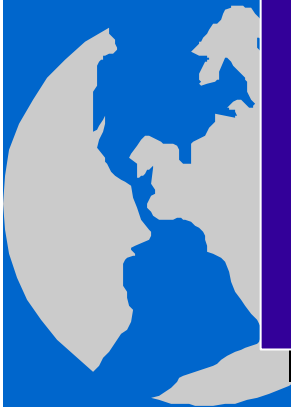




# Stainless Steel, Aluminium & Welding Chemicals



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## Overview

- Chemical treatment of stainless steel is a vital component of the fabrication process
- Pickling of stainless steel following welding leaves a visually and chemically clean surface, which allows a greater chance of the stainless steel forming a passive chrome oxide film.

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## Overview

- S-Weld Clean is an advanced high adhesion pickling gel suitable for all grades of stainless steel, including many high performance alloys and titanium
- A range of stainless steel & aluminium treatment products is now available to maximise surface finish and corrosion resistance

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## Pickling of stainless steel

- For the removal of weld scale, heat tint, ferric oxides, chlorides and other surface contamination
- Leaves the weld and heat affected zone chemically and visually clean
- Aids the auto passivation process
- Confers greater corrosion protection than grinding or sandblasting
- Non residual, cost effective

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## Passivation of stainless steel

- Passivation is the process whereby chrome oxide is regenerated in an oxidising environment
- Chrome oxide is depleted by grinding, sandblasting, polishing, pickling, surface damage and contact with corrosive substances

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## Passivation of stainless steel

- Failure of stainless steel to become or remain passive leads to corrosion
- Corrosion can occur due to the presence of embedded iron oxides and iron chlorides, other surface contamination, or following mechanical surface treatment methods such as grinding, polishing etc.

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## Passivation of stainless steel

- Surface passivation treatment restores the corrosion resistant properties of stainless steel
- Auto-passivation in air may not occur and does not always ensure corrosion resistance
- Chemical passivation with a nitric acid based passivator enhances the restoration of the chrome oxide passive film

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## Chemical treatment in fabrication

- Surface preparation, pre-weld cleaning
- Weld spatter protection
- Descaling / pickling
- Environmental compliance - waste disposal
- Passivation i.e. corrosion protection
- Cleaning of finished product

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## S-Weld Clean

- High technology pickling gel
- Outperforms leading European brands
- Superior gel adhesion technology
- Can even be used on vertical or overhead surfaces
- Stronger and faster acting
- Removal of weld scale & iron contamination which initiates corrosion

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## S-Weld Clean

- Superior packaging & customer information
- Free acid resistant application brush

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## Specifications

- Contains :  
    Nitric Acid 30% and Hydrofluoric Acid  
    5%
- ASTM 380a compliant formulation
- S-Weld Clean is a high adhesion gel, not a  
paste
- Pack sizes available 1kg, 2.5kg, 25kg

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## Other Pickling Products

- Weldbrite spray pickle
- Steelbright pickling solution

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## Weldbrite Spray Pickle

- High technology gel
- ASTM 380a compliant formulation
- Gel adhesion allows uniform coverage of tanks and vessels with greater safety and reduces run-off and wastage
- Strong and fast acting
- Removal of weld scale & iron contamination which initiates corrosion
- Pack sizes available 20L, 200L

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## Steelbright Pickling Solution

- For immersion treatment in pickling bath
- Strong and fast acting
- Removal of weld scale & iron contamination which initiates corrosion
- ASTM 380a compliant formulation
- Water dilutable & rinsable
- Pack sizes available 5L, 20L, 200L

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## Other Stainless Steel Products

- S-Weld Passivator - passivating gel
- S-Weld Neutralizer - neutralising solution
- S-Weld Brite Wash - deoxidising solution & cleaner
- Prosol - pre-weld cleaner

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## S-Weld Passivator

- Strong oxidising agent to passivate stainless steel following pickling, polishing, sandblasting or grinding during fabrication
- Restores chrome oxide passive layer
- Enhances corrosion resistance of stainless steel
- Easy to apply gel, or solution

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## S-Weld Passivator

- Essential following grinding or sandblasting of welds when pickling is not performed
- Use in maintenance procedures following corrosion removal from polishing or chemical deoxidisation
- Pack sizes available 2.5kg

