

For Professional Use Only

# Environmentally Safe Pickling Paste 2-in-1 Pickling & Passivation – Free of Hydrofluoric and Nitric Acid

#### PRODUCT DESCRIPTION

<u>Pickle 'N' Clean</u> – PASTE formula is a high-performance, patented, 2-in-1 product that pickles and promotes passivation for all grades of stainless steel. In 1 step, it quickly and effectively removes heat tint discoloration and free-iron contamination from stainless steel surfaces. Unlike traditional, toxic products, Pickle 'N' Clean is biodegradable and uses "Smart Chemical Technology" that is **FREE of hydrofluoric acid (HF)** and Nitric and encourages homogenous passivation when applied.

<u>Pickle 'N' Clean</u> is fume-free and easily applied by either a brush or by sprayer depending on the surface area to be treated. It is safe to be used on surfaces for extended / long- term dwell times without pitting, discoloring, corroding or damaging the healthy metal. As a non-dangerous goods product, it is easy to ship and store.

This advanced, water-based paste is the only non-toxic chemical pickling product commercially available.

<u>Pickle 'N' Clean</u> replaces dangerous hydrofluoric acid and nitric acid-based products, many of which are banned or becoming highly regulated. It also eliminates the need for mechanical methods which can release dangerous hexavalent chrome particles into the air. Pickle 'N' Clean complies with the highest levels of regulation and improves health and safety conditions onsite. It is the only known pickling product that can safely be sprayed on large areas without extraction.

**<u>Pickle 'N' Clean</u>** is the best choice to ensure safe and effective pickling and proper passivation every

time to improve weld zone corrosion resistance and avoid in-service weld zone failures. It comes ready to use and complies with ASTM A380 "Standard Practice for Cleaning, Descaling and Passivating of Stainless Steel Parts, Equipment, and Systems"

# **FEATURES & BENEFITS**

- High-performance, 2-in-1 pickling and passivation on all grades of stainless steel.
- Removes heat tint discoloration & free-iron contamination
- Free of Hydrofluoric acid (HF)and Nitric Acid Can be applied by sprayer
- Water-based & fully-biodegradable
- Non-toxic, non-poisonous, non-hazardous No VOC's, no HAPS, no TAPS
- As fast and effective as traditional, dangerous methods
- Easy to spread for application on surfaces.

- Extended dwell times will not damage healthy metal.
- Best choice for health and safety reduces liability.
- Non-dangerous goods product easy to ship and store

**Pickle'N'Clean:** Paste is available 1Gal (3.8L) and 5 gal (19L) pails. It is applied by brush or spray application – depending on quantity and project area. It is used for in-situ application on vertical, horizontal, overhead and large surface area applications.

#### **FOR USE ON**

Pickle 'N' Clean is safe and effective on all grades of stainless steel.

- Austenitic Stainless Steel
- Inconel Alloys
- Monel Alloys
- Hastelloy Alloys
- Duplex Stainless Steel
- Super-Duplex Stainless Steel

It can be brushed or sprayed on indoor/outdoor, vertical/horizontal/overhead and large surfaces areas. It can also be a controlled application using a caulking tube.

#### COVERAGE

<u>Pickle 'N' Clean</u> comes ready to use. DO NOT DILUTE. Do not allow it to freeze.

<u>Pickle 'N' Clean Brush</u>-on Application: 60-80 ft (18 - 24 m / liter) 0.25 gal. Brush-on Application: 2 m2 per liter (80 square feet / 1 US gal)

Product will require mixing prior to use. Use a plastic or clean, rust-free drill mixer (wash after use). Apply at least a 25mm - 50mm (1-2") band of product that liberally covers the entire underlying weld seam and any discoloration.

Pickle 'N' Clean Spray-on Application: 2 m2 per liter (80-100 square feet / 1 US gal).

#### SPRAYER SPECIFICATIONS

2 Quart / 2L Stainless Steel Pressure Pot Sprayer with regulator of up to 50psi. Recommended 68SS x 68PB or 2.5mm Nozzle Setup.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

In well vented areas, brushing or spraying, properly fitted splash goggles and nitrile (chemical resistant) gloves are recommended and should be used at all times when using this product. A face shield can also be used as added protection. If you are working in a poorly ventilated area, a respirator is required using either a half mask with acid vapor cartridges and splash proof goggles and/or a face shield or a full face respirator. Wear proper clothing to avoid any direct contact to skin such as long sleeves or coveralls.

