TECHNICAL DATA SHEET

Nanum® Weld Anti-Spatter

NI091100

Description

Nanum® Weld Anti-Spatter is a water and isopropanol-based ink whose technology involves the use of different functionalized nanoparticles dispersed in polymeric matrices to prevent the adhesion of weld spatter from welding processes on metal surfaces. As it is a paint with a high-water content, it is sustainable, does not require curing at high temperatures, allows a thin film to form on the surface and is easily removed with water.

Application

NI091100 is a paint that adheres well to metal substrates, especially carbon steel surfaces, and is able to prevent the adhesion of spatter from coated electrode welding (SMAW), MIG/MAG welding (GMAW), flux-cored arc welding (FCAW) and TIG welding (GTAW) processes. This coating can be applied using methods such as brushing, rolling, spraying or dipping. It is recommended that the part is free of oil on the surface and is preheated to up to 100 °C before the coating is applied. After application, it is also recommended that the coated surface be dried at 100°C to speed up the film formation process.

Properties:

Product name:	Nanum® Weld Anti-Spatter NI091100
Ink vehicle:	Aqueous and alcohol
Physical form:	Greyish liquid
Viscosity (cP):	400 – 1200
pH:	4.0 – 6.0
Specific gravity (g/cm^3):	0.90 – 1.20
Maximum working temperature (°C):	400 - 600
Thickness of the film formed (µm):	5 – 30

Shelf life

NI0911 should be stored avoiding exposure to light in a cool, dry place with optimal temperature range for storage between 41 °F – 104 °F (5°C – 40 °C). This product has a shelf life of 2 years from the manufacture date when stored under the mentioned conditions. Exposing the ink to higher or lower temperatures may cause loss of its properties and/or printing performance.

Operating Conditions

Temperature: 5 ºC – 40 ºC (41 °F – 104 °F)

Humidity: 20 – 60 %

Ink Volume

Custom volume upon client request.

Notes

This WELD ANTI-SPATTER COATING is produced according with a certified ISO 9001:2015 Quality Management System and NANUM warrants all reported specifications. However, satisfactory results from the ink use are related to individual formulation and operational procedures. Users are responsible for testing and to determine if our product will perform as expected throughout the entire printing, post printing, processing, and end-of-life.