### CATALOGUE

HIGH PERFORMANCE CONSUMABLES FOR THE PROCESS & THE INDUSTRIAL MAINTENANCE



HE ONLY FRENCH MANI JEACTLIBER VERTICALLY INTEGRATED, FROM DESIGN TO MARKETING

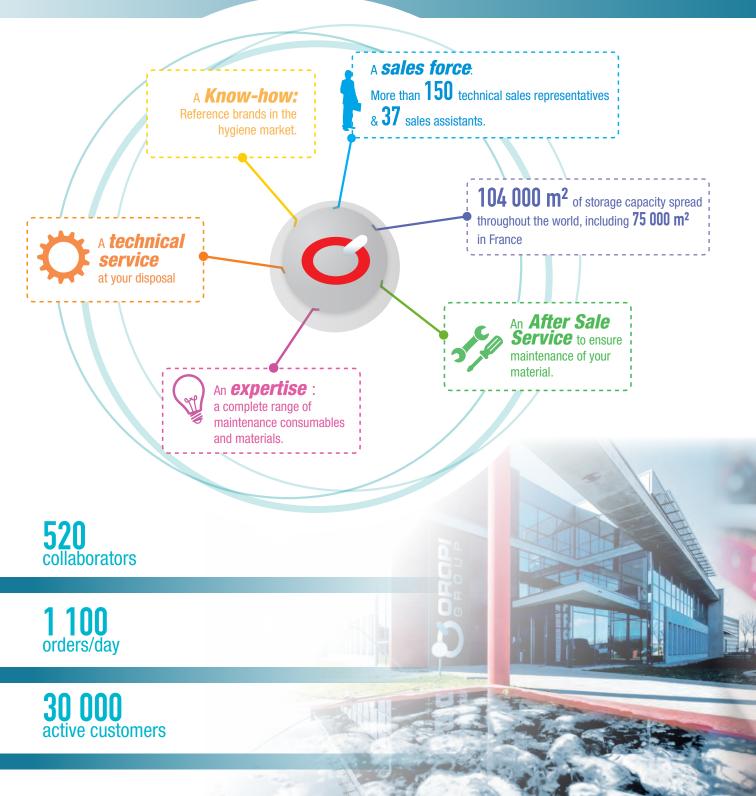




# **ORAPI GROUP**

Our teams stand by your side to ensure suitable advice, quality service and to offer training in the use of our products.

# A NATIONAL INTEGRATED NETWORK PROVIDING YOU WITH:



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# **ORAPI GROUP: IMPROVING YOUR WORKPLACE ENVIRONMENT**

High performance industrial consumables



Guy Chifflot



Henri Biscarrat

MANAGING DIRECTOR



DISTRIBUTED IN 150 + countries





8 PRODUCTION UNITS

### Orapi Group is the only French consumables manufacturer that is vertically integrated from design to marketing

Distributed in more than 150 countries, the Orapi Group is the leading French supplier designing, producing and marketing high performance consumables for the hygiene and process sectors.

Orapi Hygiène and Orapi Process aim to provide the most comprehensive range of products designed specifically to meet the requirements of the hygiene and process sectors. They have a unique portfolio of specialized brands within each sector with integrated manufacturing facilities.

Orapi combines know-how and expertise, drawing on a wide range of skills, and targets customer satisfaction through on-going responsible research and innovation. With more than 2 million users worldwide, our actions are based on continuous quality improvement.

Hygiene and Process: your business is our inspiration



#### DESIGN • MANUFACTURING MARKETING

# 



LEANING COMPANIES

FRANCE®

PARANAS

BVCert. 6081077

TFRTIARY

E

1014

HEALTH LE

LEISURE

(E

TRANSPORT

Ecolabel

INDUSTRY



QM S√



FOR AN ESTIMATE, ADVICE OR SPECIFIC REQUEST

TEL.: +33(0)4 74 40 20 20 FAX: +33(0)4 74 40 20 21



IFINICE 4

MATO

# PENETRATE & RELEASE

CERTIFICATIONS

FOOD INDUSTRY

NSF

1

DISMANTLE CLEAN LUBRICATE

NUCLEAR INDUSTRY

PMUC

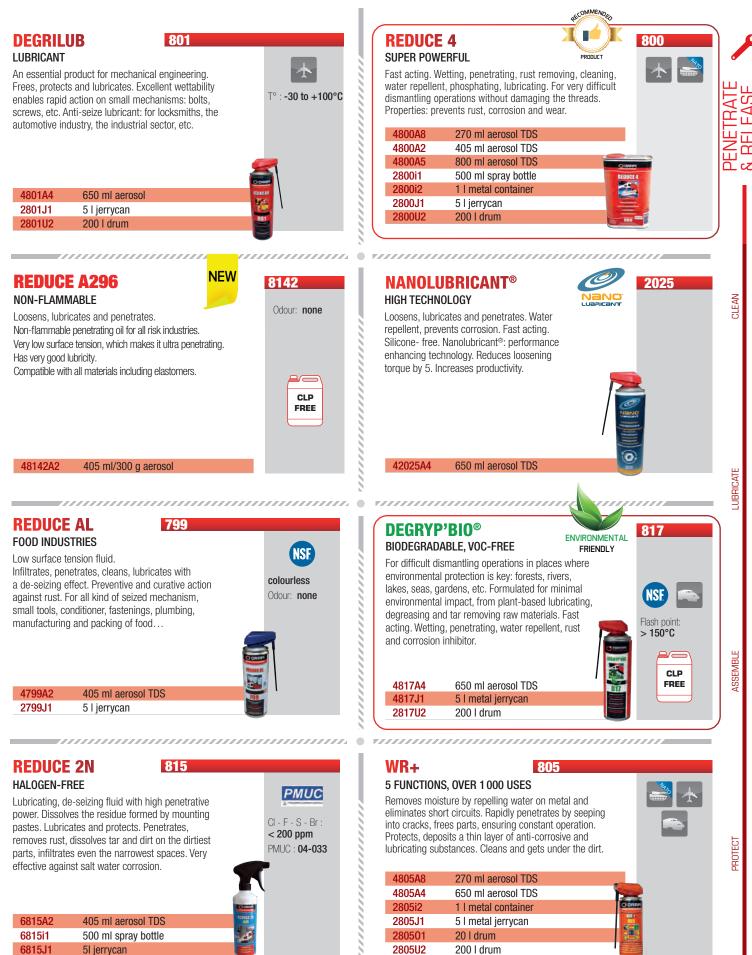
# PENETRATING OILS

QUICK SELECTION

DEGRILUB REDUCE 4 REDUCE A296 NANOLUBRICANT REDUCE AL DEGRYP'BIO REDUCE 2N WR+

Lubricant Power Non-flammable Power + Food industry Organic Nuclear and energy industry Multi-purpose

# PENETRATE & RELEASE





## HOW TO CHOOSE A SOLVENT? OUR ENGINEERS' RECOMMENDATION

The right choice is to find a balance between evaporation rate, flash point(1), effectiveness (Kb value), the environment and price.

To facilitate your choices, given the complex scope of solutions, we provide a summary table below.

DRYING TIME	FLASH POINT	KB VALUE	PRODUCTS	PAGE
	Nana	135	504 SDI NEW	10
	None	130	518 ORASOLV A05	10
		120	514 ORASOLV 0	12
IMMEDIATE		100	507 NDI	12
	< 21	80	568 ORASOLV A	14
		75 —	503 KLEANER	12
		75	516 NET FREINS	12
	>23	100	9539 TAR OFF	13
		150	5432 ORASOLV S2	11
RAPID	>30	85	581 ORASOLV L2	11
		70	512 ORASOLV L	11
		35	564 ORASOLV B30	10
	>40	80	539 ORASOLV E	13
		78	538 ORASOLV 89 CLI	13
CONTROLLED		72	511 ORASOLV M1	11
		35	567 ORASOLV B40	10
		30	544 ORASOLV T	14
	>61	70	540 ORASOLV P	11
	201	35	571 ORASOLV B60	10
AVERAGE	>62	35	517 A62NU	12
	∠0Z	30	513 ORASOLV N	14
	>69	80	550 ORANGE SOLVENT	12
	>75	150	5232 ORASOLV S232	11
	>80	150	543 ORASOLV S1	14
SLOW	>100	80	5820 COLZ'EMUL	13
	>100	30	576 ORASOLV R2	14
	>150	80	582 NATUR'SOLV	11

(1)Required temperature for the solvent to ignite spontaneously in the presence of a flame or spark (not to be confused with the autoignition temperature). Generally speaking, the lower the flash point, the faster the evaporation and the drier the solvent.



## HOW TO CHOOSE THE RIGHT DETERGENT AND ACHIEVE THE BEST RESULTS?

Making the right choice initially involves identifying the type of dirt you wish to remove, our table will help you make the link between your type of dirt and the pH of our product. This is essential for maximising effectiveness.

Our recommendations will subsequently allow you to make the appropriate choice in terms of equipment, dosage, temperature and action time.

	ACID pH NEUTRAL pH								ALKAL	.INE pH					
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	DESTRUCTIBLE DIRT					SUSPENDED DIRT			EMULSIFIABLE DIRT						
	Cement					Sugar Grease									
targets	Rust						Starch		Lipids						
tar	Limescale							Salt Proteins							
	Limestone						Dust Emulsion								
			Mineral	deposits				Fat				So	oap		

## **IDEAL USE ACCORDING TO ORAPI**

CHEMICAL ACTION (pH)

ORAPI PRODUCT

TEMPERATURE OF MIXTURE

#### ALL OUR PRODUCTS ARE CONCENTRATES:

diluting with water at 40°C improves the effectiveness of our products and prevents problems due to overdosing.

MECHANICAL ACTION

**THE RIGHT EQUIPMENT** parts washer, scrubberdrier,

pressure washer, manual

# ACTION TIME

#### THE RIGHT ACTION TIME

Allow to work before rinsing or leave the parts to soak in our parts washers designed for this purpose.



	V B30 564			ORASOL			
RAPID EVAP	ORATION	colourless	5	SAFE ANTI-C	ORROSION TREATMENT	PRODUCT	
Appropriate so	lvent for metallic surfaces,	Flash point:			almost every greasy metal s		
	d electrical parts as part of interoperation	>30°C	3	Evaporates slowly, leaving a light, corrosion			colourless
0	outine degreasing. Deeply	Dielectric	8	stubborn depo	Recommended for soaking	to remove	Flash point:
	l completely dissolves greasy ludge. Leaves a perfectly dry surface.	strength: > 40 kV	5	Stubbolli depo	13113.		>60°C
	n finishing works.		5				Dielectric
				2571i2	1 I container		strength: > <b>40 kV</b>
			3	257101	20 I drum		- +0 KV
2564i2	1 I container		3	257102	25 I metal drum		Compatible
2564J1	5 l jerrycan		3	257105	60 I drum		with ultrasonic
256401	20 l drum	Sec.	5	2571U2	200 I drum		cleaning baths
2564U2	200 l drum	-	- S	2571N1	1,000 I container		

H.

#### **ORASOLV B40**

#### UNIVERSAL

256712

Cleaning solvent which evaporates rapidly when blown dry. « For the thorough degreasing of all mechanical parts soiled by grease and oil residues, even when oxidised and burnt.

1 | container

567





200712	1 i oontanioi	
2567J1	5 l jerrycan	
256705	60 l drum	
2567U2	200 l drum	

504

508

#### **SDI NEW**

#### INDUSTRIAL SUPER DEGREASER

Extremely powerful degreaser: burnt grease, synthetic fluids, fuel, tar, rubber, varnish and deposits produced by hydrocarbons. Dries immediately. Prepares surfaces prior to gluing or painting.

	colourless	
	Mild orange scent.	
	Kb value: >135	
	Non-flammable	
ORRE		
I NEW		
5		
104		

# NON-FLAMMABLE SOLVENTS

518

#### **ORASOLV A05 CLEANER/STRIPPER**

For surface preparation. Perfectly dissolves grease, tar and oil deposits, resins, glues inks and paints. Rapid and total evaporation. Leaves a dry, clean surface, without any residue.

> 6 kg metal jerrycan 32 kg metal drum

261 kg drum

#### colourless

Dielectric strength: >60 kV Kb value: >135 Non-flammable

2518J5

251803 2518U4

## A 90H

4504A5

**CLEANER FOR ELECTRONIC APPLICATIONS** Extremely safe live contact cleaner. Rapid and total evaporation. Cleans electrical cabinets, coils, printed circuit boards, precision electronic equipment (relays, connectors, etc.). Defluxing solvent. Does not stain. Does not lead to the oxidation of parts once it has dried. Has no effect on plastic.

800 ml aerosol





4508A4

# HIGH-TECH SOLVENTS



5432

#### **ORASOLV S2**

2543201

25432U2

**ORASOLV L** 

512

#### **RAPID INK EVAPORATION**

High-tech solvent. Soluble in water, allows easy rinsing of surfaces. Used neat for the cleaning and degreasing of numerous chemicals: printing ink, resin, glue. Very efficient solvent.



**ORASOLV S232** 

Cleaning, dissolving, stripping of glues, paints,

Industry: cleaning of glues and varnishes. Printing industry: cleaning of inks, particularly those most

resistant to cleaning. Cleaning of moulds in the

printing inks, varnishes, polymers and resins.

INKS AND VARNISHES

plastic processing sector.

20 I drum	
200 l drum	



5232

light green
Flash point:
>61°C
Dielectric

strength

PENETRATE & RELEASE

		ouongun
2540i2	1 I container	>40 kV
2540J1	5 l jerrycan	Kb value:
254001	20 I drum	Compatib
2540U2	200 I drum	ultrasons

540

**ORASOLV P** 

/alue: >70 npatible bacs isons

> green Flash point: > 40°C

Dielectric

Flash point: 67°C

Kb value: 83

Flash point: >75°C

CLP

FREE

10

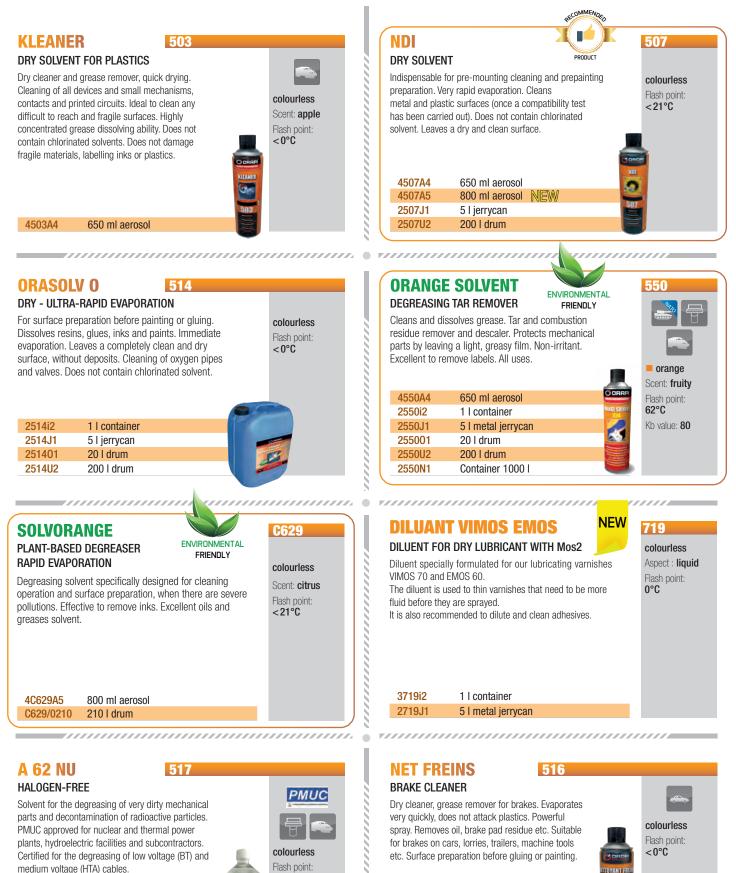
#### strength >40 kV Kb value: >72

ß

11



# SPECIAL SOLVENTS



4516A4

2516J1

650 ml aerosol

5 I jerrycan

6517i4 1 | spray bottle 6517J1 5 I metal jerrycan 651701 20 I metal drum 6517U2 200 I drum

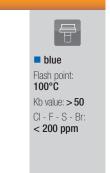


## EMULSIFIABLE PRODUCTS



#### ORASOLV 89 CLI 100 5382 ODOURLESS EMULSIFIABLE PRODUCT WITH

HIGH FLASH POINT High-tech emulsifiable solvent, VOC-free, synthesized from refined hydrocarbon products. Specific version, odourless and halogen-free, to work in nuclear environments.



PENETRATE & RELEASE

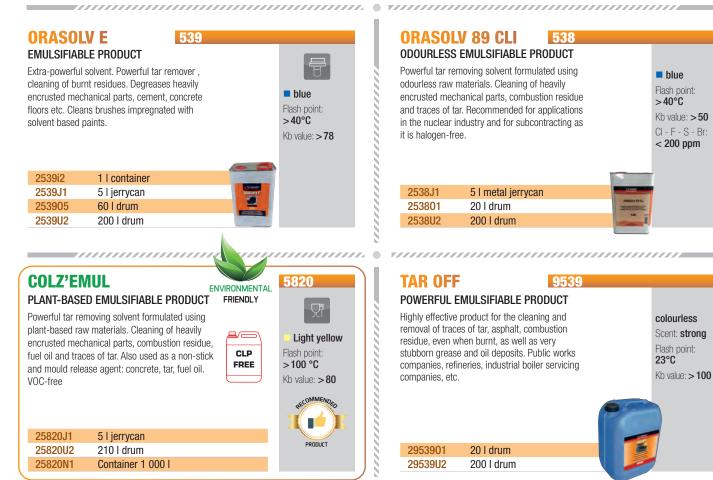
Ы

UBRICATE

ASSEMBLE

PROTECT

#### 25382U2 200 l drum





~ / / / / / / / / / / /

TEL.: +33(0)4 74 40 20 20 FAX: +33(0)4 74 40 20 21

CONTACT@ORAPI.COM



## FOOD GRADE SOLVENTS



2543i2

2543J1

254301 254305

2543U2

2543N1

1 I container

5 l jerrycan 20 I drum

60 I drum

200 I drum

Container 1000 I

6642

**DÉCAPANT PRO** 

STRIPPER FOR ALL SURFACES Very powerful industrial stripper specifically

formulated for paint stripping in industrial and

professional environments. Paint stripping from

metal, wood and floors. Effective on recent and old oil-based, acrylic, epoxy, polyurethane, single- or two-pack paints. Does not contain CMR compounds.

