55 to +500 °C
Short-term peak temperature	Up to +600 °C; validate for the application
Mix ratio by weight, A:B	2:1
Density of mixed material	1.20-1.40 g/cm³ at 25 ±0.5 °C
pH of mixed material	3-6
Workable time (source test)	>5 h at 23 ±2 °C and RH ≤70%
Handling use limit	Rest 2 h after mixing; use within 5 h of mixing
Pencil hardness of cured film	≥6H
Water immersion result	No bubbling, cracking or peeling after 24 h in water at 23 ±2 °C, after full cure
Packaging	0.75 kg/set or 3 kg/set
Storage / shelf life	5-35 °C; 12 months from manufacture in unopened, sealed original packaging

Values are taken from the supplied product specification. Test methods, film thickness and full conditioning details are not provided. Confirm performance on the actual substrate, coating thickness and operating cycle.

Application areas

Heating plate protective coating; moisture protection at electric heating tube ends; high-temperature metal panel protection. Suitable substrates include metal and ceramic, subject to surface preparation and application validation.

1. Surface preparation and mixing

Keep surfaces clean, dry and free of oil. Roughen metal by sanding, grit blasting or shot blasting as appropriate. Mix A:B = 2:1 by weight thoroughly and allow to rest for 2 hours before application. Use within 5 hours from mixing; the rest period is included in this limit. Do not use lumpy, gelled or noticeably thickened material.

2. Spray or brush application and cure

Stage	Recommended application process
Preheat the workpiece	60 °C for 30 minutes
Apply coating	Remove and immediately spray or brush; control single-coat thickness
Heat cure	180-220 °C for 15 minutes
Cool	Allow to cool naturally with the oven

The source also lists 200°C for 20 minutes after the same mixing rest and workpiece preheat. These are two supplied cure schedules; validate the selected schedule with the actual parts and oven. Avoid excessive coating thickness to reduce cracking and peeling during drying.

Room-temperature cure at 20°C is slow (approximately 5-7 days) and gives poorer final bonding strength and wear resistance; it is not recommended. Fully cure before further machining or testing.

3. Handling, cleaning and storage

Uncured material absorbs moisture. Keep bottle caps tightly closed, especially in humid conditions. Wipe uncured excess with a clean water-dampened cloth. Use appropriate spray ventilation and protective equipment according to the current SDS.

Store in a cool, dry, ventilated warehouse at 5-35°C, away from direct sunlight and heat. The supplied storage guidance specifies at least 1 m from heat sources, pallets raised at least 0.3 m from the floor and stacks no more than five layers high. Shelf life: 12 months from manufacture in sealed original packaging under specified conditions. Request the current SDS for transport and handling guidance.

4. Packaging and application validation

Standard sets: 0.75 kg and 3 kg; other sizes by agreement. The product photograph shows a 0.75 kg set: A 500 g + B 250 g. Heat resistance is a supplied coating rating, not a guarantee of the complete assembly or substrate. Confirm substrate adhesion, film thickness, thermal cycling and moisture exposure before production.

Prepared from the supplied HS-2260 specification. Application illustrations are suggested uses, not independently verified customer case studies. This TDS does not establish independent certification.