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## S-Weld Brite Wash

- For removal of embedded iron contaminants and corrosion on stainless steel & polished aluminium
- Quickly removes corrosion products
- Removes organic residues such as light oil, grease finger marks
- Essential as a final cleaner after fabrication or installation

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## S-Weld Brite Wash

- Will not affect surface finish
- Also effective for mild steel
- Final rust remover and cleaner before priming mild steel
- Readily miscible with water at all concentrations
- Pack sizes available 500ml ready to use trigger pack, 5L, 20L & 200L

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## S-Weld Neutralizer

- Alkaline solution for neutralising acidic pickling waste prior to discharge to sewer
- Built-in acid / base indicator
- Bright pink solution goes clear at neutralisation point
- Reduces hazard of pickling waste
- Aids trade waste compliance

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## S-Weld Neutralizer

- Can be used as a diagnostic tool to test for the presence of residual pickling gel or solution, especially in corners, crevices and hard to clean areas.
- An aid to worker safety
- Pack sizes available 5L, 20L, 200L

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## Prosol

- Specialised stainless steel & aluminium pre-weld cleaner
- Replacement for thinners, kerosene, toluene, MEK and other hazardous solvents
- Excellent for architectural market, removing finger prints from hand rails, elevator doors etc

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# Prosol

- Non-toxic, non-flammable , worker safe, biodegradable
- Slow evaporation makes Prosol economical
- Excellent for final clean-up & parts washing
- Conforms to Boeing D6-17487 specification for aircraft degreasing
- Pack sizes available 300gm aerosol or bulk 4L, 20L, 200L drums

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## Stainless Steel Maintenance

- Failure to remove embedded contamination due to the work environment, grinding, sand-blasting or polishing after fabrication or installation leaves stainless steel prone to corrosion
- A simple 3-step process can remove existing corrosion & prevent recurrence

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## 3-Step Maintenance Procedure

- Initial clean using S-Brite Wash at a dilution of 1:5 to 1:10 and a compatible pad
- Apply S-Weld Passivator with brush and allow a dwell time of 2 hours. Do not let gel dry out - re-apply if going dry. Rinse off
- Clean & polish with Prosol. Repeat clean using S-Brite Wash at 1:10 regularly

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## Aluminium treatment chemicals

- Albright - brightener & cleaner
- Alu-Weld - pickling gel
- S-Weld Brite Wash - brightener & cleaner for polished aluminium
- Prosol - pre-weld cleaner

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## Albright

- All purpose acidic detergent for cleaning and brightening aluminium
- Removes surface oxides, grease, soil
- Fast acting (~5 minutes)
- Non residual
- Water dilutable & rinsable
- Not for use on polished aluminium
- Available in 5L, 20L or 200L drums

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# Albright

- Ideal for:
  - ship building industry
  - general aluminium fabrication
  - aluminium sidings
  - building maintenance
- Also removes rust, soil, fungi and wood stains from cement, terrazzo tiles and unpolished rock surfaces

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## Alu-Weld

- Unique aluminium pickling gel
- Pre weld cleaner for weathered or oxidised aluminium during maintenance
- Fast acting (~5 minutes)
- Gel formula stays where required
- Non residual
- Water rinsable
- 2.5kg pack including application brush

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# Welding Chemicals

- S-Weld Spatterguard - anti-spatter aerosol spray
- Cal-Guard - water based anti-spatter liquid
- Cal-Guard - nozzle dip gel
- Prosol - Pre weld cleaner

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## Cal-Guard Nozzle Dip Gel

- Protection from spatter of MIG & torch nozzles from spatter
- Extends the operating life of sensitive components of torches & MIG nozzles
- Non toxic
- Economical
- Easy to use
- Available in 400g screw lid jars

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## S-Weld Spatter Guard

- Effective solvent based anti-spatter spray
- Aerosol presentation, CO<sub>2</sub> propellant
- Non-flammable, no silicone, paintable
- Pack size available, 500g can in cartons of 12 cans

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## Cal-Guard Anti-spatter Liquid

- Water based anti-spatter liquid for prevention of weld spatter sticking to parent metal
- Effective
- Non toxic, biodegradable
- Non-flammable
- No silicone, paintable

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## Cal-Guard Anti-spatter Liquid

- Economical
- Pack sizes available 1L, 5L, 20L
- 750ml trigger packs available on request