## STRIPPERS

liquid

6-8 m<sup>2</sup>/l



sig felt	ipping of graffi ns, glass, wood	i from walls, carriages, road d etc. Efficient on paints and pping of all types of paint from es.	gel
4	1585A4	650 ml aerosol	





5 l jerrycan 2585J1 

## **VAND'X**

ANTI GRAFFITI

Solvent for removing graffiti (chalk, paint, wax, ink, spray can, marker, etc.) from painted or fragile surfaces. Ideal for removing graffiti from buses, underground trains and railway carriages as well as road signs without affecting their reflective properties.

#### 9117

fluid liquid Odour: distinctive Flash point: >55°C



#### 1140

\*\*\*\*\*

Powerful stripper for the removal of most paints by soaking. Soaking time depends on the chemical nature and thickness of the paint, soaking bath temperature and age of the coating. Active compound concentration (100%). It is totally soluble in water. Does not contain carcinogen, mutagenic or reprotoxic compounds. Powerful detergent.

white powder Dosage: 50 to 80 g / l

15

ASSEMBL

PENETRATE & RELEASE

UBBICATE



## ALKALINE DETERGENTS





531

## frames, production and packaging of wine, beer, vegetables, meat, biscuits, dairy products etc. Can be used with a brush, in an automatic washing system, scrubber-drier or pressure washer.

colourless odourless Dosage: 0,5 to 20 %

2530J1         5 kg jerrycan           253001         20 kg drum           253005         60 kg drum           2530U2         200 kg drum	
253005 60 kg drum	
2530U2 200 kg drum	
	-

### **ORANET C**

## FLOOR AND WALL DETERGENT

Powerful liquid detergent. Specifically designed for cleaning encrusted floors (concrete, tiled, painted etc.) in the automotive industry, dirty production units, changing rooms, showers etc. Can be used with a brush, scrubber-drier or pressure washer.



2531i2	1 I container	
2531J1	5 kg jerrycan	
253101	20 kg drum	
2531U2	200 kg metal drum	

533

#### **ORANET S+** NON FOAMING

2533i2

253301

2533U2

Very powerful multi-purpose cleaner for scrubber-driers and high-speed or ultrasonic cleaning equipment. Does not foam, even under heavy agitation. Biodegradable. Used for difficult factory cleaning operations: floors, tiles, changing rooms etc.

1 I container

20 I drum

200 I drum

orange-yellow
Dosage: 2 to 15 %
8 % MAL
pH: <b>10,5</b>
NSE

) <i>\</i>	
MECAMATIC	9062
 SUPER ALKALINE LIQUID DETERGE	ENT

Cleaning and renovation of very greasy and dirty surfaces. Floor cleaning in petrol stations, garages, stills, distillers in the food processing industry. Reserved for professional use. Used neat or diluted. Recommended for use in washing machines.

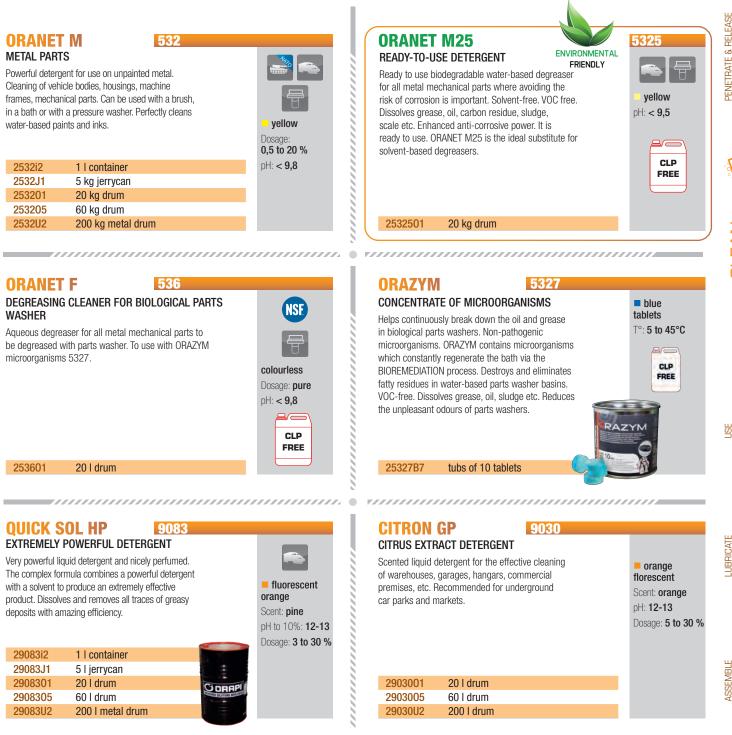
		CLOBERT
29062J1	5 l jerrycan	MECAMATIC
2906201	20 I drum	
2906205	60 I drum	9062
2000200	oo raram	

liauid

pH to 10%: **13-14** 

16

## ALKALINE DETERGENTS



#### **ORANET N** PH NEUTRAL DETERGENT

2537J1

2537U2

Multi-purpose, VOC-free mild liquid detergent. Cleaning of lorry and car bodies, tarpaulins, painted surfaces, floors, machine frames, regular maintenance of aluminium parts, etc. Can be used with a brush, in an automatic washing system, scrubber-drier or pressure washer.

5 I jerrycan

200 I drum

537



Scent: fresh marine pH (pure product): 7,5 Dosage: 5 to 40 %

# NEUTRAL DETERGENTS NEUTRALISING POWDER 15156

#### ACID POWDER

Acid powder designed to neutralise alkaline pH cleaning baths prior to disposal or treatment. Non-corrosive powder. Easy to use. Rapidly and effectively neutralises baths with a pH ranging from 8 to 14. Recommended dose: approximately 5 kg for 400 litres (see TDS).



PROTECT

17

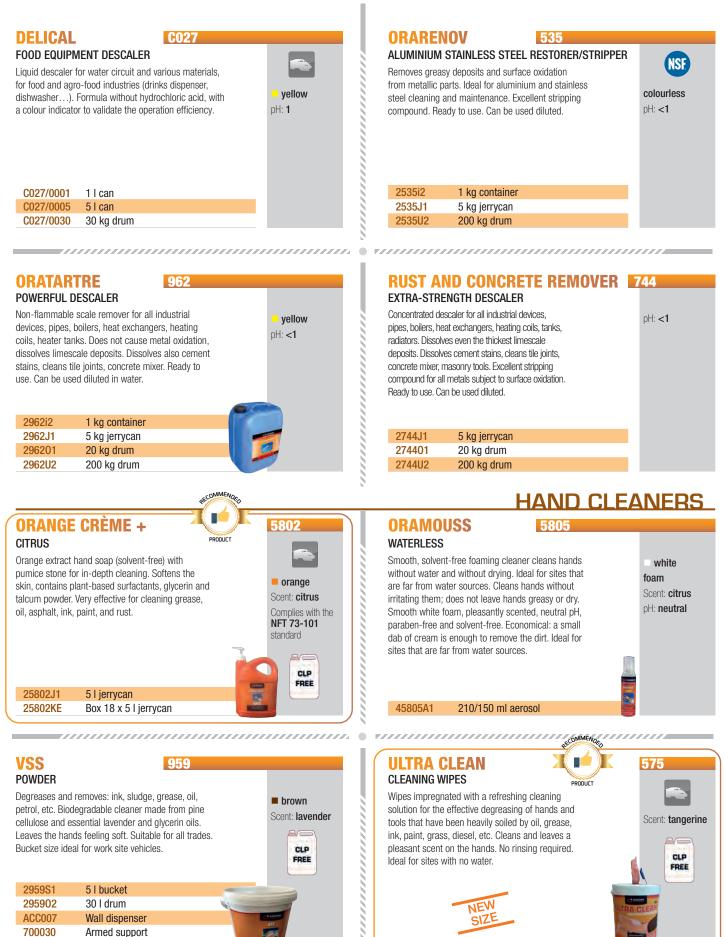
powder Completely water soluble

215156S1 5 kg tub



SOLVENTS

# ACID DETERGENTS



5575S10

Tubs of 150 wipes

CLEAN

700074

Shovel

	FIIOGENATINO	-
RAPHOS 50 963	ORAPHOS 60 964	
IOSPHATE TREATMENT DEGREASER	PHOSPHATE TREATMENT RUST REMOVER	
osphate treatment and degreasing cleaner for	vellow Phosphate treatment and rust removing cleaner. colourless	
metal parts. The phosphate treatment protects	The phosphate treatment protects against rust,	
inst rust, is long-lasting and can be painted	is long-lasting and can be painted over. Avoids	
	the need for sand blasting or shot blasting. For 20 to 50 %	
ustries, amongst others.	renovating tanks, girders and a range of frames	
	industries, amongst others. Can be used hot.	
963i2 1 kg container		
963J1 5 kg jerrycan	2964i2 1 kg container	
296305 60 kg drum	296401 20 kg drum	
963U2 200 kg drum	2964U2 200 kg drum	
	SPECIAL CLEANERS	_
RILLINOX 586	ACTI'SEPTYL 589	
AINLESS STEEL POLISHER AND RESTORER	DECONTAMINATING CLEANING AGENT	
noves greasy films and stains while giving a	NSF. Multi-purpose 6-in-1 product: Kills viruses, bacteria,	
ting shine to cleaned surfaces: stainless steel,	algae and fungi, decontaminates and cleans. For	
rome etc. Polishing and protective properties.	ourless cleaning, disinfecting* and decontaminating areas colourless	
iries, breweries, machine frames, stainless steel	where rouged instanting where rouged instanting where reading and the reader of the re	
detures, etc. Apply a small amount of product onto	plants, sugar reinferes, beverage companies, etc.)	
cloth and start polishing. Polishing and protective	or animals are present, hospitals, local authority 4 %	
operties.	facilities, campsites and swimming pools.	
A Director		
586A4 650 ml aerosol		
2586J1 5 l jerrycan		
2586U2 200 l drum	2589J1 5 l jerrycan 2589U2 200 l drum	
	* Use biocides with care.	
	Always read the label and product information before use.	
0DE 79 579	NOVAL NEW C067	
BAIN UNBLOCKER	ALUMINUM RENOVATOR, STRIPPING OF	
estroys and eliminates all blockages consisting of	Colouress	
res, fatty substances, hair, cotton wool, human d animal hairs, organic compounds, sponges,	dark Removes stains and restores the aluminum's original luster. Density : 1,14	
a animai nano, organic compoundo, spongeo,	Particularly suitable for cleaning weld seams and	
iks, washbasins, toilets, etc. and suitable for	removing raw oxidation NOVAL acts alone without rubbing. It degreases and rinses in	
imbing, sanitation and maintenance purposes.	a single operation.	
e very high density of this product provides an		
ditional mechanical action on the blockage.		
effect on septic tanks.	8	
r professional use. Do not use on white PVC.	C067/0005 5 l jerrycan	
	C067/0060 60 l drum	
1 I container	C067/0210 220 l drum	
URAGAN 5152	COILTRON 9031	
L IN ONE	RESTORER FOR AIR CONDITIONING COILS	
ady-to-use, multi-purpose disinfecting and	ISE) - R Uses natural condensation to remove the dirt	
odorising detergent. Cleans and degreases all	(grease oil lint etc.) which is responsible for poor	
	vellow green performance. Cleans and helps maintain optimal	
rfaces. For use in offices, workshops, changing	the 100/. 10	
rfaces. For use in offices, workshops, changing oms, kitchens, etc. Compliant with the EN 1040 and Cle I 1276 standards - bactericidal after 5 minutes - Sce	use of energy. Spray directly into coil fins and filters to 10%: <b>10</b>	
rfaces. For use in offices, workshops, changing       Image: Classical state sta	to 10% 10	
rfaces. For use in offices, workshops, changing oms, kitchens, etc. Compliant with the EN 1040 and 1 1276 standards - bactericidal after 5 minutes - d the EN 1275 and EN 1650 standards - euc	use of energy. Spray directly into coil fins and filters	
rfaces. For use in offices, workshops, changing oms, kitchens, etc. Compliant with the EN 1040 and 1276 standards - bactericidal after 5 minutes - d the EN 1275 and EN 1650 standards -	an induit       ineating and cooling enciency without excessive       to 10%: 10         ent: menthol       use of energy. Spray directly into coil fins and filters       to 10%: 10         calyptus       diluted in water at a 1/3 ratio.       Dosage: 1/3	
faces. For use in offices, workshops, changingms, kitchens, etc. Compliant with the EN 1040 and1276 standards - bactericidal after 5 minutes -d the EN 1275 and EN 1650 standards -	an induit       ineating and cooling enciency without excessive       to 10%: 10         ent: menthol       use of energy. Spray directly into coil fins and filters       to 10%: 10         calyptus       diluted in water at a 1/3 ratio.       Dosage: 1/3	
faces. For use in offices, workshops, changingms, kitchens, etc. Compliant with the EN 1040 and1276 standards - bactericidal after 5 minutes -d the EN 1275 and EN 1650 standards -	an induit       ineating and cooling enciency without excessive       to 10%: 10         ent: menthol       use of energy. Spray directly into coil fins and filters       to 10%: 10         calyptus       diluted in water at a 1/3 ratio.       Dosage: 1/3	
urfaces. For use in offices, workshops, changing       Image: Clean state in the i	an induit       ineating and cooling enciency without excessive       to 10%: 10         ent: menthol       use of energy. Spray directly into coil fins and filters       to 10%: 10         calyptus       diluted in water at a 1/3 ratio.       Dosage: 1/3	

## SPECIAL CLEANERS



2501J1

2501U2

5 I jerrycan

200 I drum

29092i2

2909201

1 I container

20 I drum

# SPECIAL CLEANERS



2813i1

5 I jerrycan

650 ml aerosol

C647/0012











## **BIOLOGICAL PERFORMANCE**

Biological parts washers clean your parts without any solvent by respecting the user's health and the environment.

The biological parts washer works with the principle of natural regeneration which use the microorganisms to simply transform pollutants into food and energy sources.

This process ensures a cost effective degreasing solution.

#### ÷-**OPERATOR'S** HEALTH

Solvent free. Optimal hygiene and safety conditions.



Consumable cost control. Microorganisms constantly regenerate the bath: no frequent bath draining.



Minimize waste and protect the environment.



Non-contractual photos. 1 year warranty with an advised use of ORAPI products.



## TRADITIONAL SOLVENTS PARTS WASHER



40 L MIXED **PARTS WASHER** 

#### 700061

#### **DEGREASING PARTS WASHER 40 LITRES ELECTRICAL PARTS WASHER**

Ideal parts washer for maintenance workshops. Can be moved from one workshop to another easily. Designed to be used with 40 I of solvent or detergent, which limits chemical risks. Speeds up cleaning by using a hollow brush continuously filled with product via an electrical pump, and a soaking basin. Recovers the product when the clean parts are drained. Easy to drain.

Electrical parts washer	700061
Rubber hose	700079
Pump	700066
Brush	700056





ORASOLV B60 & ORANET M

К

## TRADITIONAL DETERGENT PARTS WASHER



## HIGH PRESSURE PART WASHER

#### 700089

#### HIGH PRESSURE HEATING PART WASHER

A solid, full stainless steel structure. Equipped with a membrane pump, an electric pump, a resistor and a filtration system. Totally enclosed system which doesn't require specific protection for the users. Provides quick degreasing even for the most complex parts.

#### Part washer:

Length: 70 cm Width: 90 cm Height: 162,5 cm Pump flow: 20 litres/minutes Tank capacity: 90 l heating temperature: up to 50°C

Working plan:

Width: 84 cm Length: 64 cm 40 kg capacity Pressure: 24 bars



## **BRAKE WASHER - SOLVENT**

#### 700097

#### **BRAKE WASHER - SOLVENT**

The brake washer for heavyweights is equipped with a pneumatic pump, spraying, a multi-jet self-cleaning brush with an adjustable flow and a flathead low-pressure air dryer.

Dimension: 575 x 775 x 280 mm Tank volume: 40 litres Pump flow: 7,6 litres to 5,5 bars Congestion: folding handle Additional tray: anti-wave interior system. Tare weight : 25 kg

Non-contractual photos. 1 year warranty with an advised use of ORAPI products



## **BRAKE WASHER – LESSIVIELLE**

#### 700099

ORANET M

#### BRAKE WASHER LESSIVIEL AND SOLVENT

The brake washer is fully designed in stainless steel, it adapts itself to all washing situations. This mobile part washer avoids solvent spills and captures dusts and fibres into its washing solution, in order to protect operators' health.

Dimension : 750 x 600 x 1030 mm Tray volume:750 x I 500 x 100 mm Tank capacity : 30 L Weight : 30 kg Maximum load: 30 kg Air supply pressure: 6-10 bar



PENETRATE & RELEASE

CLEAN

ASSEMBL

PROTECT

# LUBRICATE

OILS GREASES PASTES VARNISHES POWDERS

## WHY LUBRICATE?







GRAISSE SPÉCIALE

## **HOW TO LUBRICATE?**

### ORAPI's tribologists are there to advise you.

Friction can be reduced in a number of ways; ORAPI offers 4 types of product to cover all your requirements.

### 1 - OILS

In-depth lubrication in complex mechanisms (chains) or closed mechanisms (gearboxes) requires the use of oil.

The main benefit is the natural elimination of the heat energy generated by friction which affects the smooth running of the machines. We also offer a range of oils for metal working.

## 2 – VARNISHES AND POWDERS

"Dry" lubrication is primarily recommended for dust-filled environments and exposure to severe cold down to -200°C.

Our engineers can provide you with 2 types of viscoplastic solution, which they recommend for use in mechanisms where oil cannot be contained.

### 3 - GREASES

More than 80 different types of grease have been developed to respond to all the requirements of our 10,000 customers: speed, heat, humidity, oxidising environments, heavy loads etc.

You can also discover our unique range of greases based on nanotechnologies: NANOLUBRICANTS.

## 4 - PASTES

Comprehensive ranges of mounting and anti-seize pastes to keep fretting and tribocorrosion problems to a minimum.

They also help improve thermal and electrical conductivity by using diversified and first-choice mineral fillers in terms of grading and purity: zinc, aluminium, copper, graphite, molybdenum disulphide, ceramic and of course, NANOLUBRICANTS.



#### ORAPI's tribologists pay particular attention to the selection and use of high-performance additives that they incorporate into our greases.

