



# Fluxo

NDT products

**Product Brochure**

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NDT products



## PENETRANT TESTING & MAGNETIC PARTICLE INSPECTION



<b>FLUXO S190</b>	<b>Solvent Cleaner</b> Degreasing Agent - High Evaporation Rate
<b>FLUXO P125</b>	<b>Red Dye Penetrant</b> Sensitivity 2 - Excellent Washability
<b>FLUXO P139</b>	<b>Red Dye Penetrant</b> Sensitivity 2 - High resistance to overwash
<b>FLUXO P172</b>	<b>Red Dye Penetrant</b> Sensitivity 2 - BIODEGRADABLE
<b>FLUXO R175</b>	<b>Developer</b> High Sensitivity - Thin and uniform
<b>FLUXO R180</b>	<b>Developer</b> High Sensitivity - Better Evaporation Rate
<b>FLUXO N130</b>	<b>Penetrant Remover</b> removes excess of penetrant

<b>FLUXO 8702</b>	<b>Fluorescent Penetrant</b> Sensitivity 2 - Conform to EN ISO 3452-2
<b>FLUXO 6</b>	<b>Fluorescent Magnetic Ink</b> Conform to EN ISO 9934-2 and AMS
<b>FLUXO 3</b>	<b>Black Magnetic Ink</b> Conform to EN ISO 9934-2 and AMS
<b>FLUXO 4</b>	<b>White Contrast Paint</b> High Evaporation Rate & High Covering
<b>FLUXO 5</b>	<b>Remover for White Contrast Paint</b> High Evaporation Rate
<b>FLUXO 7</b>	<b>White Contrast Paint</b> High Evaporation Rate - Free from Acetone



<b>WATER BASED Aerosol Cans</b>	<b>Penetrant Testing High Temperature</b>
<b>FLUXO 215</b> - Black Magnetic Ink <b>FLUXO 307</b> - Fluorescent Magnetic Ink	<b>FLUXO PHT</b> - Red Dye Penetrant <b>FLUXO RHT</b> - Developer <b>FLUXO NHT</b> - Remover

Aerosol Cans 500 mL - Available in stock - Delivery with Certificate of Conformity and Batch Analysis - Conform to: ISO 3452-2 / ISO 9934-2 / ASME / RCCM / Nuclear Quality (Low in Sulphur and Halogens) / AMS / ASTM



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## FLUXO – GREEN NDT

NDT Technicians of penetrant and magnetic-particle testing are more and more focusing on the use of non-dangerous - non-labelled and environment-friendly products.

SREM TECHNOLOGIES has more than 60 years of experience in the development and manufacturing of NDT Chemicals and a long experience of manufacturing user-friendly and environmentally NDT products.

### Innovations:

- Non Hazardous Chemicals
- Water Based Products
- Biodegradable Products

### MPI CONCENTRATES

FLUXO 307 is a Fluorescent Concentrate for Magnetic Particle Inspection.

**Dilution:** 1kg in 50L of Water.

FLUXO 307 is supplied without any labelling obligation - by means of formula optimization

Superior wetting, protection against corrosion, no foaming and excellent particle mobility.

Available in 1kg - 5kgs and 200g bottles.



### WATER BASED AEROSOL CANS

FLUXO 215 and FLUXO 307 are a black and fluorescent magnetic particle suspension supplied in an aerosol can - but with no labelling obligation, thanks to the fact that it is water-based and uses a non-flammable propellant.

- NO FLAMMABLE
- NO ODOR
- NOT DANGEROUS
- NOT CORROSIVE
- Water Content : 98%



### WATER BASED FLUORESCENT PENETRANT

FLUXO P702 / P502 is a range of water based fluorescent penetrant.

Free from oil / no petroleum products  
Excellent Water Washability  
Sensitivity : Level 2 or Level 1 (ISO 3452-2)

**Readily biodegradable.** Passes OECD test for ready biodegradability  
Biodegradation: > 70 %

Excellent COD / BOD values: Less load on waste-water treatment systems - Minimal impact on the environment - Depending on the regulations of the local authorities, a direct draining into the sewage system is also possible.



### BIODEGRADABLE RED DYE PENETRANT

FLUXO P172 is a biodegradable Red Dye Penetrant:

Free from oil / no petroleum products  
Sensitivity : Level 2 (ISO 3452-2)

**Readily biodegradable.** Passes OECD test for ready biodegradability  
Biodegradation: > 70 %

Excellent COD / BOD values: Less load on waste-water treatment systems - Minimal impact on the environment - Depending on the regulations of the local authorities, a direct draining into the sewage system is also possible.





