

## PRODUCT DATA SHEET

### Unique Formulation

*Specially blended for stainless steel applications with superior and powerful cleaning action. High quality surfactants create excellent surface wetting, dispersing and removing most common fabrication greases and soil. Active ingredients preferentially attack surface contamination leaving a sharp clean uniform finish.*



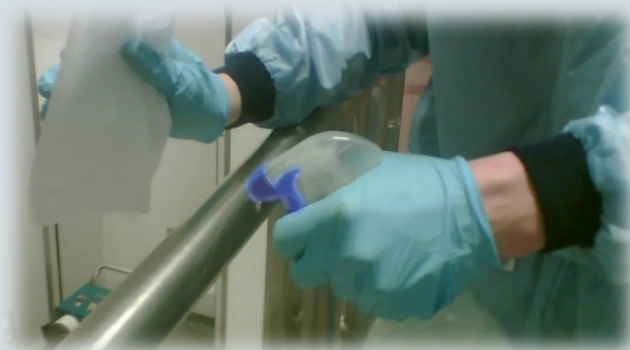
*Stainless Steel Sheet Fabrication  
Prior to Application*



*Stainless Steel Sheet Fabrication  
After Application*

### Product features:

- Effective degreasing of most common fabrication lubricants, oils, greases and general work shop soiling.
- Effective cleaning of surface handling marks and blemishes.
- Ideal pre-treatment process prior to pickling or electro polishing.
- Can be used in single step or multi-step process procedures.
- Low hazard classification, listed as only an Irritant and Non Corrosive, reducing hazard risks and impact to the environment.



*Easily applied and on new fabrications, active ingredients require no scrubbing, just spray it on, wait a short time, wash off and your stainless fabrication is given a clean crisp new look.*

**Willowchem Stainless Steel Cleaner 61 is supplied ready to use and requires no dilution. It is suitable for a wide range of applications with corrosion resistant alloys.**

**Willowchem Technology Limited**

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Stainless Steel Surface Finishing, Products & Consumables, Plant / Equipment & Consultation

# Technical Instructions & Application

## Equipment

**No specialist equipment is required for trigger spray applicators. 25 litre drums: a chemical industrial pump action spray device is employed (incorporating polyethylene, polypropylene and stainless steel exposed and moving parts). Further details on request.**

## Application

**Carried out by spray with either the trigger spray supplied or a pump action spray device, the product is applied liberally directly to surface fascia's, ensuring that all areas are fully covered and wetted. In severely soiled conditions or when application is carried out on used or old fabrications, abrasion with a ScotchBrite pad or similar is advised, although care must be taken not to damage the existing surface finish. Always abrade in the same direction or a direction which compliments the component or fabrication.**



*This column showed signs of corrosion shortly after installation. The lower area has been treated with Cleaner 61.*

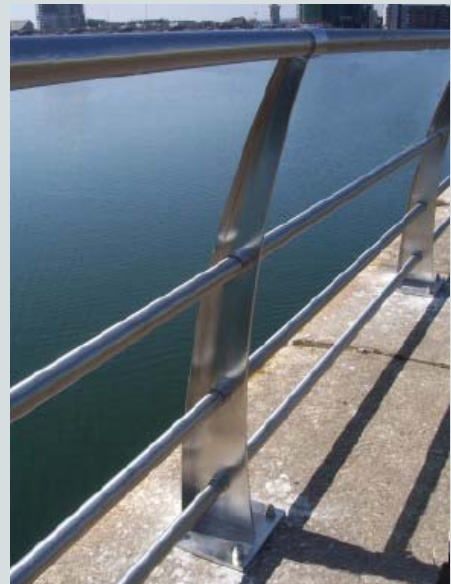
## Application Time

**Depending on degree of cleaning and degreasing necessary, assuming the ambient temperature is above 10 °C, a dwell process time of 10 – 30 minutes is normally sufficient. Do not allow the product to dry and in the event of high local ambient temperatures or weather conditions, continuously reapply, ensuring all surfaces remain wetted throughout the process dwell time. Reapplication may be carried out on heavily soiled surfaces and will have no effect to the base material.**

**Cleaner 61 used on stainless steel hand rails in a marine environment**



*Before Application*



*After Application*

## Temperature

*Cleaning and degreasing efficiency is greatly depleted at both ambient and product temperatures below 10°C. In extreme weather conditions, ensure that the product and items to be treated remain in a warm area. Should there be no choice but to carry out application in temperatures below 10°C, it is advisable to warm the product by external means. Surface substrates should be warmed by using a steam cleaner or similar. Avoid application in direct sunlight.*



*Note:- It is always recommended to trial a test coupon first to ensure compatibility.*