These can be liquids or solids such as MoS2, graphite, PTFE and NANOLUBRICANTS and have a significant impact on the performance of the greases by: reducing the friction coefficient, increasing resistance to EP (extreme pressure), minimising material wear, improving adhesion, protecting against the premature oxidation of the grease, protecting metals against corrosion, etc.



## FOCUS ON GREASE

#### GRADES

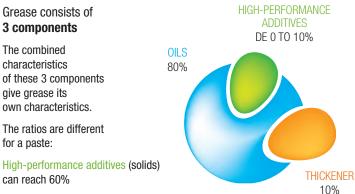
Penetration at 25°C

MECHANISM TO BE LUBRICATED	CENTRALISED GREASING	GEARS	BEARINGS	SEALING
Type of grease	Fluid grease	Soft grease	Standard grease	Thick grease
NLGI grade no.	0-00	1	2	3
(tenths of mm)	355-430	310-340	265-295	220-250

The grade varies depending on the temperature.

The grade increases for cold work - The grade decreases for hot work (the grease softens).

## COMPOSITION



## PERFORMANCE

Grease performance is assessed by 2 tests:

• Extreme pressure: 4-ball test: load resistance of the lubricating film 40 to 800 kg. Result in kg.



 Anti-wear test Wear resistance 40 kg / 1 hour. Result in mm.

High-performance additives (solids) can reach 60%

### OILS

for a paste:

These can be mineral or synthetic. Synthetic lubricants currently represent only a small percentage of the overall lubrication market, but this proportion is rising.

## **THICKENERS**

Help obtain the desired consistency thanks to simple or complex soaps, or silica, bentone or polyurea.



## DRY LUBRICATION



4701A4 650 ml aerosol

#### **POUDRE 2115** POWDER GRAPHITE

Micronised graphite powder. To be used pure, as additive to lubricants, plastics... in order to increase their efficiency. Electrical conductor. Excellent dry lubricant for low and high temperatures and dusty atmospheres.



FREE

701

1 kg tub 3721S3 3721H4 15 kg bag

721



### **BULK POWDERS** 645

#### **POUDRE PTFE** PTFE POWDER

Dry lubricant based on purified and micronised PTFE. Excellent lubricant properties. Highly inert towards chemicals, compatible with rubbers. Sliding agent for assemblies (joints, fasteners, valves). Dry lubrication in case of extreme conditions. Additive for lubricants.

## NSF creamy white T°: -120 to +250°C Grading: 1 to 7 µm

3645B7 1 kg tin

### **OR 05**

3724B7

3724S1

3724U0

#### 724 MOLYBDENUM DISULPHIDE POWDER

To be applied with leather cloth, brush, or drum on rectified pieces, superficially thematically treated. Sticks to metal and leaves a dry lubricating film. Facilitates running-in. Can be used for pieces pre-treatment.

100 kg



CLP FREE

black T°: -200 to +450°C Gradina: 0,6 µm

CLP

FREE

1 kg tin	
5 kg tub	
100 kg drum	

## VARNISH

PENETRATE & RELEASE

CLEAN

USE

JBRICATE

SSEMBL

PROTECT



black T°: -70 to +900°C Grading : 10 µm

T°: -100 to

Viscosity: 400 ± 100 cP

+150°C

Grading:

6 µm

47042A4 650 ml aeroso

#### **VER L 149/7** WATER-BASED PTFE VARNIS

Water-based PTFE bonded coating reduce the friction coefficient on al Particularly suitable for protection wear. Extremely durable treatment plasticity. Treatment of mechanical aluminium, plastic, polymer. Used lubrication of plastic mechanisms industry.

28287J1 5 kg jerrycan

726

Dry lubricating coating for all metals and plastics. Protect from oxidation. Not soluble in solvents and hydrocarbons. Polymerises at room temperature. Excellent dry lubricant for threaded pieces, spigots, small gearings, hinges, any mechanism in dusty atmosphere. Lubrication of valves and military hinges submitted to extreme cold. Efficient even on mechanism operating very occasionally.

	< <b>10 μm</b>
l	
8287	
GH g designed to all types of surface. against fretting t thanks to its l pieces in steel, for the lifetime in the electricity	<b>blue</b> pH: >9,5 Density: 1,31 ES: 51%

#### **VIMOS 70** MOS2 VARNISH

37 37 37

26B7	1 kg tin
19i2	1 I container (diluent)
19J1	5 l jerrycan (diluent)

ORAPI-PROCESS.COM

#### 29

#### film. Resists to abrasion and gives metallic moving parts an excellent lubrication. Facilitates assembling T°: -70 to +900°C and enables non-destructive dismantling. In CI - F - S - Br : particular stainless steel/stainless steel assemblies. < 200 ppm Ideal in dusty atmospheres and for applications in PMUC: 04-0106 very cold environments. 6717i2 1 I container



#### **EMOS 60** 720 MOS2 THERMOSETTING VARNISH

Drv MoS2 lubricant based on thermosetting resins. Lubricates and protects all metal surfaces against oxidation; withstands solvents and acids. Excellent salt spray resistance. Excellent dry lubricant for gears, cylinders, jacks, threaded screws, pinions, racks, screws etc. Aeronautical equipment, lifetime lubrication of all hinges exposed to low temperatures and particle-charged environments.

3720B7	1 kg tin
3719i2	1 I container (diluent)

black
T°: -100 to +250°C
Viscosity: 80 ± 10 cP
Grading: 6 µm
Setting: 160°C 40 minutes



614

## ANTI-SEIZE PASTES

604

## LM 20

#### **GRAPHITE-BASED**

Exceptional adhesion, prevents oxidation, ensures perfect sealing of gaskets and connections. Lubrication of mechanisms, joints, taps, valves, bearings, operating in humid environments and at high temperatures. Facilitates assembling and disassembling.



3614T4	200 g tube
3614B7	1 kg tin
361402	25 kg drum
3614U1	180 kg drum

#### LM 50

#### HIGH-CONCENTRATION GRAPHITE

Graphite assembly paste, stable at very high temperatures. For axles, sleeve fittings, hinges, rollers, oven doors, forging and foundry tools etc. Facilitates assembly and dismantling thanks to its high graphite content.

black T°: -40 to +900°C

#### 3604B7 1 kg tin



#### GRN HALOGEN-FREE GRAPHITE

Chlorine-free, sulphur-free and fluorine-free anti seize paste, stable at high temperatures. Mechanical assemblies. Facilitates the running-in and dismantling of parts.

	P	М	JC		
	bla	ck			
T°:	-80	) to	+9	00°C	,
4-k	ball	EP:			

250 kg CI - F - S - Br : < 200 ppm PMUC: 04-016

6613A4	650 ml aerosol	
6613T4	200 g tube	
6613B6	500 g tin	

613

603

#### PATE SPRAY MOS2 IN A THIN LAYER

Easy-to-use spray can for the application of MoS2 paste in thin and precise layers. Reinforced extreme pressure power. Lubrication of tooling, for all mounting and mechanical parts.





#### **MOB 30** MoS2 / GRAPHITE

## 610

Easy to use, for surface pre-treatment and mild-greasy lubrication, before mounting; for all mechanisms and parts that need to be lubricated afterwards. It makes mounting and breaking in easier. Mechanical warehouses, maintenance services



#### black T°: -40 to +450°C

3610T4 200 g tube 3610B7 1 kg tin

#### 

#### **MOB 60**

3611T4

3611B7

### 611

**MOS2 HIGH-CONCENTRATION GRAPHITE** Strong formula. Mechanics use this paste for the most difficult fixings. For breaking in and pretreatment,

use this paste with a leather cloth or with a brush. Strong resistance to extreme pressure. For all hard assembly. Prevents fretting corrosion. Mechanical workshops, fixing, maintenance.

200 g tube

1 kg tin

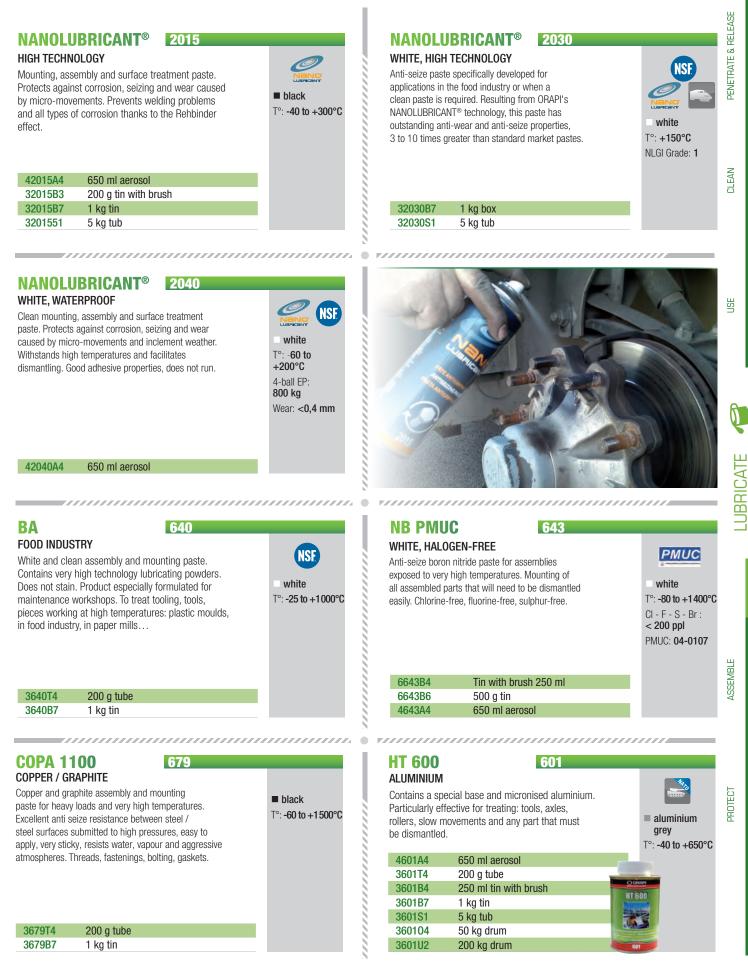


#### black T°: -60 to +450°C

4603A4 650 ml aerosol

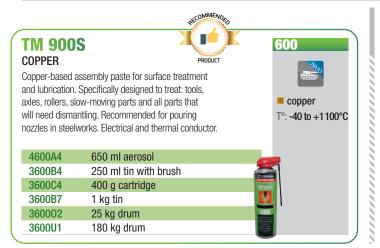
30

## ANTI-SEIZE PASTES





# ANTI-SEIZE PASTES





641

lubricating laye	duct formulated to leave a thin er. For threaded parts that will	
	embled and dismantled after being v high temperatures.	■ copper T°: -40 to +1100
	works, oven, marine	
nemienes, uye		
nennenes, uye	works, oven, manne	
3637T4	200 g tube	
3637T4	200 g tube	
3637T4 3637B6	200 g tube 500 g tin	

647

HTCU COPPER

112000

Copper paste specifically designed for the rail sector providing corrosion protection for threaded assemblies on carriages, engines and rail tracks.

3647T4 200 g tube 3647B7SNCF 1 ka tin 364704 50 kg drum

## THERMALLY CONDUCTIVE PASTES

6412

#### L 362 HIGH EFFICIENCY

Heat-conducting assembly and sealing paste. Any domain where thermal conductivity between two surfaces must be improved, heat energy transfer must be facilitated and the transfer surface area must be increased. Alternators, starters, probes, electrical and electromechanical devices, heat sensors etc. Assembly, lubrication, sealing etc.

650 ml aerosol

400 g cartridge

200 g tube

25 kg drum

50 kg drum

1 kg tin

black T°: -40 to + 180°C Thermal conductivity: 0.8 W/m.K NLGI Grade: 3

> CLP FREE

copper

T°: -40 to 1100°C

```
36412C3
             300 g cartridge
3641202
             25 kg drum
```

**CT 4** 

bearings.

4608A4

3608T4

3608C4

3608B7

360802

360804

MOS2 GREASE

## STANDARD GREASES



#### **PC 195** WHITE

Provides sealing and thermal transfer of heat energy while preserving the static and dimensional stability of protected devices. Alternators, starters, electrical and electromechanical devices.



3641E4	30 ml syringe	
3641C3	300 g cartridge	
3641B7	1 kg tin	
364102	25 kg drum	
364104	50 kg drum	

#### **CT 10** 677 MULTI-PURPOSE LITHIUM GREASE

EP2 multi-purpose lithium grease suitable for general lubrication, maintenance and the automotive industry in applications that are not overly demanding. Lubrication of chassis, farm equipment, civil engineering equipment, etc.

3677C4	400 g cartridge	
3677B7	1 kg tin	
367704	50 kg drum	
3677U1	180 kg drum	

light amber T°: -25 to +130°C NLGI Grade: 2 4-ball EP: 250 kg DN Factor: 350 000 CLP FREE

# STANDARD GREASES

CLP

FREE

ODRAF

602

light amber

T°: -30 to 165°C

NLGI Grade: 2

4-ball EP:

DN Factor:

350 000

315 kg

PENETRATE & RELEASE

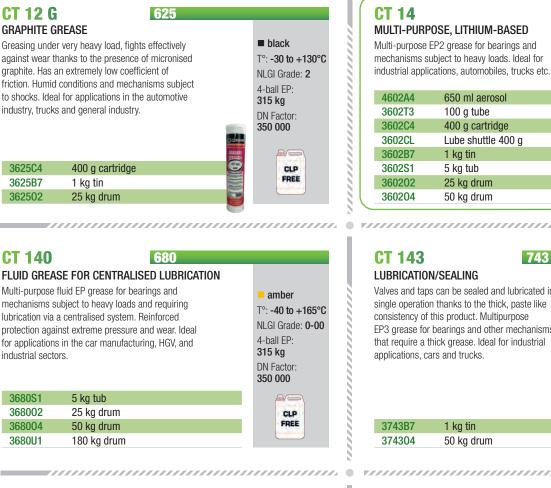
CLEAN

USE

UBRICATE

SSEMBL

PROTEC<sup>7</sup>



#### **CT FLON** PTFE GREASE

**CT 12 G** 

3625C4

3625B7

362502

**CT 140** 

industrial sectors.

3680S1

368002

368004

3680U1

Teflon ® grease for lubrication under heavy load. Lubricating effect reinforced by Teflon, noise decrease, chemically inert. Ideal for lubrication on plastics. Good water resistance.

607

612



#### 4607A4 650 ml aerosol 3607C4 400 g cartridge 3607B7 1 kg tin 3607S1 5 kg tub

#### **ENG CB 612** CABLES/GEARS

Soft grease for cables, gear reducers, bevel and hypoid gears, tooth couplings, Quarries, public works, crushers, ski resorts etc. Excellent anti-wear properties, considerably lengthens the lifespan of gear teeth.

4612A4	650 ml aerosol	
3612C4	400 g cartridge	INC CO STO
3612S1	5 kg tub	
361205	50 kg drum	612
3612U1	180 kg drum	

light brown T°: -50 to +220°C 4-ball EP: 780 kg NLGI Grade: 0 CLP FREE

#### 743 amber Valves and taps can be sealed and lubricated in a T°: - 30 to +165°C single operation thanks to the thick, paste like consistency of this product. Multipurpose Drop point: EP3 grease for bearings and other mechanisms 180 that require a thick grease. Ideal for industrial NLGI Grade: 3 4-ball EP: 315 ka DN Factor: 350 000 **GRAISSE UNIVERSELLE** 635

#### **CLEAN GREASE**

Adhesive, non-drip, odourless, corrosion inhibiting grease, compatible with all materials. Moisture resistant. For doors, locks, hinges, runners, chains, rubber or plastic parts, household appliances, tools etc.

colourless T°: -30 to +150°C Drop point: none DN Factor: 350 000

NSF

4635A4 650 ml aerosol

#### GREASES <u>SPECIAL</u>



400 g cartridge

25 kg drum

storm water resistance.

3687C4

368702

ENVIRONMENTAL FRIENDLY barriers, agriculture, forest management, cable cars, public works, port areas etc. Excellent water and



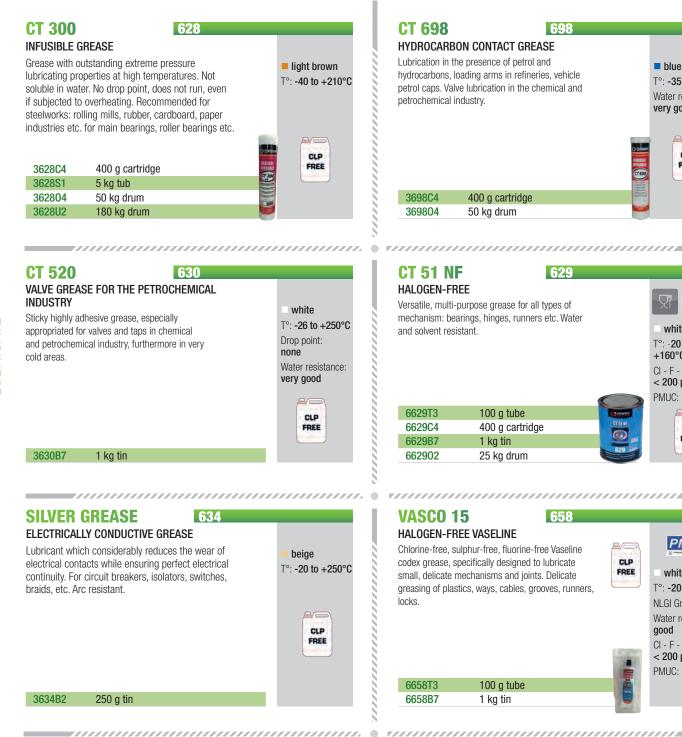
687

CLP FREE

ORAPI-PROCESS.COM



## SPECIAL GREASES



#### 698 HYDROCARBON CONTACT GREASE Lubrication in the presence of petrol and blue hydrocarbons, loading arms in refineries, vehicle T°: -35 to +75°C petrol caps. Valve lubrication in the chemical and Water resistance: very good CLP FREE CT 598 400 g cartridge 50 kg drum

\*\*\*\*\*\*\*

629

#### PMUC Versatile, multi-purpose grease for all types of mechanism: bearings, hinges, runners etc. Water white T°: -20 to +160°C CI - F - S - Br: < 200 ppm PMUC: 19-0533

002913	TOO Y LUDE	Conom		
6629C4	400 g cartridge	CT-STAF	CLP	
6629B7	1 kg tin		FREE	
662902	25 kg drum	629		

658

# HALOGEN-FREE VASELINE

CT 691

#### Chlorine-free, sulphur-free, fluorine-free Vaseline codex grease, specifically designed to lubricate small, delicate mechanisms and joints. Delicate greasing of plastics, ways, cables, grooves, runners,

	PMUC
FREE	white
	$T^\circ:$ -20 to +50°C
	NLGI Grade: 4/5
	Water resistance: good
-	Cl - F - S - Br :
	< 200 ppm
	PMUC: <b>19-084</b>

white

NLGI Grade: 1

4-ball EP test:

< 0.45 mm

4-ball EP: >340 kg

T°: -50 to + 200°C

CLP

FREE

Specifically designed for the lubrication of delicate mechanisms: Textile, food, pharmaceutical, watch making industry etc.