## FLUXO MPI Powders

Full Range of MPI Powders for dilution in Water or Petroleum - Fluorescent & Visible - NOT DANGEROUS

Product	Description	Use	Packaging
<b>FLUXO 11</b>	Fluorescent Particles Standard Concentrate	Water Media 4-5 g/L	1kg - 5kg
<b>FLUXO 9</b>	Fluorescent Particles High Corrosion Protection	Water Media 10 g/L	1kg - 5kg
<b>FLUXO 12</b>	Black Particles High Corrosion Protection	Water Media 20 g/L	1kg - 5kg








**Combination of:**

Fluorescent particles FLUXO L, anticorrosive agent, antifoaming and Wetting Agent. No extra bath additives needed. Superior wetting, non foaming and excellent particle mobility. Particle Size = 5µm

FLUXO 11 is a high concentrated product (material cost saving). FLUXO 9 has perfect protection against corrosion.



Product	Description	Use	Color	Packaging
<b>FLUXO L</b>	Fluorescent Particles Advanced fluorescent brightness	Petroleum Media 1g/L		1kg
<b>FLUXO 22C</b>	Fluorescent Particles Conform to aeronautic standards	Petroleum Media 0.8g/L		1kg
<b>FLUXO 15</b>	Black Particles	Petroleum Media 8g/L		1kg - 5kg
<b>FLUXO 19</b>	Red Particles	Petroleum Media 8g/L		5kg
<b>FLUXO 13</b>	Grey Powder	Dry Application		2kgs

**Particle Certification**

Particles meet all relevant industry specifications, including but not limited to AMS 3044, ASTM E-1444, ASME, ISO 9934-2. Certification is included with each shipment.

September 2018





## FLUXO MPI Concentrates

Full Range of MPI Concentrate for dilution in Water - Fluorescent & Visible - NOT DANGEROUS - Conform to EN ISO 9934-2 / ASME / ASTM

Product	Description	Use	Packaging
<b>FLUXO 302</b>	High Concentrated product Fluorescent	1.0% in Water	5kg - 0.5kg
<b>FLUXO 307</b>	High Corrosion Protection Fluorescent	2.0% in Water	5kg - 1kg



### Combination of:

Fluorescent particles, anticorrosive agent, antifoaming and Wetting Agent, Additives. Superior wetting, no foaming and excellent particle mobility. Particle Size = 5µm

<b>FLUXO 215</b>	Standard Concentrate Black	2.0% in Water	200g
<b>FLUXO 209</b>	Anticorrosive Agent	1-2% in water	10 kgs

## FLUXO MPI Ready-to-Use Products

Full Range of Ready-To Use product - Fluorescent & Visible - Conform to EN ISO 9934-2 / ASME / ASTM / AMS.

Product	Description	Packaging
<b>FLUXO 6</b>	Fluorescent Ink	10L
<b>FLUXO 6D Type 1</b>	Fluorescent Ink conform AMS 2641 Type 1	10L



### Combination of:

Fluorescent particle and odorless oil-based carrier fluid. Ready to Use, good sensibility & clear indication. Particle Size = 5µm

<b>FLUXO 3</b>	Black Ink	10L
<b>FLUXO 4</b>	White Contrast Paint	5 kgs
<b>FLUXO FS015</b>	Carrier Fluid	10L - 200L

April 2019





**Fluxo**  
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## Magnetic Particle Inspection WATER BASED Aerosol Cans

SREM Technologies presents the new Range of WATER BASED Magnetic Inks for Magnetic Particle Inspection:

**FLUXO 215** : Black Magnetic Ink

**FLUXO 307** : Fluorescent Magnetic Ink

Benefits Health & Safety :

NON FLAMMABLE  
NO ODOUR  
NON DANGEROUS  
NON CORROSIVE



**These symbols  
no longer apply**



Conformity :

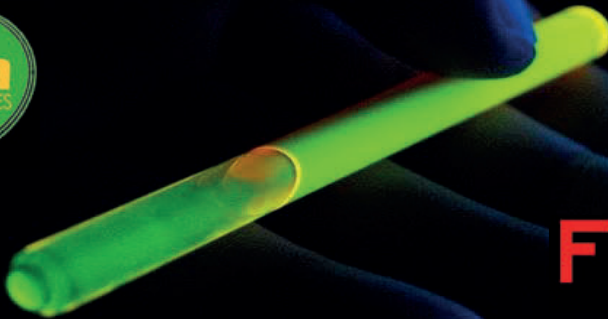
ASME / ISO 9934-2 / ASTM E1444 / AMS 3042 & 3044  
Low in Sulphur & Halogens