*Stainless Steel Cleaner 61 is often used as a pretreatment prior to electro polishing with Willowchem 90 / 91 Electrolyte*

## Post Treatment

*On completion of the process, components should be thoroughly rinsed with clean fresh water. To obtain full corrosion resistance, stainless steel surfaces which have been cleaned and have no further treatment planned, should undergo a final passivation step.*

*Willowchem Technology **BioPass** is an ideal product for this operation: a non hazardous, biodegradable, multifunctional product with desmut, passivation and biocide properties, rendering all surfaces free from bacteria, fungi and viruses.*

## Safety Precautions

*Willowchem Stainless Steel Cleaner 61 is a mixture of low concentration acids and additives. It is classified as an "Irritant" and not a corrosive. Care should be taken when handling and using this product as well as wearing the appropriate personal protective clothing. The MSDS Health & Safety Data Sheet should be read in conjunction with this data and fully understood prior to handling or application.*

## Environmental Issues

*Whilst the concentration will be low, the waste rinse waters can potentially contain acids that should be neutralised and disposed of inline with the local authority rules and regulations. If you are in any doubt you should contact your local authority. This cleaner is not an ozone depleting product and does not contain toxic components*

*Further information may be obtained by contacting either Willowchem Technology Limited direct or your local distributor / agent.*

## Surface Finishing Product Range

| PRODUCT                                      | APPLICATION  | METHOD   |
|--|--|--|
| <b>CLEANER</b>                               | <b>RANGE</b>   |  |
| <i>Cleaner 60</i>                            | A concentrated highly efficient stainless steel cleaning product that may be applied by spray and diluted for use in immersion processes.  | Solution maybe applied by pump action hand spray or used dilute in an immersion application. |
| <i>Cleaner 61</i>                            | A low classification "Irritant" stainless steel cleaner with high cleaning power.  | Applied by spray by 1000 ml trigger sprays or pump action spray device.                      |
| <b>PICKLE</b>                                | <b>RANGE</b>   |  |
| <i>Pickle Gel 50</i>                         | A universal clear pickle gel, capable of efficiently removing all types of thermal oxides and weld discolouration  | Brush or roller on, 15 – 30 minutes application  |
| <i>Pickle Solution 80</i>                    | A full strength pickling solution capable of combating the most difficult and stubborn thermal oxides and weld scales.   | Mixed 1:1 with water and for immersion and enclosed spray processing only                    |
| <i>Pickle Solution 81</i><br>(Inhibited)     | An inhibited pickle solution that lowers the fume evolution and stabilises the process on initial application  | Mixed 1:1 with water and for immersion and enclosed spray processing only                    |
| <b>ELECTROPOLISH</b>                         | <b>RANGE</b>   |  |
| <i>Electrolyte 90</i>                        | A highly efficient universal electrolyte capable of processing a wide range of stainless steel alloys.   | For electrolytic processing in accordance with the product data sheet.                       |
| <i>Electrolyte 91 Medical Grade</i>          | Similar to that of Willowchem 90 but with the added factor of first fill solution only contain high grade stainless steel metal in solution and the product is supplied with full certification of analysis and conformity.    | For electrolytic processing in accordance with the product data sheet.                       |
| <i>First Fill 90 &amp; 91F</i>               | For first filling of tank the electropolishing products require metal in solution and therefore may be supplied precondition and ready for use.  | For use when starting up a new electropolishing installation.                                |
| <i>High Specific Gravity 90 &amp; 91 HGS</i> | Due to the hygroscopic nature of the electrolyte (Absorbs water for the atmosphere) Willowchem HGS may be added to a working solution in order to maintain the specific gravity within the limits detailed in the data sheets. | For use as additions on an electropolishing installation to increase the specific gravity.   |
| <i>Anodic Etch 95</i>                        | An electrolytic non toxic pickling alternative highly effective electrolyte capable of processing a wide range of stainless steels.  | For electrolytic processing in accordance with the product data sheet.                       |
| <b>PASSIVATION</b>                           | <b>RANGE</b>   |  |
| <i>BioPass</i>                               | A multipurpose Desmut, Passivation Sanitiser. Non Hazardous & Biodegrade.  | Applied by spray by 1000 ml trigger sprays or pump action spray device.                      |
| <i>Passivation 70</i>                        | Nitric acid based concentrate to making up solutions inline with ASTM A697   | Usually mixed 1:1 with water for immersion or spray application.                             |
| <i>Desmut 71</i>                             | Sulphuric acid based product for rapid desmutting following pickling or electropolishing   | Usually mixed 1:1 with water for immersion or spray application.                             |

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