657

NSF	NATIO DE LA COMPANY

hite 20 to +50°C Grade: 4/5 r resistance:

CLP

FREE

		OGRAPI
3657C3	310 ml cartridge	WSELINE GREA
3657B7	1 kg tin	100
3657S1	5 kg tub	2

3634B2	250 g tin
VASCO	
VASELINE C	ODEX GREASE

	w
	T°: -:
	NLGI
	Wate
	good
OGRAPI	

H
4
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#### Water repellent, insulating, non-stick lubricating paste formulated with ultra-pure and PTFE-enhanced synthetic oils, for the mounting and lubrication of

691

sliding and telescopic assemblies. Non-stick, long term lubrication even in extreme weather conditions. Excellent resistance to inclement weather, extreme cold and very hot weather.

LUBRICATION OF TELESCOPIC CRANE BOOMS

Can be sprayed with lube shuttle spray gun 700081 (pneumatic version)

		CT 691
3691C4	400 g standard cartridge	1
3691C4LS	400 g Lube Shuttle cartridge	691
369102	25 kg drum	
		-

# SPECIAL GREASES



water resistance.

3619T3

3619C5

3619B7

3619S1

100 g tube

1 kg tin

5 kg tub

800 g cartridge

3617B7	1 kg tin	Court
361704	50 kg drum	
3617U2	180 kg drum	617

white

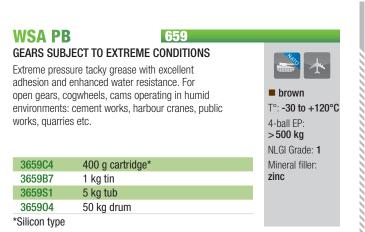
T°: -40 to +320°C 4-ball EP: 800 kg

CLP

FREE



## SPECIAL GREASES



MOS2 INFUS	SIBLE GREASE	
Infusible greas not run. Very s	e with MoS2. Extreme pressure, does table during lifetime. Very stable at or bearings, axles, hinges, pumps,	Dark gre
cable tensione		T°: -35 to +
		NLGI Grade:
		Drop point: none
3660C4	400 g cartridge	
3660C4 3660B7	400 g cartridge 1 kg tin	none
	0 0	

303304	400 y cartruye	winerar mier.	
3659B7	1 kg tin	zinc	
3659S1	5 kg tub		
365904	50 kg drum		
*Silicon type			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	 	a.

#### **NANOLUBRICANT®** 2010

**TOP-OF-THE-RANGE SEMI-SYNTHETIC** Grease rich in additives using new innovative technologies, with tremendous potential for advanced lubrication. Multi-purpose, high-performance grease.



42010A4	650 ml aerosol
32010C4S	400 g cartridge
32010C4	400 g Lube Shuttle cartridge
32010B7	1 kg tin
3201002	25 kg drum
3201004	50 kg drum

#### **NANOLUBRICANT®** 2045 WATERPROOF MARINE GREASE

High-performance, long-lasting tacky and adhering grease resulting from new technologies. Calcium soap grease specifically formulated for very wet or underwater marine environments, notably severe weather and humidity conditions. For petroleum industries, port areas, wind farms, agriculture, public works, paper mills.



400 g cartridge standard 32045C4S 32045B7 1 kg box 3204504 50 kg drum

#### **M6** 675 HIGH SPEED AND SEVERE COLD

Synthetic grease with lithium soap. Extreme pressure, resistant to low temperatures, ideal grease for lubrication in cold regions such as the poles, at very high altitude and in the refrigerating industry. Resists heavy loads and very high speed. Appropriate for spindle bearings and every bearing with big diameter at high speed.

400 g cartridge

1 kg tin



NANOLUBRICANT <sup>®</sup> 2035	
HIGH-TECH WHITE GREASE Grease specifically developed for applications in the food industry or where clean grease is required. Resulting from ORAPI's NANOLUBRICANT® technology, this grease has outstanding anti-wear, extreme pressure and long-life properties, 2 to 4 times greater than other greases on the market.	white T°: -30 to +150 NLGI Grade: 2 4-ball EP: 500 kg

\*\*\*\*\*

32035C4S 400 g standard cartridge

#### **CT 665**

.......................

#### 665 SEVERE WEAR AND SHOCK CONDITIONS Grease formulated using calcium sulfonate soap. Especially designed for very severe conditions: extreme pressure, wear, shocks, water resistance. Main bearings, oven bearings, foundry rollers, axles, frames etc. for agriculture, civil engineering, marine, steelworks, public works.

Water resistance: very good 3665C4 400 g cartridge 3665B7 1 kg tin

#### \*\*\*\*\*

674

#### M 7 MOS2 AERONAUTICAL GREASE

#### Extreme pressure synthetic grease enhanced with molybdenum disulphide. Excellent performance at low temperatures, withstands very high rotation speeds and ideal for large-diameter bearings. Resistant to heavy loads and shocks. Ideal grease for lubrication in regions such as the poles, at very high altitude and in the refrigerating industry or aeronautical applications.



caramel

4-ball EP:

480 kg

T°: -25 to +190°C

+150°C

T°: -73 to +121°C 4-ball EP: 350 kg DN Factor: 1 000 000

```
3674B7
              1 kg tin
```

3675C4

3675B7

### SPECIAL GREASES



CLP

FREE

 3622B7
 1 kg tin

 362204
 50 kg drum

400 g cartridge

1 kg tin

50 kg drum

36221C4

36221B7

3622104

Classe: H1

CLP

FREE



### SILICONE GREASES



4809A4

650 ml aerosol

38

### SILICONE GREASES

OILS



### SIL 50/50

SURFACE TREATMENT

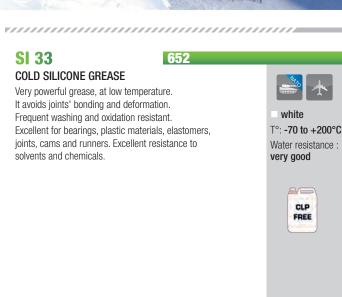
MoS2 silicone paste. Exceptional resistance to corrosive chemicals, water, steam and oxidation. Lubrication of mechanisms exposed to very low and very high temperatures. Widely used in aeronautics.

100 g tube

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823





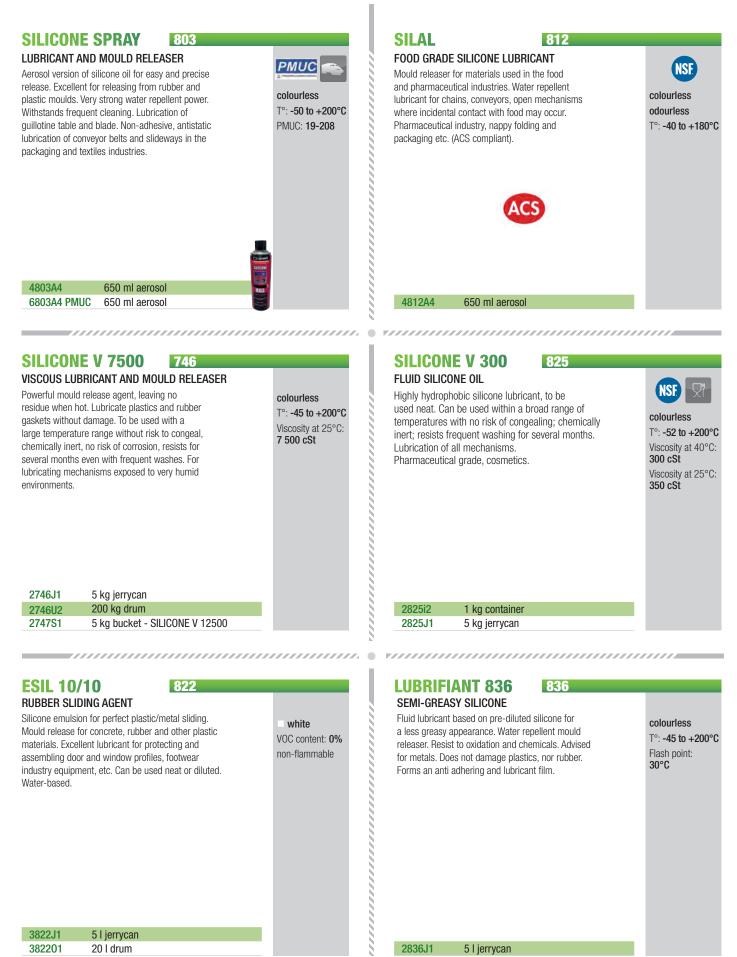
3652T3100 g tube3652B71 kg tin

ASSEMBL

PROTECT



### SILICONE GREASES

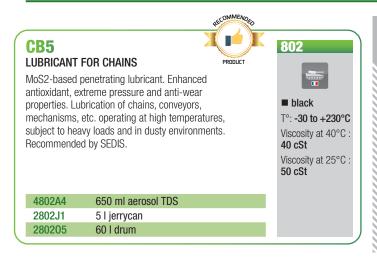


### SILICONE OILS

		ULIOUN		
<b>ORALUB 32</b> <b>JURBINES, SPINDLES</b> Provides corrosion protection of lubricated surfaces. Very low friction coefficient, anti-wear properties, adapted for central greasing. Fast spindle movements, hydraulic motors and pumps, precision mechanisms etc.	<ul> <li>■ yellow</li> <li>Viscosity at 40°C: 32 cSt</li> <li>Flow point: -27°C</li> <li>ISO 32</li> </ul>	<b>ORALUB 46</b> <b>HUDRAULICS, RUNNERS</b> Multipurpose lubricant with antioxidant additives, anti-wear and extreme pressure characteristics. Specially designed for power transmissions. Suitable for centralised greasing and oil mist lubrication systems. For application onto hydraulic motors and pumps, precision machine tools.	<ul> <li>yellow</li> <li>Viscosity at 40°C:</li> <li>46 cSt</li> <li>Flow point:</li> <li>-24°C</li> <li>ISO 46</li> </ul>	CLEAN PENETRATE & RELEASE
2894J1       5 l jerrycan         289401       20 l drum         2894U2       220 l drum         ORALUB 68         895         RUNNERS, GEARS         Oil with high grip and extreme pressure additives and which guarantees anti-corrosion protection of lubricated surfaces. Avoids frictions and vibrations.         For all runners, regardless of speed and load conditions, machine tool guides and sliders, cables, gears, gear reducers, hydraulic equipment, etc.	<ul> <li>yellow</li> <li>Viscosity 40°C:</li> <li>68 cSt</li> <li>Flow point:</li> <li>-24°C</li> <li>ISO 68</li> </ul>	2893J1       5 l jerrycan         289301       20 l drum         2893U2       220 l drum         2893N1       1,000 l container         NEW         ORALUB 868         SOLUBLE LUBRICANT FOR SCISSORS         IN GLASS INDUSTRIES         A water-soluble lubricant that forms an emulsion for lubricating and cooling scissors in the glass industries.         Without residues.       Without residues.         Optimal for lubrication in a very 'hot' environment: 1000 to 1200 ° C.	868 yellow Viscosity at 40°C: 22 mPa.s	ATE
2895J1         5   jerrycan           289501         20   drum           2895U2         220   drum           2895N1         1,000   container		2868U2 200 l drum 286805 60 l drum LUB CABLE 831E CABLE OIL		ASSEMBLE
High-tech, very adhesive fluid lubricant capable of withstanding high temperatures under heavy loads. Contains extreme pressure additives, reinforced anti-corrosion property. No gap formation when using splash lubrication. Gears, cranes, public works equipment, port areas, ball mills for crushing ore, cable cars, gantries, etc.         2831i2       1   container         2831J1       5   jerrycan	<ul> <li>brown</li> <li>Viscosity at 40°C: 220 cSt</li> <li>Flash point: 260°C</li> <li>Flow point: -12°C</li> <li>ISO 220</li> </ul>	Very fluid, adhesive and highly penetrating oil for internal and external cable lubrication. Contains extreme pressure and water repellent agents. Increases the life span of crane, cable car, hoist, bridge crane cables and protects them against corrosion. Applied with a brush, by spraying or splash lubrication.	<ul> <li>brown</li> <li>very fluid</li> <li>Viscosity at 25°C:</li> <li>100 cP</li> <li>4-ball wear</li> <li>1h at 40 kg:</li> <li>&lt; 0,4 mm</li> </ul>	PROTECT
2831J1         5 l jerrycan           283101         20 l drum           2831U2         220 l drum		2831E 01 20 l drum		



### MECHANICAL OILS





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#### **NANOLUBRICANT®** 2020 HIGH TECHNOLOGY

Highly adhesive, water repellent fluid lubricant containing revolutionary additives. For cables, chains and gears. Resists to high temperatures and heavy loads. Reinforced anti-corrosion and anti wear properties. Increases lubrication longevity by 5, reduces wear by 4 and reduces friction by 2.



42020A4 650 ml aerosol 22020J1 5 I jerrycan

> ,,,,,,,,,,,,,,,,,,, 705

#### ORAFLON PTFE LUBRICANT

High-technology, semi-greasy PTFE lubricant for long-lasting use. Reinforced anti wear and anti oxidation properties, excellent adherence. Verv low friction coefficient. Excellent resistance to water and cold. For chains, cables, slides, delicate mechanisms...



#### 4705A2 405 ml aerosol TDS 2705i2 1 I container 2705J1 1 I bottle

CB6	806		
CLEAN LUB	RICANT FOR CHAINS		
Semi-synthetic water-resistant liquid.			
temperatures Conveyors, fo	and anti-wear properties, for high . Does not stain or attract dust. rklift trucks, agricultural tooling, ecommended by SEDIS.		<b>brown</b> T°: <b>-30 to 280°C</b> Viscosity at 10°C: <b>1700-1800 cSt</b> Viscosity at 40°C :
4806A4	650 ml aerosol		210 cSt
3806i2	1 I container	Conor	
3806J1	5 l jerrycan	211	
380601	20 I drum		
3806U2	200 l drum	tos	

\*\*\*\*\*

663

### G 105 X

#### **GRAPHITE-BASED CHAIN LUBRICANT**

Graphite-enhanced mineral oil for mechanisms operating at high temperatures under high stress. Not water soluble, protects against corrosion. Recommended for the lubrication of chains and conveyors in the textiles industry, on oil rigs, in port areas, glass works and the automotive industry. Advised in special applications: deformation, cutting, drilling.

black T°: up to +240°C Silicone-free Viscosity at 25°C : = 1960 cP

```
CLP
FREE
```

366301 20 kg drum

### MOLIQ

2837i2

2837J1

283701

**G 840** 

6840i2

684001

#### SELF-CLEANING LUBRICANT Extreme pressure fluid based on MoS2 and graphite. Developed

for the external lubrication of points bearings, railway tracks and any mechanism operating intermittently and being exposed to dirt. Cleans and lubricates in one go. Underground railways, tramways, railways, merry-go-rounds.

1 I container

5 l jerrycan

20 I drum

837



```
black
T°: -40 to +180°C
4-ball EP:
800 kg
```

GLYCERIN OIL	
Refined lubricant for delicate greasing. Very fluid, to	
be used for lubrication of micro-mechanisms, control	