Characteristics & Use:

- Same Sensitivity as a classic MPI Ink
- Includes corrosion inhibitor and others additives
- No flammable Propellants (Compressed Air)
- More usable Test Medium than an aerosol with propellant butane/propane (30% or 40% more)
- Ideal for capacity control
- VOC or Petroleum Content : 0%
- WATER Content : 98%

September 2018





**Fluxo**  
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## FLUXO Range - Fluorescent Tracer for Leak Detection

### Description:

**FLUXO Range** of fluorescent tracer are concentrated soluble solvent dyes, which emits an intense fluorescence yellow-green colour under UV light wavelength of 365 nm.

Add the fluorescent tracer in closed systems and inspect the system with UV Light. You can easily detect leaks with high fluorescence.

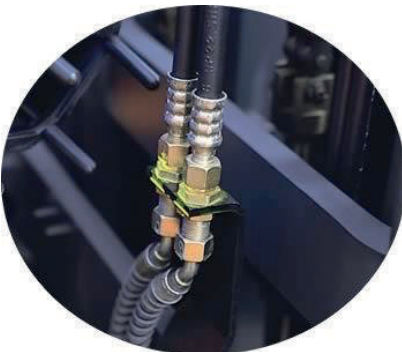
Different products for different applications:

**FLUXO FT 931 - Yellow Fluorescence**  
**FLUXO FT 919 - Red Fluorescence**

Leak detection in oil, hydraulics,  
Gasoline systems  
Typical dilution: 500 to 1000 ppm

### **FLUXO FT 959**

Leak detection in water systems  
Typical dilution: 500 to 1000 ppm

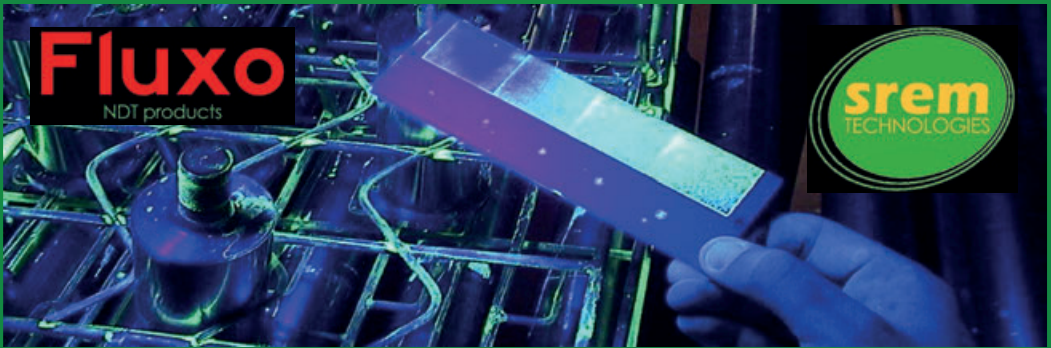


### How it Works ??

It's a simple fact: hydraulic fluids or automatic transmission fluid, oil, coolant, and fuel, will sooner or later develop leaks. Leaks are often virtually impossible to find with conventional methods until they result in expensive vehicle failure.

**FLUXO** fluorescent leak detection changes that. It quickly locates even the smallest and most elusive leaks including intermittent and simultaneous multiple leaks that would otherwise be missed. This method saves labor and money.

Leak detection utilizes a simple method that has only two basic parts: A high-intensity UV light lamp and a fluorescent Tracer **FLUXO FT931**. The fluorescent dye is added to the system and circulates. The system is then inspected with the lamp. Since the dye collects at all leak sites, the lamp will show the precise location of every leak with a bright glow. The dye can remain in the system indefinitely and does not affect system components or performance.



## WATER BASED FLUORESCENT PENETRANT

### Description:

FLUXO P702 / P502 is a range of water based fluorescent penetrant for the control of aluminium parts in automotive industry.

### Advantages:

Water based product, free from oil and no petroleum products  
 Excellent Water Washability  
 Sensibility Level 2 or Level 1 (ISO 3452-2)  
**Readily biodegradable.** Passes OECD test for ready biodegradability - Biodegradation: > 70 %  
 Excellent COD / BOD values : Less load on waste-water treatment systems - Minimal impact on the environment - Depending on the regulations of the local authorities, a direct draining into the sewage system is also possible

### Method of Use:

FLUXO P702 / P502 have self-developing properties: it can be used without developer.

