



MEDICAL DEVICES

IMPLANTS AND SURGICAL INSTRUMENTS



ECOLOGICAL CLEANING SOLUTIONS

 SWISS QUALITY



CLEANING AND SURFACE PREPARATION

Quality, reliability, expertise, applied to surface preparation of medical devices before passivation, anodisation or electropolishing

COMPATIBILITY

- Stainless steel:
 - Austenitic
 - Martensitic
 - Precipitation hardening
- Titanium:
 - T40, Ti-6Al-4V
- Chromium - cobalt
- Ceramic
- Aluminium
- Polymer

PARTS

- Implants:
 - Orthopaedics
 - Dental
 - Stents
- Surgical instruments:
 - Ancillary
 - Needles, staples
 - Blades, drills, saws, etc.
 - Catheters

POLLUTIONS

- Cutting oil, neat or soluble
- Abrasives: blasting, polishing, compounds, tumbling, emery
- Fluorescent dye penetrant
- Iron oxide (passivation)
- Fingerprints, dusts

DETERGENTS, SOLVENT, FINISHING AND PASSIVATION

| PRODUCTS | pH | TYPE | FUNCTION | APPLICATION/POLLUTION |
|-----------------------------|------|-------------------------|---|---|
| DECOCLEAN 440 ¹ | 13.7 | Detergent | Spray or ultrasonic cleaning ³ | Neat oil, polishing compounds |
| DECOSPRAY TM ¹ | 9.6 | | | |
| RODACLEAN 2018 ² | 14 | | Ultrasonic cleaning | Polishing compounds, soluble oil, dye penetrant, light pollutions |
| GALVEX 20.01 ² | 8.9 | | | |
| DECOMET | 1 | Citric acid passivation | Soaking | Free iron oxide removal |
| RUBIFIN N°4 | N.A. | Solvent | Degreasing in vacuum or ultrasonic machines | Neat oil |

¹ Requires an oil separator

² Can be used in surface preparation prior to passivation

³ Can be used in vacuum system

REGULATORY COMPLIANCE

| REACH N°1907/2006 | | | CLP 1272/2008 | DM 2017/745 | | | 2011/65/UE | BIOCIDE 528/2010/UE |
|---------------------------|-------------------------------|--------------------------------|-----------------------|-----------------------------|---------------------------------|-------------------------|------------|---------------------|
| Candidates subst. to SVHC | Authorised subst. (annex XIV) | Restricted subst. (annex XVII) | CMR Cat. 1A/1B Cat. 2 | Severe endocrine disruptors | Phtalates, latex, nanomaterials | Subst. of animal origin | ROHS | BPR |
| ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

SUPPORT

- **NGL Academy:** training on precision cleaning, passivation, water treatment, and HSE regulation
- **Application Centre:** various cleaning systems and wide range of analytical tools for all types of tests
- **Worldwide and local implementation**

ISO CERTIFICATION*

- **ISO 9001 - Quality**
- **ISO 14001 - Environment**
- **ISO 45001 - Health and safety at work**

*Applicable to the production site at NGL Cleaning Technology SA



OUR PRODUCTS

SOLVENT

for oil removal and hybrid processes

▪ RUBIFIN N°4

A3 solvent for degreasing in vacuum or ultrasonic machines. Its hydrocarbon-free formulation leaves **no greasy residues** on the parts in vacuum process. Can also be used in **hybrid processes** (solvent/detergent) with Decoclean 440 or Decospray TM. Also suitable for sensitive alloys such as aluminum.

STRONG ALKALIS

for heavy pollutions

▪ RODACLEAN 2018

Strong alkaline detergent for the removal of polishing pastes and soluble oils in ultrasonic processes. Particularly efficient on all grades of steel.

▪ DECOCLEAN 440

Strong alkaline, non-foaming detergent for the removal of neat oil or polishing compounds in spray or ultrasonic processes. The machine must be equipped with an oil separator for neat oil.

RANGE COMPATIBLE WITH VALIDATION STANDARDS

- Cleaning:
 - ISO 19227 - 2018
 - ASTM F3127 - 16
- Characterization of inorganics:
 - ISO 10993 - 18
- Passivation:
 - ASTM A967M - 17
 - ASTM F1089 - 18

MILD ALKALIS

for sensitive alloys and finishing

▪ GALVEX 20.01

Universal detergent without amines, allows degreasing on all materials and offers a high degree of finish due to its excellent rinsability.

Very versatile, for interoperation cleaning (removal of polishing pastes), surface preparation before passivation, anodizing, electrochemical polishing or final cleaning before sterilization.

▪ DECOSPRAY TM

Mild alkali for the removal of neat oils on **sensitive alloys**, in ultrasonic or spray processes. The machine must be equipped with an oil separator.



PASSIVATION

for corrosion protection

▪ DECOMET

Developed to meet the requirements of the ASTM standard A967, this citric acid-based passivation agent solubilizes free iron oxides, present on the surface of stainless steels, **martensitic or austenitic** and promotes the oxidation of chromium, to form a **passive layer**.



EQUIPMENT

With our **UPC 3000**, ensure on a daily basis that your equipment is properly set up:

- Measurement of ultrasonic power in Watts/L
- Measurement of the conductivity
- Temperature measurement
- Detergent concentration measurement
- Measuring the quality of demineralised water (0.001 $\mu\text{S}/\text{cm}$ to 200 $\mu\text{S}/\text{cm}$)



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