1 I container

20 kg drum

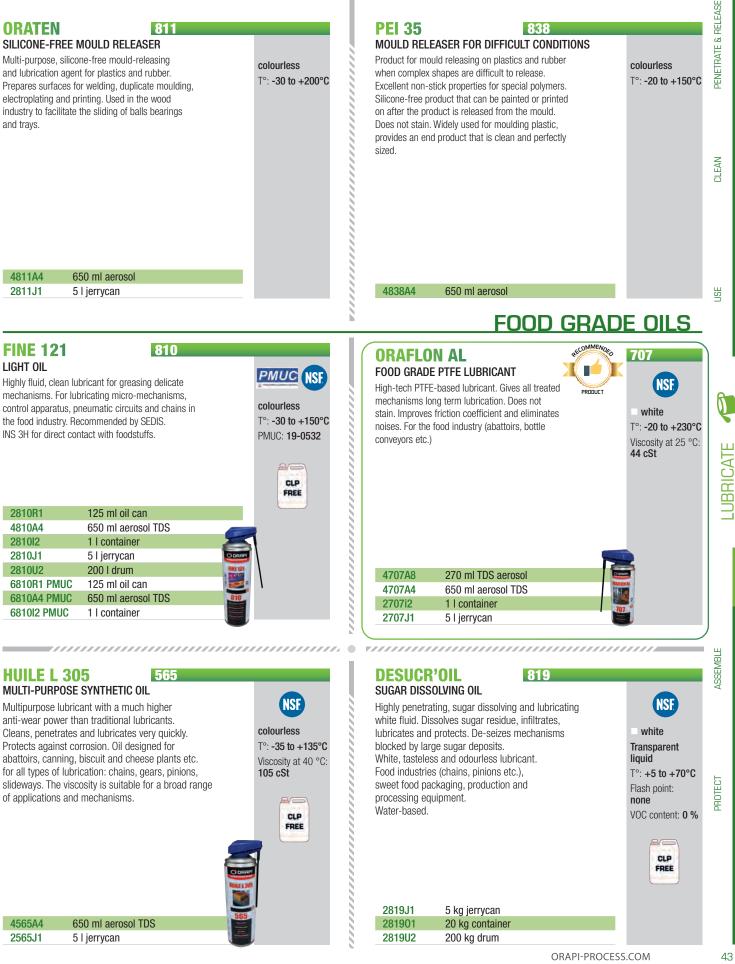
840



UBRICATE

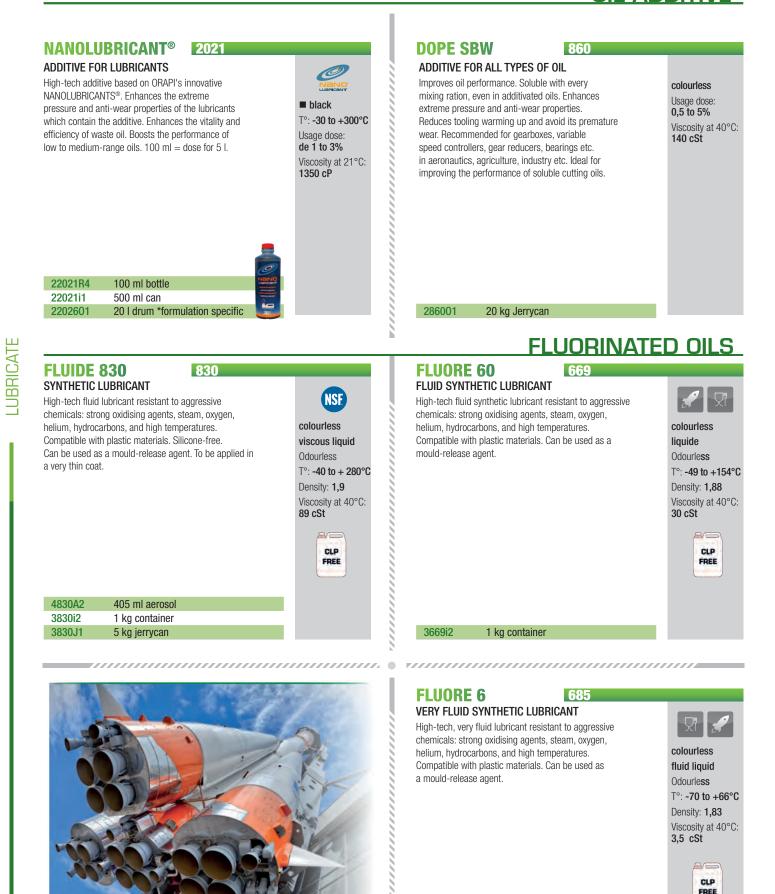
### MOULD RELEASE OILS

OILS





OIL ADDITIVE



368501

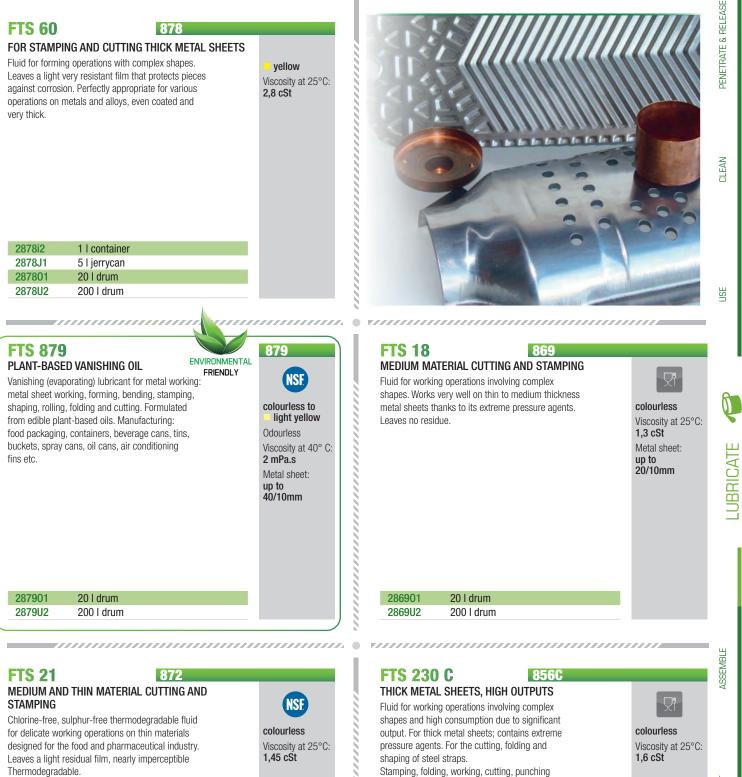
368512

20 kg drum

1 kg container

44

### METAL WORKING - VANISHING FLUIDS

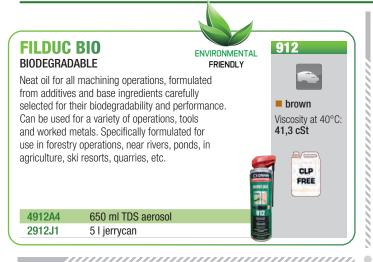


 287201
 20 l drum

 2872U2
 200 l drum

of all metals and special alloys. Automatic stamping: covers, boxes, packaging of all shapes.







858

886

### **2000 NUCL NF** HALOGEN-FREE

Cutting oil with excellent extreme pressure and anti-wear properties, free from halogen compounds; quickly dissipates the heat energy generated by machining. Its formulation and viscosity make it suitable for all uses on all materials, more specifically titanium and stainless steel machining in the nuclear and aeronautical industries.

650 ml TDS aerosol

500 ml can

5 l jerrycan

200 I drum

	1.0		0
P	11/	υ	C

6865i1

yellow Viscosity at 40°C: 21 cSt CI - F - S - Br : < 200 ppm

### PMUC: 19-0527 CIP FREE

### METAL WORKING - NEAT OILS

#### **FILDUC 1879** TAPPING, DRILLING, SAWING

4859A4

2859R1

2859J1

2859U2

Cutting oil with very good extrem anti-wear properties. Effective, m product. Exceptional adhesion on drills. Excellent for tapping difficul "blocked" or not in all types of ste stainless.

879 859	
LING, SAWING	Na
ery good extreme pressure and ies. Effective, multi-purpose	
nal adhesion on screw taps and	brown
r tapping difficult holes whether n all types of steel, including	Viscosity at 40°C: 510 cSt
650 ml TDS aerosol	
125 ml oil can	
5 l jerrycan	
200 I drum 🚔	

-

### **OLDUC 1227 SF**

#### MACHINING OF HARD STEELS AND STAINLESS STEELS

855

Extreme pressure and anti-wear cutting oil for turning, milling, boring, tapping, bar turning and all difficult machining operations on stainless, treated and alloy steels. Thanks to its fluidity, it can be sprayed onto automatic lathes.

light brown Viscosity at 40°C: 25 cSt

#### 2855J1 5 I jerrycan

### **FTS 10 NU ODOURLESS AND COLOURLESS**

#### Synthetic colourless and odourless fluid with high anti wear and extreme pressure power. For the tapping and drilling of all metals, prevents the premature wear of cutting tools. To be applied neat, with brush or by spraying.

865

colourless odourless Viscosity at 20°C: 180 cSt CI - F - S - Br : < 200 ppm PMUC: 19-071 CLP FREE

PMUC

### TAPPING PASTES

### **TA 1800 TAPPING PASTE**

3886B6

3886S1

6858A4 6858i1

6858J1

6858U2

Cutting paste with excellent extreme pressure and anti-wear properties, easy to apply onto the tools. Does not run. Increases tools life. Its formulation and texture make it suitable for all uses on all materials: a genuinely multi-purpose and efficient product. Exceptional adhesion on taps and drills, even in vertical and upside-down applications.

500 a tin

5 kg tub



CLP FREE



500 ml spray bottle

### METAL WORKING - SOLUBLE OILS



\_\_\_\_\_

ORACOUP 11	880
GRINDING	

Synthetic lubricant solution specifically formulated for precision grinding, guaranteeing excellent internal and external protection of steel, cast iron, ferrous and non-ferrous metal parts, bearing tracks, bushed bearings, chocks etc. Easy to filter, does not foam, even under the most difficult grinding conditions.

<ul> <li>green</li> <li>Usage dose:</li> <li>2 to 3%</li> </ul>
pH diluted to 3%: 9 to 10

#### ISO L : MAH

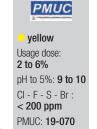
2880J1	5 l jerrycan	
288001	20 l drum	
2880U2	200 I drum	

892

### **ORACOUP 892** HALOGEN-FREE

Micro-emulsion for milling, turning and sawing of ferrous metals and white alloys, appropriate for high volume metal chip removal. Product with excellent mechanical and microbial stability, allows for less frequent emptying.

ISO L : MAF



colourless

Usage amount: 1 to 5%

689205 60 l drum	6892J1	5 I can	
	689205	60 I drum	
6892U2 200 l drum	6892U2	200 l drum	

#### **ORACOUP 91** 854 FUNGICIDE MAINTENANCE TREATMENT

Bactericidal and fungicidal product with cleaning action for restoring baths damaged by bacterial pollution. Recovers baths which are starting to turn, i.e. characterised by sludge and unpleasant odours. The bath will regain its initial appearance and odour within 24 to 48 hours of the treatment. Curative and preventive treatment.

2854i2	1 I container	
2854J1	5 kg jerrycan	
285404	50 kg drum	

ORACOU	P 32 882			
NON-FERRO	US METALS			
unctuous and a of non-ferrous aluminium, cop	mulsion with a high concentration of inti-wear additives, for the machining metals, copper alloys, titanium, per, mild & semi-hard steel and light milling, drilling, taping.	light yellow Usage dose: 4 to 6% pH diluted to 5%: 9 to 10		
ISO L : MAD				
288201	20 I drum			
2882U2	208 l drum			
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			
ORACOU	P 252 852			

### **ORACOUP 252** VERSATILE. LONG-TERM USE

Chlorine-free micro-emulsion for milling, turning and sawing ferrous metals and white alloys, suitable f or significant chipping. Product with excellent mechanical and microbial stability, allows for less f requent emptying.

ISO L : MAF

\_\_\_\_\_\_

2852i2	1 I container	
2852J1	5 l jerrycan	
285201	20 I drum	
2852U2	200 I drum	

yellow

Usage dose: 2 to 6%

pH to 5%: 9 to 10

PENETRATE & RELEASE

CLEAN

ЗS

UBRICATE

SSEMBLE

PROTECT



587

### ANTIMOUSS **BUBBLE ELIMINATOR**

Additive formulated from stabilised, high-purity copolymers for eliminating foam in water-based solutions. The foam is eliminated within seconds in water-soluble cutting oils, lubricants, scale removers and detergents, in particular when they are vigorously shaken. To be used in small quantity.

### TREATMENTS





2587i2 1 I container

# ASSEMBLE

BOND SEAL FIX REPAIR

# **KEEP IN A COLD PLACE**

# **TOWARDS BETTER ASSEMBLY**

In the imperfect world of mechanical assembly, ORAPI has been developing solutions adapted to problems in all their forms since 1968.

Here we will share some of our knowledge with you to help you make the best possible choices.



### FOCUS ON ANAEROBIC RESINS



# Anaerobic resins are single-component, single-bond adhesives.

These polymerise at room temperature when not in contact with oxygen and when the adhesive is in contact with metal. Applications are therefore limited to metals but they are numerous.

The benefits of the resins we manufacture are their excellent resistance to chemicals, high temperatures and vibration.

### THE RATE of Polymerisation depends on:



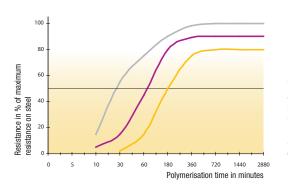
- 2 the application temperature
- 3 the materials

### THE USE OF RESINS CAN BE DIVIDED INTO 4 CATEGORIES:

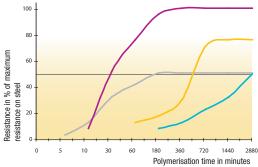
- 1 Screw and bolt locking
- 2 Fastening of cylindrical assemblies: rings and bearings
- 3 Thread sealing of fittings and plugs
- 4 Close mating surface sealing of crankcases, flanges etc.



### **RATE OF POLYMERISATION OF ANAEROBIC RESINS**



#### According to the material

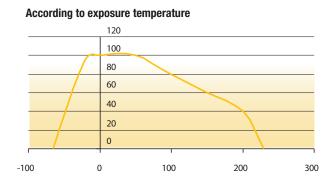


According to room temperature

### LEGEND

100 According to clearance 80 CLEARANCE 0,05 CLEARANCE 0,15 Resistance in % of maximum resistance on steel CLEARANCE 0,25 \_\_\_\_ 50% résistance 60 According to the material 40 Brass Steel 50% resistance Galvanised steel Stainless steel 20 According to room temperature 10 180 360 720 1440 2880 30 60 40°C \_ 05°C - 50 % resistance Polymerisation time in minutes

#### **MECHANICAL PERFORMANCE IN % OF RESISTANCE** 25°C







### PREPARATION

#### **NETTOYANT 3141** 016

#### PRE-GLUING SOLVENT

Dry degreaser specifically formulated for cleaning prior to gluing. Removes impurities, improves adhesion and setting speed. Quickly and totally removes all greasy particles stuck to material.

liquid Odour: strong and distinctive

### ACTIVATEUR 3140

SPECIAL ANAEROBIC RESINS

Speed up the polymerisation of anaerobic resins, reducing setting time. Recommended:

- for use on galvanised or painted surfaces, stainless steel and aluminium,

015

- for large gaps

- when the temperature is below 10°C



1015M1 100 ml pump spray

6015M1 PMUC 100 ml pump spray

#### 4016A4 650 ml aerosol

### FREINAGE ULTRA FAIBLE 299

### VERY LOW RESISTANCE

For fragile assemblies to be dismantled easily using standard tools to avoid material deformation: bicycle wheel spokes, small screws in computers, watch making, eyewear etc.

yellow-orange very liquid T°: -60 to +150°C Setting time/steel: 3 to 25 mn Breaking strength on M10 steel bolts < 5 N.m CD 24 hrs/ M10 steel: < 6 Nm

### **FREINAGE FORT** STRONG RESISTANCE

Thread locking for metallic threads when dismantling is not required for maintenance or that are never to be dismantled



THREAD LOCKERS

300

green viscous liquid T°: -60 to 150°C Setting time/steel: 10 to 25 mn CD 24 hrs/ M10 steel: > 25 N.m PMUC: 16-0048

1300F1	5 ml bottle
1300F9	24 ml bottle
1300F3	50 ml bottle
1300F5	250 ml bottle 🥂 📇
6300F3 PMUC	50 ml bottle

1299S1 5 kg tub

### FREINAGE FAIBLE MODERATE RESISTANCE

For all threaded pieces which are to be easily dismantled with standard tooling. For all assemblies with limited stress or fragile. Prevents loosening due to small vibration stresses such as those acting on electric motor screws.

50 ml bottle

250 ml bottle

purple viscous liquid T°: -60 to +150°C Setting time/steel: 10 to 25 mn CD 24 hrs/ M10 steel: < 13 N.m

.....

306

### FREINAGE MOYEN MEDIUM RESISTANCE For all threaded parts, to be dismantled if necessary with standard tooling. Excellent against vibration.

ALCOMMENO A 303

blue viscous liquid T°: -60 to +150°C Setting time/steel: 10 to 25 mn CD 24 hrs/ M10 steel: 10 - 20 N.m

1303F1	5 ml bottle	
1303F9	24 ml bottle	
1303F3	50 ml bottle	
1303F5	250 ml bottle	
1303i2	1 I container	
		-

1306F3

1306F5

For all assemblies to be dismantled easily using standard tools and with small gaps, on thin threads

50 ml bottle

250 ml bottle

50 ml bottle

LOCKING/SEALING PRODUCT FOR PRE-ASSEMBLY

Pre-assembly thread treatment for locking and

sealing threaded parts: the threads are treated in the

workshop a few days before use. Dismantling with

and small screws.

1307F3 1307F5

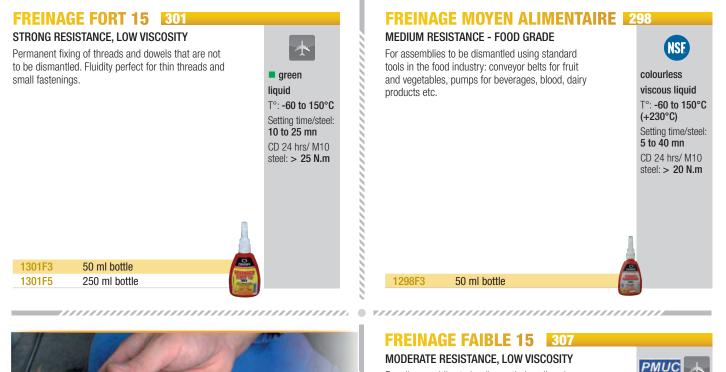
6307F3 PMUC

APPLICATION

standard tooling.

**PRE-APPLIQUE** 

# THREAD LOCKERS





304

### FREINAGE MOYEN 15

#### MEDIUM RESISTANCE, FLUID THREAD LOCK

For all assemblies to be dismantled easily using standard tools. Fluidity perfect for thin threads and small fastenings.



red
 liquid
 T°: -60 to
 +150°C
 Setting time/steel:
 10 to 25 mn
 CD 24 hrs/ M10
 steel: 15 - 20 N.m
 PMUC: 16-049

1304F3	50 ml bottle
1304F5	250 ml bottle
6304F3 PMUC	50 ml bottle

### 1458F6 400 ml bottle

### --

PENETRATE & RELEASE

CLEAN

g

blue

liquid T°: -60 to +150°C Setting time/steel: 10 to 25 mn CD 24 hrs/ M10 steel: 7 to 13 N.m PMUC: 16-074

458

light blue

liquid T°: -50 to +100°C Setting time/steel: immediate CD 24 hrs/ M10 steel: < 8 N.m

PROTECT

ORAPI-PROCESS.COM

### 51



310

### RING FASTENING FOR BEARINGS

### **FIXPRESS**

#### VERY STRONG AND QUICK FASTENING

Very resistant to radial, axial and dynamic stresses. Helps extend machining tolerances recommended for clearance values of 0.15 to 0.25mm. Can be used as very strong, quick-setting sealant. Recommended for assemblies that cannot be dismantled.