Clean & Dry the part  
 Apply FLUXO penetrant on the part by sparing, dipping, flowing, brushing  
 A dwell time of 5-20 min is mandatory. Allow the penetrant to drain off the part  
 Remove the penetrant from the part  
 Dry the part  
 Developer can be used in order to amplify the marks  
 Inspect the part using a UV Lamp. Any defect indications will fluoresce greenish-yellow.

**Packaging:** 10L - 200L - 1000L

### Companion products:

- FLUXO RD1 - Dry Powder (*form a*)
- FLUXO R175 - Solvent Based Developer (*form d*)
- FLUXO R100 - Water Suspensible Developer (*form c*)

**Option:** a version FLUXO P502 / P501 is available: specific product with a **better washability**

FLUXO P502 is water soluble and can be diluted in water 1:1 (depending on the application).

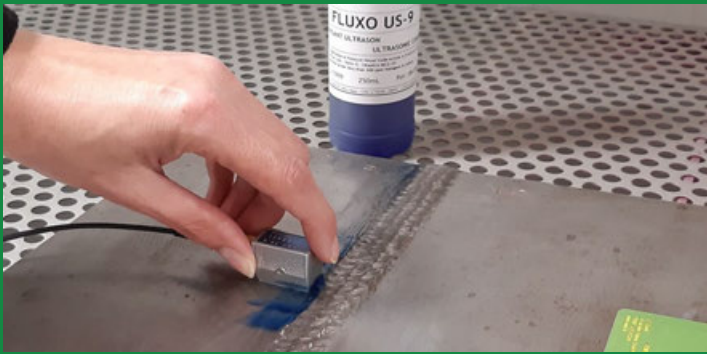


	FLUXO P702	FLUXO P701	FLUXO P502	FLUXO P501
Sensitivity Level	2	1	2	1
Form & Colour	Yellow Green Liquid	Yellow Green Liquid	Yellow Green Liquid	Yellow Green Liquid
Viscosity	12.0 mm <sup>2</sup> /s	11.0 mm <sup>2</sup> /s	9.5 mm <sup>2</sup> /s	7.2 mm <sup>2</sup> /s
	Excellent resistant to overwash = for smooth surface / ceramics ...		Excellent washability = ideal for aluminium foundry parts	



February 2019





## FLUXO RANGE - Ultrasonic Couplant

### FLUXO US-3

High performance glycerin free ultrasonic couplant that is compatible with most materials

Excellent corrosion inhibition on all materials.  
No glycerin as required for carbon fiber composites.

Uncolor gel - Medium viscosity

Can be used for all application - ideal for aerospace application.

**Conform to :**

RCCM Code - Tome III - MC2133



### FLUXO US-9

High performance ultrasonic couplant that is compatible with most materials

Nuclear grade (Low in Sulphur & Halogens < 200ppm)

Blue gel - Medium viscosity

Can be used for all application - ideal for nuclear application.

**Conform to:**

RCCM Code - Tome III - MC2133

ASME Boiler & Pressure Vessel Code - Article 4 (T-433 & T-533)

**Properties of FLUXO US-3 / FLUXO US-9**

- Water based
- Slow drying - stable in time for UT Inspection
- Remains in place on vertical and overhead surfaces.
- Water soluble - Easy to remove
- Odourless - Not toxic
- NON DANGEROUS product - Environment and operator friendly.
- Contact with skin and clothes: indifferent
- Processing temperature: 0°C to +80 °C

**Packaging:** 250mL / 2.5L / 10L

All batches supplied with inspection certificate.

### FLUXO US-1 - Ultrasonic Couplant - Powder Form

- Powder to be mixed with water to obtain a Yellow Fluorescent gel
- Typical concentration: 40 grams per liter, but a thinner gel can be obtained by reducing the powder content to a minimum of 10 grams per liter.
- Temperature Operating Range: 0°C to 50°C
- Can be used for all surface
- Non-toxic and safe for the environment
- FLUXO US-1 incorporates corrosion inhibitors / wetting agent / fluorescent tracer
- Packaging: 1kg



September 2021





# S-LED

## UV LED LAMP



**100% CONFORM**  
ISO 3059  
ASTM E3022-15  
RRES90061  
AITM6-1001-12  
NADCAP

**CERTIFICATE OF CONFORMITY**  
  
WITH EACH LAMP



The S-LED UV lamp the best IP68 lamp on the market. The undulation of the LED current is <math><5\%</math> and assimilated to continuous current as required by ASTM and AITM. Its lack of stroboscopic effect allows for great durability of the LED. The unit is waterproof and resilient against petroleum products, grease remover and passivation. It is insensitive to electromagnetic field of a magnetic particle inspection (MPI) bench or demagnetizer.