Refer to Health & Safety Section (below) and SDS for additional instructions.

#### SITE CONDITIONS

Use and store product at temperatures between 50-90°F (10-32°C). Protect areas that are not to be treated from overspray and dripping. Protect treated areas from contact or contamination by traffic and/or environmental factors (i.e. rain). Good ventilation should be provided in confined areas.

## **SURFACE PREPARATION & CLEANING**

First, preclean cool surfaces to remove all oils, grease, dirt and other contaminates, using **Cougartron N5** or other alkaline cleaner according to ASTM A380 Standard for Descaling, Pickling and

Passivation of Stainless Steel. This is imperative when using an oil-based anti-spatter product in welding operations.

Surfaces should be smooth and free of weld spatter, loose debris and any liquid or moisture.

## **APPLICATION**

<u>Pickle 'N' Clean</u> arrives ready to use. Testing in a small area is suggested to determine exact dwell time.

The product will require stirring prior to use. Use a plastic or rust-free, clean drill mixer (wash after use).

Do not dilute. Let hot, newly welded surfaces cool completely before application. When applying by synthetic brush, apply a liberal amount of **Pickle 'N' Clean** directly on the treatment area. Ensure complete coverage of .078" - .120" (2mm-3mm) thickness with at least a 1-2 inch (25mm – 50mm) band of product that covers the underlying weld seam and any adjacent discoloration. Once applied, DO NOT agitate or interfere with the working product.

When applying by pressure pot sprayer, ensure complete coverage similar to recommendations for brush-on application. Cover the weld seams, adjacent discoloration and surfaces requiring rust (bloom or imbedded) removal. Protect areas not to be treated from overspray. Once applied, DO NOT agitate or interfere with. It is important to apply the proper thickness of <u>Pickle 'N' Clean</u> to ensure effective surface results. However, too thick an application may result in the product slipping or moving on vertical or sloped

surfaces resulting in an incomplete treatment of affected areas.

## **DWELL TIME**

Always perform a test patch to determine adequate dwell time.

Normal working dwell time (in temperatures above freezing) is between 45 and 90 minutes. Dwell time will vary slightly based on the amount of heat tint discoloration on the surface. Warmer temperatures will increase working speed and decrease dwell time.

<u>Pickle 'N' Clean</u> can be left on stainless steel as long as is needed – overnight or until removal is convenient – without fear of pitting, corrosion or thinning of the weld or base metal that could result in premature failure in the field.

## **REMOVAL**

Pickle 'N' Clean is removed by wiping with wet cloth, washing, or pressure washing. NEVER USE METAL or WIRE BRUSH FOR REMOVAL as cross contamination to pickled area can occur. Product and wash water is fully biodegradable. Wash away according to local water regulations

#### **HANDLING & DISPOSAL**

Pickle 'N' Clean does not require any special handling. The product itself is biodegradable, however once applied, the product will naturally be contaminated with metal ions so disposal should always be approached with a knowledge of local regulations to ensure compliance with any and all rules for your area.

## **STORAGE**

Pickle 'N' Clean requires no special storage or handling. Store in well-sealed containers to prevent spillage and contamination. Extreme hot and cold temperatures should be avoided when storing and transporting. Do not freeze the product.

#### **HEALTH & SAFETY**

Avoid eye contact – it is mandatory to always wear appropriate chemical resistant eye protection. Splash proof goggles are recommended.

**Avoid skin contact** – wear appropriate clothing to avoid direct contact with skin. Nitrile (chemical resistant) gloves for hands, coveralls or comparable clothing for body and site appropriate footwear. If the product comes in contact with skin, wash the area thoroughly with water. Use in areas with adequate ventilation. If the area has poor ventilation, proper air flow must be added. If the area is a confined space, follow all confined space rules and regulations as well as use the mandatory proper PPE.

Do not swallow, inhale, or ingest. If ingestion occurs, seek medical advice if you feel unwell. Do not eat, drink or smoke when using this product. Refer to SDS for additional information.

### PHYSICAL PROPERTIES Pickle 'N' Clean

Color: Off White pH: Acidic Odor: Slight VOC's: None

Flammability: Not Flammable Solubility in Water: Miscible Viscosity:14 0 000 CPS

Application Temperature: 10oC-32oC (50oF-90oF)

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