### green Handling time: 3 to 5 mn Shearing strength: > 25 N/mm<sup>2</sup> T°: -60 to +150°C

1310F3 50 ml bottle
1310F5 250 ml bottle
1310S1 5 kg container



### FIXMETAL 312 **REPAIRS DEFORMED PARTS** Paste product advised for repairing, without arev machining, used cylinder-shaped pieces with high Handling time: and even irregular gap (0.25 to 0.5mm). Resists to 20 to 45 mn impacts and vibrations. For bearings' housing gone Shearing strength: $> 20 \text{ N/mm}^2$ oval, repairing of shafts with wear or scratches. Always used with ACTIVATEUR 3140. T°: -60 to +150°C 1312T2 50 g tube

#### **BLOCK BAGUE** 314 STRONG FASTENING - GAP < 0.05MM PMUC Fluid resin recommended for small gaps. Fastening of rings, pulleys, bearings etc. with high shearing strength. green Handling time: 10 to 25 mn on steel T°: -60 to +150°C Shearing strength: >20 N/mm<sup>2</sup> PMUC: 16-050 50 ml bottle 1314F3 1314F5 250 ml bottle

### **BLOCK BAGUE 60** 313

### STRONG FASTENING - MEDIUM GAP

Strong resistance for radial, axial and dynamic stresses. Recommended for gaps from 0.15 to 0.25 mm, on assemblies that cannot be dismantled: fastening of drive shafts, pinions, pulleys etc.



green Handling time: 10 to 25 mn on steel T°: -60 to +150°C Shearing strength: >20 N/mm<sup>2</sup>



50 ml bottle

BLOCK OIL TOLERANT 316

50 ml bottle

250 ml bottle

6314F3 PMUC

1316F3

1316F5

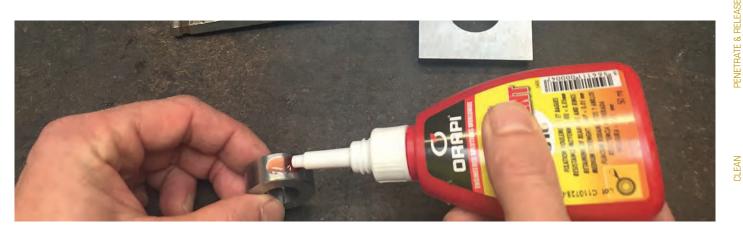
be perfect. Advised for gaps < 0.15mm. Fastening of green rings, inserts, pulleys, bearings, cylinder liners etc. Handling time: with high shearing strength. 10 to 30 mn on steel T°: -60 to +150°C Shearing strength: >25 N/mm<sup>2</sup>

50 ml bottle 250 ml bottle

1313F3

1313F5

### RING FASTENING FOR BEARINGS



# CK ROULEMENT 60 317 BLOCK ROULEMENT 318

### BLOCK ROULEMENT 60 317 MEDIUM RESISTANCE - MEDIUM GAP

Fastening of parts to be subsequently dismantled using standard tools in the event of wear. Fitting reinforcement for gaps between 0.05 and 0.15mm. Increases assemblies' reliability. Fastening of bearings onto shafts or housings, liners, inserts, rings, pulleys etc.

red
Handling time: 10 to 25 mn on steel
T°: -60 to +150°C
Shearing strength >15 N/mm <sup>2</sup>
CLP FREE

 1317F3
 50 ml bottle

 1317F5
 250 ml bottle

#### 

333

### PORAJOINT

### SEMI FLEXIBLE FLAT SEALANT

Sealing gel with high adhesive power for all flanges, including vertical flanges. Replaces conventional seals with complex shapes: pump housings, motors, gear boxes etc. Also recommended for threaded metal seals with «medium resistance» when dismantling.

1333E4	25 ml syringe
1333F7	50 ml squeeze bottle
1333T2	50 ml tube
1333T4	200 g tube
1333C3	300 g cartridge
6333T2 PMUC	50 g tube

### PMUC

red
T°: -60 to +150°C
Shearing strength: >8 N/mm <sup>2</sup>
Setting time at 20°C: <b>10 to 25 mn</b>
PMUC: <b>16-0072</b>

# 1318F3 50 ml bottle

MEDIUM RESISTANCE - GAP < 0.05MM

Affixing parts which need to be dismantled

with standard tools in case of wear. Fittings

reinforcement. Increase assemblies reliability.

6318F3 PMUC 50 ml bottle

### FLAT SEALING

PMUC

T°: -60 to +150°C Shearing strength: >15 N/mm<sup>2</sup> (24

red 📕

on steel

hrs) PMUC: 16-051

PMUC

Handling time:

Shearing strength: > 15 N/mm<sup>2</sup> PMUC: 16-075

5 to 25 mn

T°: -60 to

+180°C

red

Handling time:

10 to 25 mn

### **ORAJOINT** FLAT SEALING

Sealing of machined close mating surfaces. Withstands vibrations, industrial fluids, oils and gases. Recommended for complicated close mating surfaces: pump housings, motors, gearboxes etc. Also recommended for threaded metal seals with «medium resistance» when dismantling.

324

1324T2	50 ml tube
1324C3	300 g cartridge
6324T2 PMUC	50 q tube

ЗU



ст





paste 5 to 20 mn on steel T°: -60 to +150°C

Handling time: Breaking strength: 1 to 8 N.m

#### 1334T2 50 ml tube

to access.

SFMBL

50 ml squeeze bottle 1323F7

and tapes on all pipes, fittings etc. in plumbing,

heating, mechanical applications.

T°: -60 to +

5 - 15 N.m

Breaking strength:

150°C



326

**HYDRAUBLOCK** 

applications.

1326F3

1326F5

SMALL DIAMETER FITTINGS

Sealing of threaded metal fittings and tubes up to

1 inch, with medium resistance when dismantling.

Withstands shocks, vibrations, most gases and

fluids, hot/cold water etc. Easy dismantling using

standard tools. Replaces pastes and tapes on all

50 ml bottle

250 ml bottle

pipes, fittings etc. in plumbing, heating, mechanical

## FLAT SEALING

### **HYDRAULOCK**

### HYDRAULIC/PNEUMATIC

Low resistant sealing gasket for pneumatic and hydraulic thread connections up to 1/2 inch. Withstands shocks, vibrations, most gases and fluids, hot/cold water etc. Easy dismantling using standard tools. Replaces pastes, hemp and tapes on all pipes, fittings etc. in plumbing, heating, mechanical applications.

329

# brown Handling time: 5 to 10 mn on steel T°: -60 to +150°C Breaking strength:

5 to 10 Nm



.....

331

322

### ETANCHELOCK

#### SEALING BY INFILTRATION

Very fluid adhesive using capillary attraction to penetrate threads, cylindrical parts and metal pores. Gap: 0.1mm max. For locking, ring and bearing fastening or post-mounting sealing operations in applications where pre-assembly adhesive application is impossible. ■ green very fluid Handling time: 10 to 30 mn T°: -60 to + 150°C Breaking strength: > 20 N.m



328

1322F3 50 ml bottle

### JOINT LIQUID

PTFE-BASED PIPES

PTFE-based seal for metal fittings, hydraulic, pneumatic and heating pipes up to 3 inches where medium dismantling resistance is required. PTFE brings an excellent chemical stability. Facilitates assembly and dismantling.



white Handling time: 20 to 40 mn T°: -60 to 180°C Breaking strength: 5 to 13 N.m



 1331T2
 50 ml tube

 1331T4
 200 ml tube

PORALOCK

(Up to 1 inch)

THREAD SEALING, HIGH RESISTANCE

Liquid sealing compound for metal, hydraulic or pneumatic fittings and threaded fittings subjected

to severe vibration. Unaffected by hydraulic and

synthetic fluids, most industrial fluids and gases, hot

50 ml bottle

and cold water etc. Replaces pastes, hemp, tapes.

PENETRATE & RELEASE

CLEAN

ATE

■ green viscous liquid T°: -60 to +150°C Shearing strength: > 15 N/mm<sup>2</sup> M10 steel rekease: > 25 N.m Setting time at 20°C: 10 to 25 min PMUC: 16-071

PROTECT



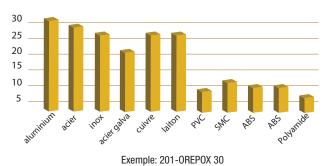
### FOCUS ON STRUCTURAL BONDING

Gluing is a wide-ranging subject as the shape of parts, the nature of the surfaces, size, mechanical and thermal stresses vary depending on the customer.

Our engineers look at a wide range of specific situations every day; in the following pages, we will help you find the right solution for your needs.All our adhesives are tested on different traction and shearing devices to accurately identify the performance which can be expected of them.

Not only can we help with the choice of adhesive, but we can also provide you with adhesives for manual use for minor or occasional operations, as well as adhesives designed for industrial use, complete with glue applicator by way of example..

### Average shearing strength in N.mm<sup>2</sup> 48 hour cure at 25°C



1 A range of DUAL-COMPONENT epoxy, polyurethane and acrylic adhesives.

These adhesives are comprised of a resin component and a hardener component, and begin to polymerise as soon as they are mixed together. The adhesive can be used to fabricate parts or replace materials.

#### Primary applications include:

Gluing part with large or irregular gaps.

• Sealing and repairing holes, cracks and repairing/gluing parts with pieces missing.

2 A range of FLEXIBLE ADHESIVE MASTICS: odourless acetic silicones, PU and MS+

These single-component adhesives polymerise at room temperature thanks to the moisture in the air, which is why the adhesive must be left in the open air before assembly.

#### Primary applications include:

- · Flexible gluing and sealing, soundproofing.
- Often recommended for assemblies subjected to vibrations or when the assembled materials have different expansion coefficients.



### WE HELP YOU CHOOSE:

Thank you for choosing ORAPI adhesives; the table below will help you select the adhesive best suited to your application.

This choice does not take into account the usage conditions, temperature and other criteria which must be submitted to our technicians who are there to help you all year round.

### **STRUCTURAL BONDING PRODUCTS**

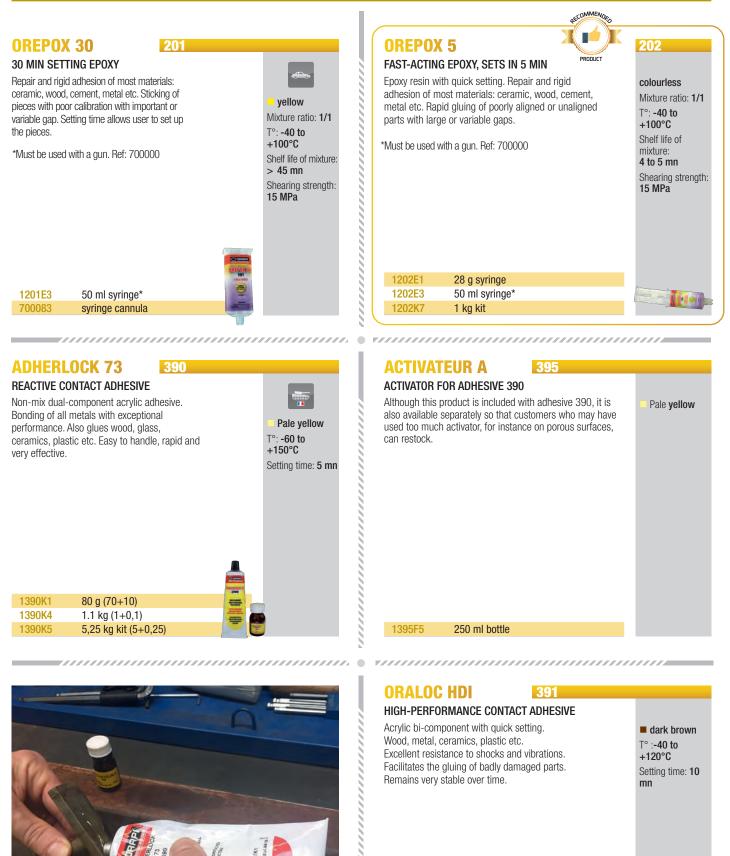
				•			_			
WOOD	400 125 352						_	B		4
STEEL	373 390	310 373 390					- 1			100
COPPER	373 125	355 310	202 310							
GLASS	373 390	390	355	125 100 355					9	
PVC	355	355	355	125	355			- The		
RUBBER (NITRILE)	355	355	390	125	355	355		and the second s	94	-
PLASTIC*	355 390	125 390	125 390	125	355	355	355			
ALUMINIUM	390	125 390	202 390	355	390	202 390	355	390 125		
STAINLESS STEEL	390 125	390	390	390	373	390	390	390	390	
PAPER CARDBOARD	400 spray can	400 aerosol	•	400 aerosol	400 aerosol	400 aerosol	400 aerosol	400 aerosol	400 aerosol	400 aerosol
	WOOD	STEEL	COPPER	GLASS	PVC	RUBBER (NITRILE)	PLASTIC	ALUMINIUM	STAINLESS STEAL	PAPER CARDBOARD

\*Except PE, PP and silicone



SILICONES

### STRUCTURAL ADHESIVES

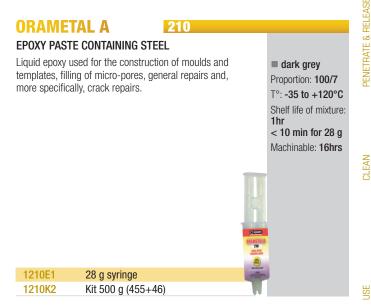


SFMBI

# REPAIR EPOXY



212



### ORAMETAL F

#### EPOXY PASTE CONTAINING ALUMINIUM

To be applied like putty for defects and cracks reparation on moulded or machined alloy pieces. Aluminium charge is light and corrosion resistant. After polishing, the surface has a shade very similar to aluminium colour.







\*\*\*\*\*

dark grey

after mixing

Shelf life of

approx. 4 mn

mixture:

T°: -50 to +120°C

ASSEMBLE

UBRICATE



### ORAMETAL POCKET 221

### PRE-MEASURED LOADED MASTIC STEEL

Repair of all supports (wood and metal). Pre-measured, it is very easy to use and avoids any waste. Repairs moulds, leaky pipes, broken tools, etc. Does not rust and can be used under water. Can be pierced, threaded, and painted after polymerisation.

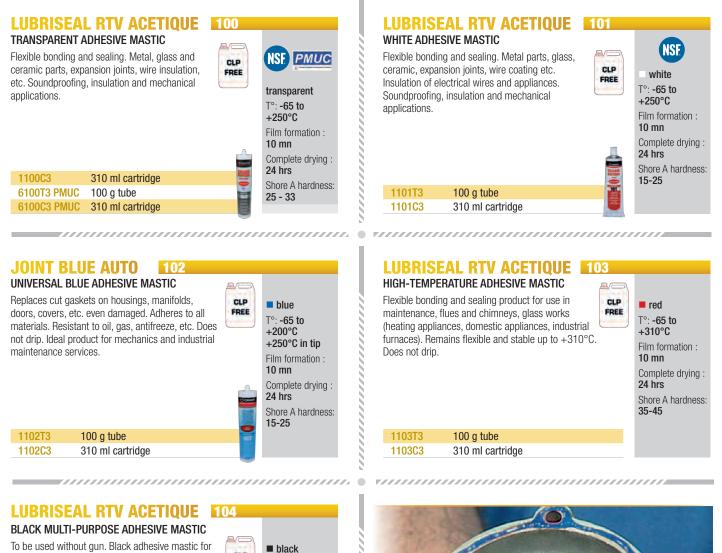
 1221D3
 57 g stick

 1221D1
 115 g stick

ORAPI-PROCESS.COM

PROTECT

# ACETIC SILICONES



To be used without gun. Black adhesive mastic for sealing crankcases, manifolds, doors, covers etc. Easy to use thanks to its pressurised canister. Light pressure on the nozzle provides a steady stream of sealant.



1104A7 200 ml pressurised canister

145

JOINT METAL

# GREY ADHESIVE MASTIC, SPECIFICALLY DESIGNED FOR USE IN THE PRESENCE OF OIL

Flexible sealant resistant to oils. Replaces pre-cut seals on crankcases, manifolds, doors, covers etc. for water, oil and solvent proofing. High mechanical resistance to corrosive fluids. Does not run, can be used also on crankcases with planarity defects.

grey
T°: -65 to +250°C
Film formation :
10 mn
Complete drying : 24 hrs
Shore A hardness: <b>20-30</b>
CLP



#### 

### PRIMAIRE 4004 0220 SPECIAL ADHESIVE MASTIC

Improves bonding adhesion and increases bonding reliability. Suitable for adhesive mastics on surfaces with low surface energy: concrete, steel, wood etc. Easy to use: apply the adhesive onto the dry primer.





100 g tube

60

1145T3

# ODOURLESS SILICONES

PENETRATE & RELEASE

S

UBBICATE



elastic putty sealant. Excellent adhesion to stainless steel, aluminium, wood, zinc, lacquer, stone, glass, PMMA etc. Can be applied onto wet and fully immersed surfaces. Can be painted over. Odourless. Does not drip. Ideal for bonding transparent glass and plastic.



materials including wood, glass, plastic, cement etc.

310 ml cartridge

It is particularly well suited to applications where

Can be painted over. Odourless. Does not drip.

good seal flexibility is required.

1120C3

Shore A hardness:

35-45



### SEALING

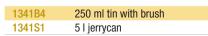
#### SEALFLON LIQUID 341

#### LIQUID TEFLON® TAPE

Aqueous fluid containing PTFE. Seals threads and flat gaskets. Let it dry before mounting (can be stoved). After drying, leaves a flexible film allowing an easy dismantling and to be mounted again later. Prevents excess thickness. Protect threads against seizing.



SEALING



### JOINTPLAST

#### PLASTIC THREAD SEALANT

Seals threaded plastic-to-plastic and mixed material (plastic/metal) fittings. Compatible with gas, cold and hot water. Forms low pressure seals on contact and seals capable of withstanding 10 bar after 24h. Easy dismantling. Allows crankcases, electric boxes, etc. to be filled so that components can be insulated and secured.

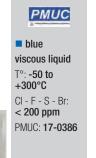
133



1133T3 100 g tube

### NUCSEAL N PMUC 346 NON HARDENING, HALOGEN-FREE

For sealing close mating surfaces and threaded fittings subject to severe vibrations. Replaces or bonds paper gaskets and other pre-cut gaskets. Helps create leak-proof seals of any shape, including complex ones. Instantly forms a low pressure seal.



6346T3

342

### ORASEAL

#### NON-HARDENING THREAD SEALANT

For sealing close mating surfaces and threaded fittings subject to severe vibrations. Replaces or bonds paper gaskets and other pre-cut gaskets. Helps create leak-proof seals of any shape, including complex ones. Instantly forms a low pressure seal.

