





# PROMOCLEAN<sup>™</sup> TP 178

REMOVING OXIDES, MINERALS RESIDUES & DIAMOND LIQUID POLISHING
AQUEOUS IMMERSION PROCESS WITH ULTRASONICS
SUBSTITUTE FOR PHOSPHORIC ACID BASED CLEANERS

## **BENEFITS**

PROMOCLEAN TP 178 is especially designed for removal of oxides, minerals residues (such as lime scale or finger traces) and diamond liquid polishing in an aqueous immersion process. Having an acid pH, it provides excellent cleaning performance and can be used on most metals such as Inox, ferrous alloys, Copper, Titanium, Aluminium, Gold & Silver. This product can also be used as a brightening agent to make brass & light alloys more shiny. However, the right dilution and process parameters need to be confirmed. It's a concentrated product which is used diluted with DI water. Thanks to its excellent chelating properties it can be also diluted with tap water without risk of lime deposits.

From sustainability point of view, PROMOCLEAN TP 178 does not contain phosphorus compounds and helps to limit the ecological degradation of water bodies & rivers.

|             | Excellent deoxidation power  |
|-------------|--|
| PERFORMANCE | No risk of phosphating ferrous metals  |
|             | <ul> <li>Compatibility with most metals, including sensitive ones</li> </ul> |
|             | High chelating power, reducing lime deposits                                 |
| COST        | High cleaning power even at low concentration                                |
|             | Reduce the cost of wastewater treatment                                      |
|             | <ul> <li>Non-toxic &amp; no CMR substances</li> </ul>                        |
| HSE         | <ul> <li>Low environmental impact : No phosphorus compound</li> </ul>        |
|             | No mineral acid such as hydrochloric nitric or sulfuric acids                |

## **SPECIFICATIONS**

| SPECIFICATIONS         | VALUES        | METHODS    |
|------------------------|---------------|------------|
| Aspect                 | Yellow liquid | Visual     |
| Density at 20°C (g/ml) | 1,06 +- 0,01  | BRY-MO-028 |
| pH of pure product     | 2,1           | BRY-MO-011 |

## **CHARACTERISTICS**

| CHARACTERISTICS       | VALUES                    |
|-----------------------|---------------------------|
| Surface tension at 1% | 28 Dynes /cm <sup>2</sup> |
| Solubility in water   | totally soluble           |

# PROCESS RECOMMENDATION

The best process will depend on factors such as operating conditions, equipment, desired cleaning time and the nature of contaminants. Our team is ready to advise you.

### PROCESS EXAMPLE

## Deoxidation process

DI or TAP WATER HOT AIR VACUUM Conc: 5-30% in DI water Temp: 40-75°C / 104-167°F **DRYING SOLVENT** Temp: 20-30°C / 68-86°F US: Possible Time: 2-5 min Time: 5-20 min **RINSING CLEANING DRYING** 

Diamond polishing compound removal (e.g. manufacturing of tungsten carbide cutting tools)



- Dry ferrous metals immediately after rinsing to avoid corrosion.
- A dedicated PCA Kit to monitor the bath status and compatibility report with different materials are available on request.
- It's key to determine the maximum time materials can be exposed to the cleaning chemical. Although our cleaning products will not damage materials they are designed for under normal conditions, prolonged exposure may.

# PACKAGING, STORAGE & SHELF LIFE

- Keep products in closed original packaging and store at room temperature.
- Shelf life is minimum 18 months from production date when kept in recommended conditions.

## **AVAILABLE PACKAGING**





# **HEALTH, SAFETY & ENVIRONMENT**

## PROMOCLEAN TP 178 is a GREENWAY product.

More info on our Greenway concept via this link



### MAIN CONTRIBUTORS WHICH REDUCE IMPACT:

#### **HUMAN HEALTH & SAFETY**

- Non-flammable & no flashpoint, eliminating the need for explosion proof equipment or special storage & transport
- Non-toxic

### **ENVIRONMENT PROTECTION & RESOURCES SAVINGS**

- No GWP
- No aquatic toxicity
- Does not contain phosphorus compounds
- No mineral acid

Contains no Reach Substances (on Candidate list, Annex XIV & XVII) / Contains no persistent organic pollutant (EC 850/2004) / Contains no Import/Export Hazardous substances (EU 649/ 2012)

It is biodegradable according to regulation 648/2004 but must be neutralized and filtered before disposal in sewer system in accordance with local regulations. Neutralization and titration methods are available upon request.

Please refer always to the Safety Data Sheet (SDS or MSDS) prior to use. Our SDS can be downloaded at <a href="https://www.quickfds.com">www.quickfds.com</a>. We will request to provide your email address, so we can automatically send you a new version of the SDS when a future update would occur.

## **TECHNICAL SUPPORT & FREE-OF-CHARGE TESTING**

Inventec has a worldwide dedicated Technical Support team to help you along the different stages of our cooperation.

Depending on your request, we provide online or onsite support

- to select the right product based on your specific needs
- to assist you in your product qualification process
- to guide you with the initial set up of you process at all your worldwide manufacturing facilities
- to provide fast response on technical issues which could occur at any time during mass production

Customers are also welcome in our CLEANING CENTERS to see the process in action and to get convinced by our solutions. We cover water- and solvent based processes.

Inventec is unique in the world by developing not only cleaning materials but also soldering and coating solutions. These materials are very closely linked with each other from a process point of view. Talking to our Technical Team, who understands very well these 3 different product groups, will help you greatly to overcome technical challenges within your overall process.

Contact our technical support via <a href="mailto:contact@inventec.dehon.com">contact@inventec.dehon.com</a> or your local sales representative.



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# **ABOUT INVENTEC**

Inventec is a global provider of SOLDERING, CLEANING & COATING materials for Electronic, Semiconductor and Industrial applications. For over 60 years we have shown leadership in innovation by putting HEALTH IMPACT, SUSTAINABILITY and RELIABILITY at the core of our product development.

With ISO 9001 & 14001 production sites in France, Switzerland, USA, Mexico, Malaysia and China we can guarantee a smooth and cost-effective supply chain.

We supply to many industries but the excellent performance of our products in applications which demand high reliability, leads us to focus especially on the AUTOMOTIVE, AEROSPACE, SEMICONDUCTOR, ENERGY and MEDICAL industry.

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SOLDERING • CLEANING • COATING

In accordance with the Annex II of Directive 2011/65/UE (RoHS), including its amendments, we certify that this product does not contains quantities above 0.1% of Hg, Pb, Cr VI, PBB, PBDE, DEHP, BBP, DBP, DIBP and above 0.01% of Cd

This data is based on information that the manufacturer believes to be reliable and offered in good faith. In no event will INVENTEC PERFORMANCE CHEMICALS be responsible for special, incidental and consequential damages. The user is responsible to the Administrative Authorities (regulations for the protection of the Environment) for the conformity of his installation.

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