



# 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 <sup>1</sup>	13.7	Detergent	Spray or ultrasonic cleaning <sup>3</sup>	Neat oil, polishing compounds
DECOSPRAY TM <sup>1</sup>	9.6			
RODACLEAN 2018 <sup>2</sup>	14		Ultrasonic cleaning	Polishing compounds, soluble oil, dye penetrant, light pollutions
GALVEX 20.01 <sup>2</sup>	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

<sup>1</sup> Requires an oil separator

<sup>2</sup> Can be used in surface preparation prior to passivation

<sup>3</sup> 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

## 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 µS/cm to 200 µS/cm)





# OUR SUBSIDIARIES AROUND THE WORLD

## NGL FRANCE SAS

Parc Aktiland Bât B, 1 rue de Lombardie  
FR-69800 Saint-Priest  
france@ngl-group.com

## NGL SHANGHAI

Room 407, 4F, Building 3, No.3199 Jinhai Road,  
Fengxian District  
CN-201406 Shanghai  
shanghai@ngl-group.com

## NGL CLEANING GMBH

Schlavenhorst 15  
DE-46395 Bocholt  
kontakt@ngl-group.com

## NGL ASIA PACIFIC PTE LTD

28 Kallang Place #05-09 Kallang Basin Industrial Estate  
SG-339158 Singapour  
asiapacific@ngl-group.com

## NGL NORDIC A/S

Industriskellet 10  
DK-2635 Ishøj  
nordic@ngl-group.com

## NGL AMERICA INC.

747 North Church Road, Suite G-9  
Elmhurst, IL 60126, USA  
usa@ngl-group.com



07/06/2023



## NGL CLEANING TECHNOLOGY SA - ECOLOGICAL CLEANING SOLUTIONS

Chemin de la Vuarpillière 7 – CH-1260 NYON – SWITZERLAND  
+41 22 365 46 66 – contact@ngl-group.com – www.ngl-group.com