100 g tube



#### 100 g tube 1342T3 1342B4 250 ml tin with brush 1342B7 1 kg tin

	DN LIQUID 341		SEALFLON 340 PTFE PASTE TAPE	
fluid ( ets. Le After c disma	containing PTFE. Seals threads and et it dry before mounting (can be Irying, leaves a flexible film allowing ntling and to be mounted again later. is thickness. Protect threads against	white T°: -50 to +250°C Gap: 0,15 mm max VOC content: 0%	Aqueous paste sealing compound containing PTFE, that creates a flexible seal easy to dismantle. Resists vibrations and chemicals. Seals threads and flat gaskets. Prevents excess thickness. Instantly seals PVC pipes. Let it dry before mounting.	white T°: -50 to +250°C Gap: 0,3 mm max VOC content: 0%
4	250 ml tin with brush	ALFLOND	1340T3 100 ml tube 😽	
1	5 l jerrycan		134002 20 kg drum	

348

### **ORAPLAST'X**

#### FLEXIBLE, ELASTIC PASTE

Temperature and pressure resistant Insoluble in most liquids. Retains its plasticity. Sealing and bonding of crankcases, close mating surfaces, valves, carburettors, flanges, valve covers, clutches, fittings, pipes, heating, pumps, compressors etc. Ideal for the automotive industry, petrol stations, refineries and the chemical and petrochemical industries.

1348T4 200 g tube 1348B7 1 kg tin

051

343

### OXYSEAL

### WITHSTANDS OXYGEN AND EXTREME TEMPERATURES

Seals flanges, threads and close mating surfaces and withstands pressures of up to 200 bar and contact with oxygen. Compatible with liquid gas oxygen. Dries slowly.



orange

T°: -20 to

+250°C

light grey T°: -250 to +600°C Full pressure resistance: 24 hrs

> CLP FREE

1051T3 100 ml tube

### ORASEAL + NON-HARDENING PASTE

### For sealing vertical mating surfaces. Substitute paper gaskets or make them stick. Helps create leak-proof seals of any shape. Instantly forms a low

pressure seal. Allows to use the seal again after dismantling. At room temperature, can be used as a thread locking agent, ideal for use on adjustment screws in mechanical devices and musical instruments.

1343T3 100 g tube 1343C3 310 ml cartridge



Paste T°: -50°to +300°C

SSFMBL

### SPECIAL BONDING

#### PENETRATE & RELEASE THERMIQUE PMUC 418 COLLE REPOSITIONNABLE 477 HIGH-TEMPERATURE PUTTY GLUE POST-IT TYPE GLUE IN AEROSOL PMUC Silicone-free putty glue. Jointing, bonding and Immediate adhesion. Posters or labels can be beige sealing, specifically formulated to withstand repositioned easily up to several weeks after Setting time: immediate Anthracite very high temperatures. Asbestos-free. Hardens gluing. For gluing light materials: photos, films, arev completely, to the very centre. Do not use in contact cork, foam board, decorations. Consumption: 1 thick paste with water. For cracks or holes filling-in, over metal, $aerosol = 7 m^2$ T°: -40 to +1 200°C stones or concrete... Stoves, boilers, furnaces, open fireplaces, probes, car exhaust pipe fittings. Thickness: 5 to CLEAN 15 mm Shore A hardness: **70 to 90** PMUC: 17-0385 CLP FREE 1418C3 310 ml cartridge 4477A4 650 ml aerosol ß \_\_\_\_\_ ///////// **NEW NEOPRENE ORASEAL 4000** 400 347 MULTI-PURPOSE CONTACT ADHESIVE FLEXIBLE ADHESIVE Adhesive sealent with air and water between metallic and Instant setting on rubber, leather, fabric, cork, beige metals, laminates. Flexible, high efficiency. Very plastics parts : Setting time: 5 to high resistance to pull out, excellent resistance to Cladding stonework, facades, metal bracings. Car body. 15 mn moisture. Applied to both surfaces (150 ml/m2 per Elements of cold rooms. Corrosion inhibitor. Horizontal leak Max T°: +90°C side). and bonding in the car industry. Stick on glass, cement, Resistance to aluminium, steel, ... peelina: 15 kg/cm² 4400A4 650 ml aerosol SSEMBLE 1400T3 100 ml tube 1400B7 1 | tin 1347C6 1400S1 5 I bucket 600 ml cartridge ..... \_\_\_\_\_ **MOUSSE PU** 474 ADHERENT COURROIES 1953 **INSULATING FIRE-RETARDANT FOAM** STOPS DRIVE BELTS FROM SLIPPING 80% closed cell expanding foam for thermal and yellow grey Triples belt adherence for rubber, leather, canvas, acoustic insulation and caulking. Gas, smoke, flame very sticky foam or composite. Prevents belts from hardening while liquid and water tight. Doors mounting, windows and other eliminating power loss. Treated belts wear more T°: -60 to +100 °C Max T°: +80°C articles designed to slow down fire propagation, slowly and transmit power more effectively. Fire resistance: including in high schools, local authorities and Helps position pre-cut gaskets onto crankcases. 120 mn hospitals. Must be applied onto wet surfaces. For treating conveyor belts to provide better grip. PROTECT Coverage: 20 to 35 litres/aerosol

4474A6

1000 ml aerosol



# GLUES 3

### In the rapid bonding field, ORAPI has developed solutions suitable

for all applications: from ultra fluid and rapid glues to thick gels for porous materials or vertical applications. To respond to our customers' specific requests, we have also developed tinted glues and glues with additives to increase flexibility.

**Cyanoacrylates** are single-component glues which polymerise at room temperature when the adhesive is in contact with both surfaces.

The moisture in the air neutralises the stabilising agent and triggers the polymerisation process.

These glues should be used when there is no gap between the surfaces.

### **ADVANTAGES :**

- A small drop is all that is required and the glue can be applied with ease.
- Glues practically everything in seconds.
- Excellent shearing and tensile strength.

### **STORE IN A COOL PLACE**

Shelf life: 10 to 12 months

ACTIVATORS/PRIMERS

### ACTIVATEUR 6140 025

### SPECIFICALLY FOR GLUES

4025A1

1025i2

Decreases setting time significantly for glues and enables polymerisation outside of gluing area. Apply ACTIVATEUR 6140 on one of the surfaces and the glue on the other surface or directly on the glue to activate polymerisation.

210 ml aerosol

1 | container

**colourless liquid** Evaporates quickly

### PRIMAIRE 3450 021

### SPECIFICALLY FOR GLUES - MULTI-PURPOSE

Improve the adhesion of glues on all difficult to tape materials, except silicone. Apply PRIMAIRE 3450 onto both surfaces and allow it to evaporate (1 to 2 min), then apply the glue. yellow-orange liquid

1021F2 20 ml bottle

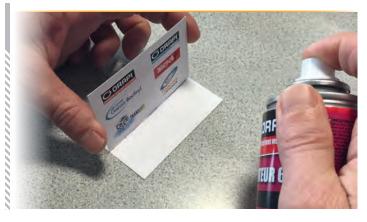
DECOLLEUR 3720

### GLUE CLEANING AND REMOVAL

Cleaning solvent for glue applicators and work tables with glue on them. Separation of glued assemblies. Works by soaking. Liquid to be used in a well ventilated area.







6408F2 PMUC20 g bottle1408i21 l container

#### STORE IN A COOL PLACE Shelf life: 10 to 12 months in a cool place.

354

.....

T°: -55 to +80°C

colourless

Viscosity:

80 - 120 cP

Setting time :

> 25 MPa

5 to 60 seconds

Shearing strength:

### C 2000 UNIVERSAL

Very rapid bonding cyanoacrylate glue for all materials. Excellent for gluing wood, leather, fabric, ceramics, plastic, glass, rubber etc. Mechanical devices, electronics, optics, jewellery, watch making, toys, plastics processing, domestic appliances, knick-knacks, tableware. All materials except Teflon, polyethylene and derivatives.

1354F1	5 g bottle	
1354F2	20 g bottle	
1354F3	50 g bottle	





359

### C 2000/5

1359F2

1359F6

#### VERY FLUID AND ULTRA QUICK

Quickest glue for all materials. Very liquid adhesive for gluing by infiltration and capillarity on very smooth surfaces and small gaps. Ideal for automatic gluing systems with repeating application and high work pace.

20 g bottle

500 g bottle

colourless
⊺°: -60 to +100°C
Viscosity: 3-10 cP
Setting time: very quick
Shearing streng 27,5 MPa

#### C 3000 373 **MULTI-PURPOSE** Ultra guick-setting glue thanks to a specific and colourless unique catalyst, suitable for all materials. Strong T°: -60 to resistance on wood, plastic, leather, PVC, ceramics +100°C and metals. Ideal for surfaces that are difficult Viscosity: to glue. 80-120 cP Setting time: 5 to 40 s Shearing strength: 27,5 MPa 5 g bottle in blibox 1373F1 1373F2 20 g bottle 1373F3 50 g bottle 1373F6 500 g bottle

SEALING

### SUPER GEL

#### VERY THICK GEL

### 352

361

\*\*\*\*\*

#### Glue as a very thick gel for all usage requiring a viscous products. For vertical or down under sticking or with porous materials. For all materials, does not run.



1352C3 300 g cartridge 1352T7 20 g tube

### C 3610

### FLEXIBLE AND UNIVERSAL

Adhesive for universal gluing. Flexible glue. Ideal for construction.

colourless	
T°: -50 to +80°C	
Viscosity: 80-120 cP	
Setting time: 10 to 60 s	
Shearing strength: 10 to 15 MPa	

#### 1361F2 20 g bottle 1361F6 500 g bottle



SSEMBL

# GLUES

GLUES

PENETRATE & RELEASE

CLEAN

ß

UBRICATE

351

356

STORE IN A COOL PLACE Shelf life: 10 to 12 months in a cool place.

### GLU<u>ES</u>

colourless

Viscosity:

T°: -50 to +80°C

1000 - 2000 cP Setting time: 10 to 60 s Shearing strength: 10 to 30 MPa

### **GEL CYANO**

#### THIXOTROPIC GEL

Glue with quick setting for vertical or down under sticking or with porous material like wood. Sticks on most materials: aluminium, ABS, PVC, metals, wood...

colourless
T°: -50 to +80°C
Viscosity: fluid gel
Setting time: 10 to 60 s
Shearing strength: 10 to 30 MPa

1351F2	20 g bottle	
1351F3	50 g bottle	
1351F6	500 g bottle	

### C 3600

#### DIFFICULT RUBBER

Ultra quick-setting adhesive for the bonding of PVC, rubber joints etc. Bonding of polyolefins after surface preparation with 022.

colourless
T°: -50 to +80°C
Viscosity: 20 - 40 cP
Setting time: 2 to 30 s
Shearing strength: 26,3 MPa

20 g bottle 1356F2 1356F6 500 g bottle



385

353

## MULTI-PURPOSE

C 2000 CMM

Sticking of porous metals or for vertical or

and materials that are difficult to bond with

down under mounting. Adheres to most metals

20 g bottle

GEL FOR METALS

a standard gel.

1353F2

.......................

6385F1

6385F2

# C 5000/14

#### Fluid glue with ultra rapid setting thanks to a special catalyst. Multi-purpose: glass, plastic, metals, wood etc. Chlorine-free, sulphur-free, fluorine-free, bromine-free.

5 g bottle

20 g bottle

# HALOGEN-FREE

### colourless T°: -50 to +80°C Viscosity: 80-120 cP Setting time: 5 to 40 s Shearing strength: 27,5 MPa PMUC: 16-053

PMUC

386

### C 5040 ELASTOMERS AND PLASTICS

Quick-setting chlorine-free, sulphur-free, fluorinefree and bromine-free adhesive for bonding rubber joints, plastic, glass and O-rings. Good resistance to humidity. Bonding of silicone joints after surface preparation with 021.

5 g bottle

20 g bottle

### PMUC

colourless T°: -50 to +80°C Viscosity: 20 - 40 cP Shearing strength: >25 MPa PMUC: 16-052



### 384

Quick-setting chlorine-free, sulphur-free, fluorinefree, bromine-free gel for the vertical or inverted bonding of porous materials such as wood. Sticks on most materials: aluminium, ABS, PVC, metals, wood...



colourless T°: -50 to +80°C Viscosity: 1000 - 2000 cP Setting time: 20 to 90 s Shearing strength: 10 to 30 MPa PMUC: 16-047

6384F2 20 g bottle

SSFMBL

6386F1

6386F2

### STORE IN A COOL PLACE Shelf life: 10 to 12 months in a cool place.

# COLOURED GLUES

**GLUES** 

black

Viscosity:

T°: -50 to +80°C

PENETRATE & RELEASE

CLEAN

g

### **BLANCHE S**

#### WHITE, UNIVERSAL

White and universal adhesive with quick setting and strong mechanical resistance. Flexible bonding of materials subject to shocks and vibrations. Ideal for mounting and repairing of white materials and to localise glued pieces thanks to the colour. Used in the cosmetic and skiing industries.

### white T°: -50 to +80°C Viscositv: 800-1500 cP Setting time: 10 to 60 s Shearing strength: 15 to 30 MPa

### C 3000 DF 378 BLACK, UNIVERSAL Black and universal adhesive with quick setting and strong mechanical resistance. Flexible bonding of materials subject to shocks and vibrations. Ideal for the bonding and repair of black materials and for 200-250 cP locating bonded parts thanks to its colour. Setting time: 10 to 140 s Shearing strength: 15 to 30 MPa

20 g bottle

500 g bottle

1377F2

C 3000 AF

### 20 g bottle

### .....

377

### 371

#### BLACK GEL, SHOCK RESISTANT

Quick setting adhesive for vertical or down under gluing, porous materials, when assembly is exposed to shocks, flexible mounting. Its black colour makes it easy to see.





1371F2	20 g bottle	
1371F6	500 g bottle	



### C 3000 HU

1378F2

1378F6

#### 363

### FLUID, BLACK AND FLEXIBLE

Universal adhesive with guick setting. For bonding surfaces that are subject to shocks and vibrations. Designed for bonding and repairing black materials. High-strength bonding, ideal for the automotive industry for seals, hoses etc.

black T°: -50 to +80°C Viscosity: 20 - 40 cPs Setting time: 5 to 30 s Shearing strength: 15 to 30 MPa

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### THOROUGH PROTECTION

Your work, your tools, your machines and your personnel are valuable; this is why ORAPI constantly endeavours to improve its products to provide protection against corrosion, scratches, splattering and accidents.

# OUR PROTECTION RANGE COVERS

ANTI-CORROSIVE PAINT

All our paints have been designed to provide the best possible VOC coverage, optimised safety and include carefully selected fillers so as to guarantee the highest salt spray resistance on the market.





PROTECTION AGAINST LEAKS AND CRACKS

As all gas leaks can be dangerous and costly, we offer products designed to detect leaks and cracks.

WELDING PROTECTION

# This range helps protect metals against welding spatter.

Always conscious of environmental and user safety issues, we offer aqueous and biodegradable products.

68

# PROTECT

STORAGE WELDING SAFETY

# 650 ml aerosol

Butane 33% GAS 67% ACTIVE PRODUCT

# 

3% GAS AND 97% ACTIVE PRODUCT

5





PROTECTION OF INDIVIDUALS

### Your staff are valuable; let's make their working environment as safe as possible:

anti-slip, anti-fall products, antipuncture products etc. including marking paints, various kinds of absorbent products, insecticides, de-icing products, hole and pothole repair products etc.

STORAGE PROTECTION

# Machined parts and other valuable components need to be protected during storage and transport.

This is why we have developed oily, waxy and dry protective varnishes that come in peelable and non-peelable, coloured or colourless versions so that each of our customers can find the right solution for their components and requirements - with or without initial parts cleaning.



699

3000XX

### **GALVA EXPRESS**

#### SPECIFICALLY FOR RETOUCHING

Hard-wearing treatment and long-lasting protection against corrosion (up to 3 years) for all metal parts: slideways, gates, re-welds, pipes, boiler-making, wire netting and tanks. Retouching of galvanised parts. Retouching of parts after hot galvanising. Can be used as a primer for the final coat.



4699A4 650 ml aerosol

#### CODEROUIL ANTI-RUST LACQUER

Glossy, ultra-quick drving, rust inhibiting lacquer. Highly resistant when used outdoors. Excellent adhesion to a wide range of surfaces. Provides excellent VOC contenterage. Easy to apply. Using CODEROUIL allows you to paint directly onto rusty metal. Nevertheless, for best results, we recommend that you apply the product onto an undamaged surface. Can be used on all surfaces subject to oxidation: metal frames, tanks, pipes, vehicles, machine tools, doors and gates, etc. Ideal for industrial applications, DIY, the automotive industry, plumbing etc.

Aerosol :
Dust free: 5 min
Complete drying: 15 min
Bulk:
Dust free: 1 hr min
Complete drying: hrs min
Resistance at T°: 100°C max.

4712A4

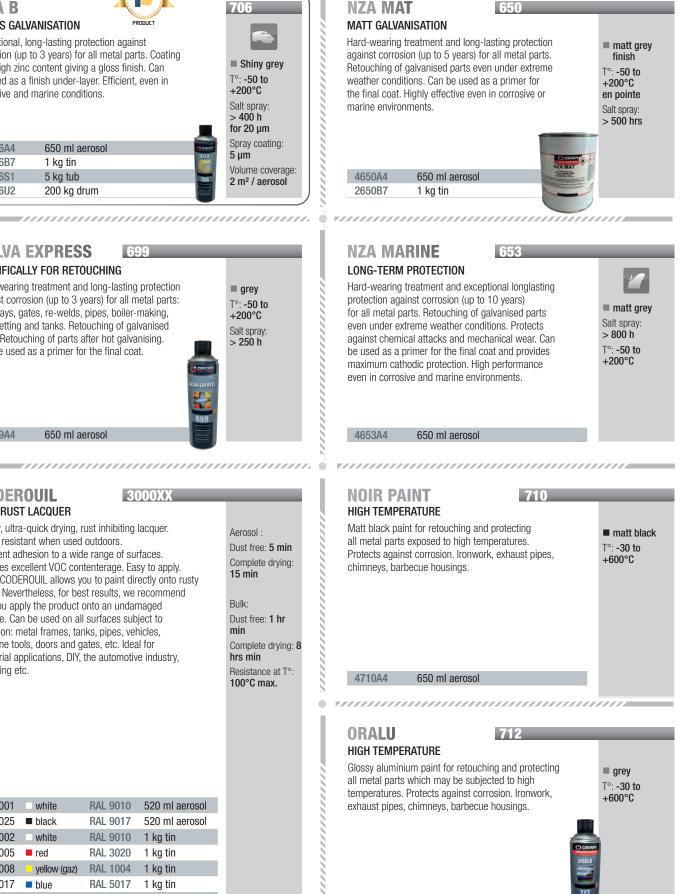
2712S1

650 ml aerosol

5 I bucket

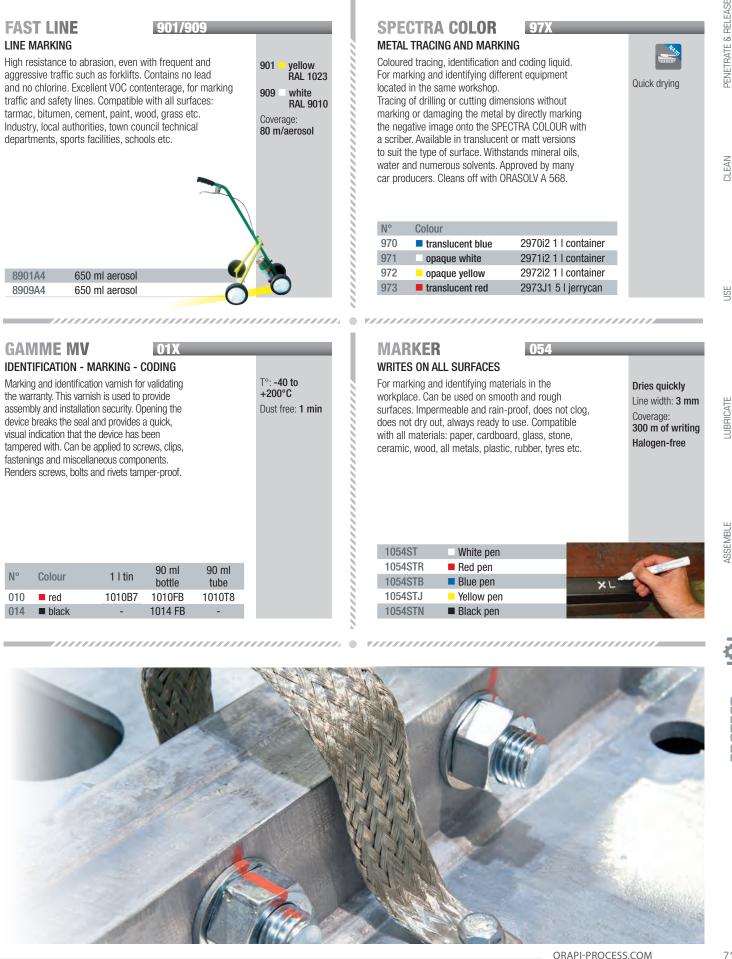
300001	white	RAL 9010	520 ml aerosol
300025	black	RAL 9017	520 ml aerosol
300002	white	RAL 9010	1 kg tin
300005	red	RAL 3020	1 kg tin
300008	yellow (gaz)	RAL 1004	1 kg tin
300017	blue	RAL 5017	1 kg tin
300023	grey	RAL 7042	1 kg tin
300026	black	RAL 9017	1 kg tin

### CORROSION INHIBITING PAINT



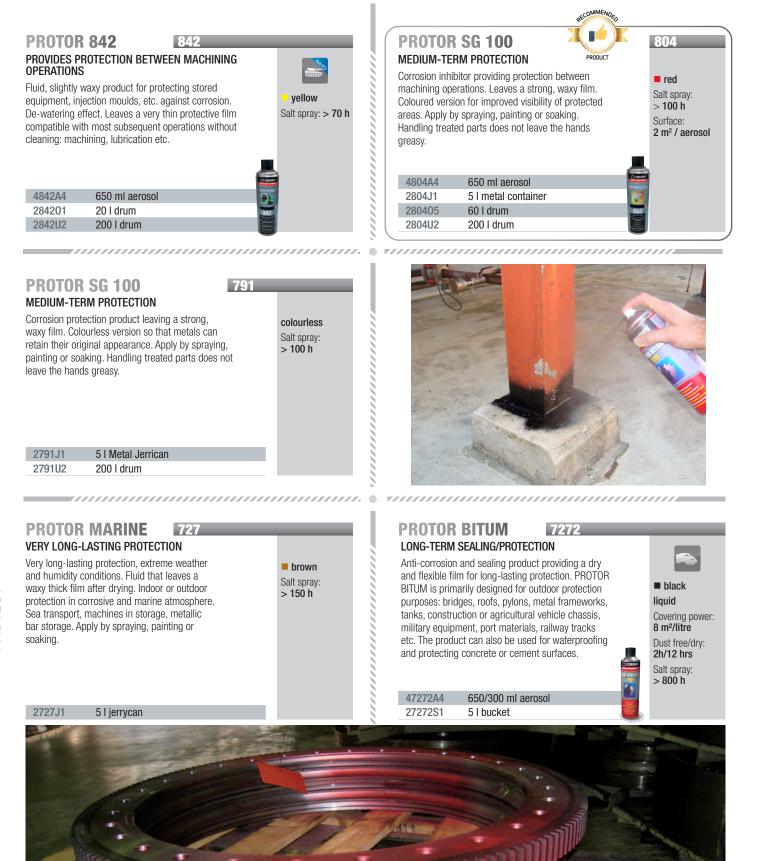
70

# TRACING - MARKING



PROTEC

### CORROSION PROTECTION



72

# PEELABLE PRODUCTS



PROTEC<sup>-</sup>

Silicone-free and so product. Non-toxic. agents, to be used	ECO NTI-WELD SPATTER Devent-free anti-welding spatter Water emulsion of non-stick for the protection of assemblies g operations. Removed with	808 milky white Viscosity: 1 to 3 cPs Flash point: Non- flammable VOC content: 0%		
4808A4 6	50 ml aerosol 🛛 📃			
	l jerrycan			
	D I drum			
	O I drum		6808A4 650 ml aerosol	
3808U2 2	DO I drum 🛛 🔛		6808J1 5 l jerrycan	

#### ANTIPERL SOUDURE 807 SOLVENT-BASED ANTI-WELDING SPATTER

Silicone-free anti-welding spatter product. Nonstick agents dispersed in a solvent, to be used for the protection of assemblies and tools in welding operations.

Pale yellow T°: -30 to +280°C Flash point: Nonflammable



# PROTEC<sup>-</sup>

4807A4

2807U2

# .....

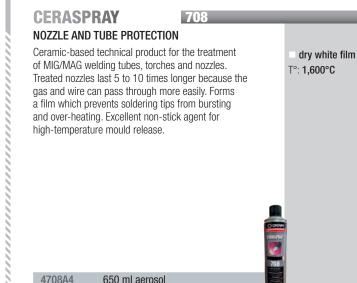
#### ANTIPERL WB 914 WATER-BASED ANTI FLUX RESIDUE

Silicone-free and solvent-free anti-welding spatter product. Non-toxic. Combination of non-stick agents, diluted in water, used for preventing welding spatter and projections over large areas (frames, mechanised welding, ship building etc.) Removed with water.

650 ml aerosol

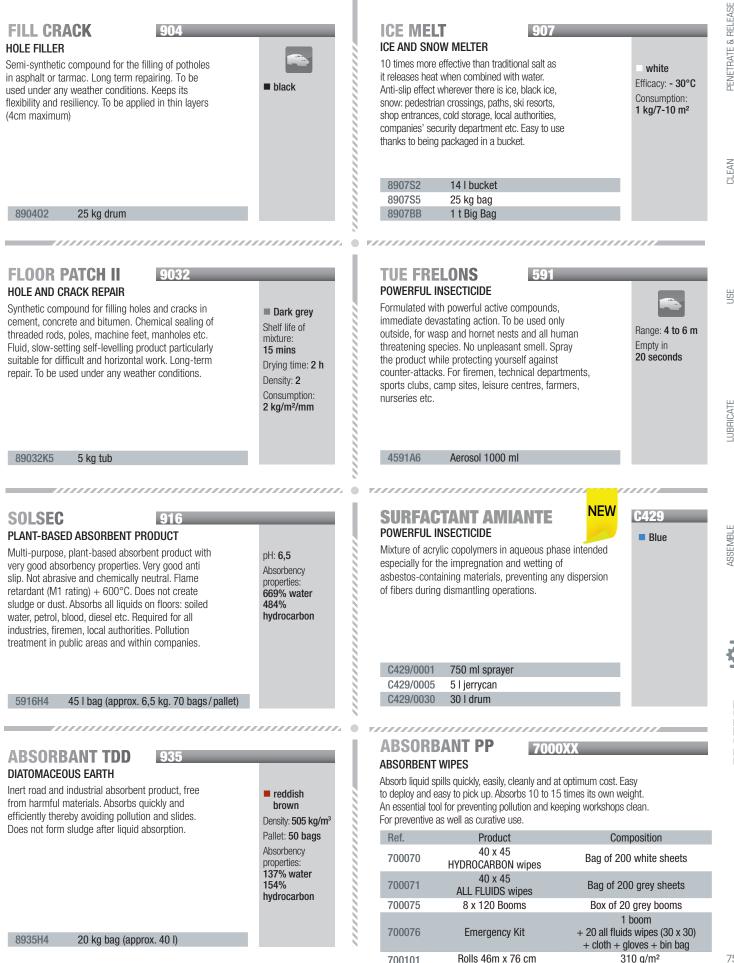
200 kg drum

colourless to light yellow Flash point: nonflammable VOC content: 0%



291401

# SAFETY AND MARKING



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952

DETECTION

# FLAW DETECTION

#### LEAK DETECTOR GAS LEAKS

Suitable for the detection of gas leaks: compressed air, oxygen, butane, propane, CO2 etc. on connectors or valves. Instantly detects leaks by foaming. The aerosol has an adjustable nozzle. Contains a corrosion inhibitor which prevents subsequent metal oxidation.



CI - F - Br - S: < 200 ppm PMUC: 07-010

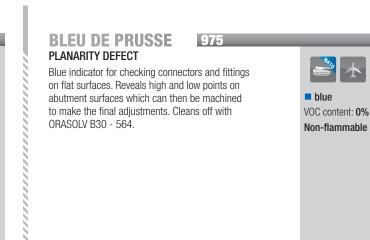
4952A4	650 ml aerosol	
6958A4	650 ml aerosol PMUC	
2952J1	5 kg jerrycan	
295205	60 kg drum	

#### CRACK DETECTOR 957

#### CRACKS, FISSURES - PENETRATING RED DYE

Highly effective red fluid which penetrates the cracks, micro-fissures and pores of metals, whether blocked or not. For testing welds during construction and monitoring wear after several years' use on tanks, pylons (ski resorts, cable cars), machine frames, cars, etc. Clean with 503, apply 957, allow the product to penetrate, wipe off, then apply 956. Flaws appear in red when white indicator 956 is applied. ASME Section V compliant.

red Capacity: 200 m



1975F9 22 ml tube 1975T3 100 ml tube

\_\_\_\_\_

4956A4

#### **CRACK DETECTOR** 956 **CRACKS, FISSURES - WHITE INDICATOR**

White product which, when applied after the 957 product onto cracks, micro-fissures and porous metal, blocked or otherwise, makes the 957 product which has penetrated into the material reappear, thereby identifying any flaws. For testing welds during construction and monitoring wear after several years' use on tanks, pylons (ski resorts, cable cars), machine frames, automobiles etc. Clean with 503, apply 957, let it penetrate, sweep away, apply 956. Flaws appear in red when white indicator 956 is applied. ASME Section V compliant.

650 ml aerosol

white Capacity: 150 m

4957A4 650 ml aerosol 2957J1 5 l jerrycan

#### **KLEANER**

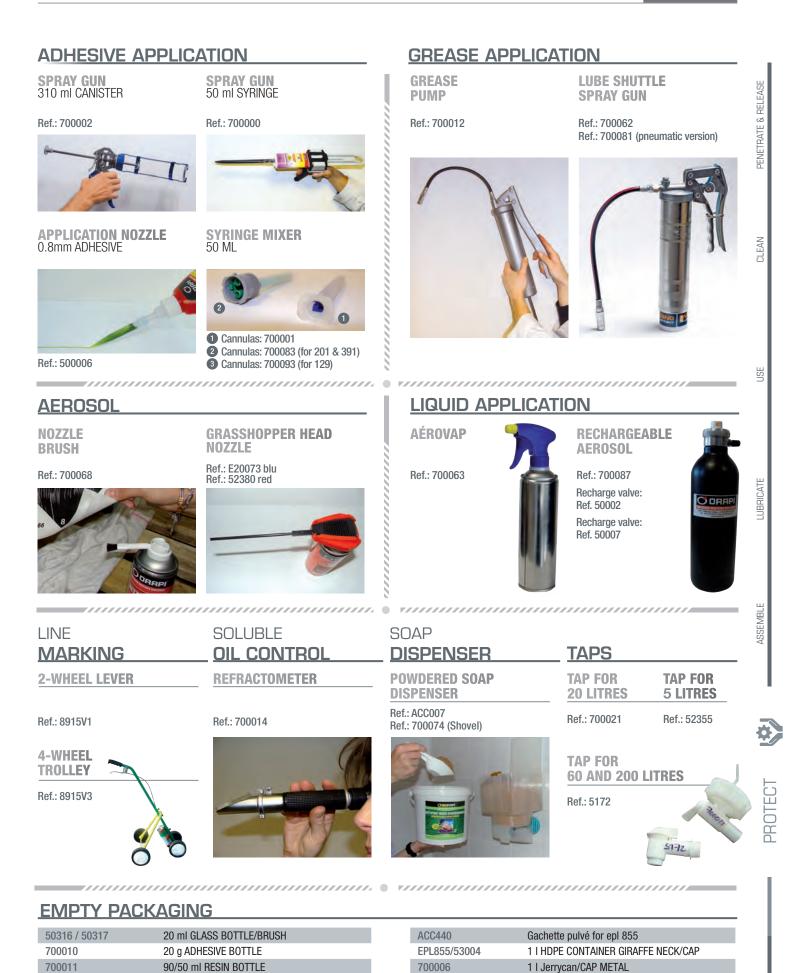
#### **CRACKS. FISSURES - DRY SOLVENT**

Helps prepare surfaces before detecting cracks and fissures using the 2 products from the CRACK DETECTOR range. Degreasing solvent with ultra quick evaporation that efficiently removes dust and greasy marks that could interfere with the action of detection products. Does not damage plastic, rubber, polymers etc.

503

Scent: apple Flash point: < 0°C





E24070

7BID0P1/2

5477/E21256

100 ml MECHANICAL PUMP SPRAY

500 ml BOTTLE + SPRAY

1 | Jerrycan/CAP

# SPRAY TRIGGER

**5 I CONTAINER/CAP** 

53936/53937

51165

858         2000 NUCL NF         46           700071         40*45 ALL FLUID WIPES         75           700070         40*45 HYDROCARBONS WIPES         75           700075         8*120 BOOMS         75           517         A 62 NU         12           508         A 90H         10           717         A 20N NF         29           935         ABSORBANT TDD         75           589         ACTIVATEUR 3140         50           025         ACTIVATEUR A         58           953         ADHERINT COURROIES         63           390         ADHERINT COURROIES         63           390         ADHERLOCK 73         58           1140         ALCAPOUDRE         15           587         ANTIPERL ECO         74           808         ANTIPERL ECO PMUC         74	6642 408 801 817 C027 819 719 860 700076 720 612 822 322 A4423 901/900 859 912 904
700070         40*45 HYDROCARBONS WIPES         75           700075         8*120 BOOMS         75           517         A 62 NU         12           508         A 90H         10           717         A20N NF         29           935         ABSORBANT TDD         75           589         ACTI'SEPTYL         19           015         ACTIVATEUR 3140         50           025         ACTIVATEUR 6140         64           395         ACTIVATEUR A         58           953         ADHERENT COURROIES         63           390         ADHERLOCK 73         58           1140         ALCAPUDRE         15           587         ANTIMOUSS         47           808         ANTIPERL ECO         74	801 817 C027 819 719 860 700076 720 612 822 322 A4423 901/900 859 912
700075         8*120 BOOMS         75           517         A 62 NU         12           508         A 90H         10           717         A20N NF         29           935         ABSORBANT TDD         75           589         ACTI'SEPTYL         19           015         ACTIVATEUR 3140         50           025         ACTIVATEUR A         58           953         ADHERENT COURROIES         63           390         ADHERENT COURROIES         63           1140         ALCAPOUDRE         15           587         ANTIMOUSS         47           808         ANTIPERL ECO         74	817 C027 819 719 860 700076 720 612 822 322 A4423 901/900 859 912
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508         A 90H         10           717         A20N NF         29           935         ABSORBANT TDD         75           589         ACTI'SEPTYL         19           015         ACTIVATEUR 3140         50           025         ACTIVATEUR 6140         64           395         ACTIVATEUR 6140         63           953         ADHERENT COURROIES         63           390         ADHERLOCK 73         58           1140         ALCAPOUDRE         15           587         ANTIMOUSS         47           808         ANTIPERL ECO         74	819 719 860 700076 612 822 322 A4423 901/905 859 912
717         A20N NF         29           935         ABSORBANT TDD         75           589         ACT'SEPTYL         19           015         ACTIVATEUR 3140         50           025         ACTIVATEUR 6140         64           395         ACTIVATEUR A         58           953         ADHERIN COURROIES         63           390         ADHERLOCK 73         58           1140         ALCAPOUDRE         15           587         ANTIMOUSS         47           808         ANTIPERL ECO         74	719 860 700076 720 612 822 322 A4423 901/909 859 912
589         ACTI'SEPTYL         19           015         ACTIVATEUR 3140         50           025         ACTIVATEUR 6140         64           395         ACTIVATEUR A         58           953         ADHERENT COURROIES         63           390         ADHERLOCK 73         58           1140         ALCAPOUDRE         15           587         ANTIMOUSS         47           808         ANTIPERL ECO         74	700076 720 612 822 A4423 901/900 859 912
015         ACTIVATEUR 3140         50           025         ACTIVATEUR 6140         64           395         ACTIVATEUR A         58           953         ADHERENT COURROIES         63           390         ADHERLOCK 73         58           1140         ALCAPOUDRE         15           587         ANTIMOUSS         47           808         ANTIPERL ECO         74	720 612 822 322 A4423 901/909 859 912
025         ACTIVATEUR 6140         64           395         ACTIVATEUR A         58           953         ADHERENT COURROIES         63           390         ADHERLOCK 73         58           1140         ALCAPOUDRE         15           587         ANTIMOUSS         47           808         ANTIPERL ECO         74           808         ANTIPERL ECO PMUC         74	612 822 322 A4423 901/909 859 912
395         ACTIVATEUR A         58           953         ADHERENT COURROIES         63           390         ADHERLOCK 73         58           1140         ALCAPOUDRE         15           587         ANTIMOUSS         47           808         ANTIPERL ECO         74           808         ANTIPERL ECO PMUC         74	822 322 A4423 901/909 859 912
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