Both UV and white light can be used simultaneously using separate switches. To increase the life of the lamp, there is a timed function switch allowing to lamp to be operated for 5 minutes with a single push or 100 minutes with two pushes. A third push shuts the lamp off.

Two models are available: battery powered or mains connected. It remains fully operational at up to  $50^{\circ}\text{C}$  and automatically switches off at higher temperatures to protect itself and the operator.

Special version is available to meet aerospace requirements of ASTM E3022-15, NADCAP, AITM6-1001 and RRES90061.

**Further details available upon request.**

## HOFFMANN PSM-5 TAM PANEL

### USE:

The HOFFMANN TAM PANEL helps the operator control the full functional process of their penetrant tests procedures.

### DESCRIPTION:

- Made of stainless steel plate, half chrome plated with 5 star cracks
- Star cracks require maintenance to remove dirt, corrosion and other contaminants and mechanical stress
- Other half with rough surface for evaluation of the characteristics of the penetrant residue,  $Ra = 2.0\mu\text{m}$
- Panel is designed for casual testing and should have annual testing

**Further details available upon request.**



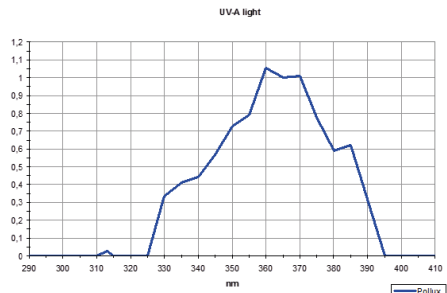
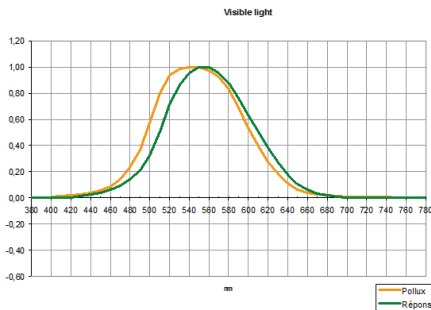
# POLLUX

## RADIOMETER PHOTOMETER



POLLUX is a radio/photometer used to measure the ultraviolet (UV-A) irradiance and visible light illuminance simultaneously.

The POLLUX is equipped with an intelligent processing system of measurement that gives an average time coupled to an algorithm of the measurement control. This permanently checks that the reading on the display corresponds to the instantaneous value detected by the sensor. If a shift in time integration is detected, the average will be deleted and replaced by a new average to ensure stability. Further details are available upon request

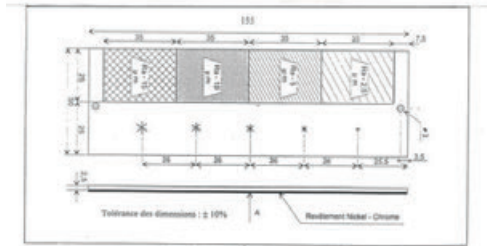


The POLLUX is very robust with a reinforced ABS plastic casing and powered by a 9v dry cell battery. The sensor is stored separately and comes with a 1m cable. This single sensor measures both visible and UV-A light.

**Further details available upon request**



# REFERENCE BLOCK TYPE 2



## Reference Block Type 2

Reference Block Type 2 is used for routine assessment of system performance of both fluorescent and colour contrast penetrant facilities and open containers.

This test is to be conducted at the start of each set of tests to verify the material.

- Rectangular design 155x50x2.5mm
- Five uniformly placed star defects, 3.0 – 5.5mm
- Application and testing to EN 571-1
- Protective storage in a protective and solvent free environment, ultrasonic clean only occasionally
- Stainless steel base with 60/1m layer of nickel coated in hard chromium ranging from 0.5/1m to 1.5/1m
- Four adjacent areas for rinsability: 25 x 35mm with Ra roughness gauges of 5µm, 10µm and 15µm, all placed by size
- Annual calibration recommended IAW EN ISO 3452-2

Further details available upon request.



### Sercal Non-Destructive Test Equipment Ltd

Cannock, Staffordshire WS12 4TR, UK

**Tel:** +44 (0) 1543 570074

**Fax:** +44 (0) 1543 465090

**Web:** [www.sercal.co.uk](http://www.sercal.co.uk)



### Oceanscan Limited

Denmore Road, Bridge of Don,

Aberdeen, AB23 8JW

**Tel:** ++ 44 (0)1224 707000

**Fax:** ++ 44 (0)1224 707001

**Web:** [www.oceanscan.co.uk](http://www.oceanscan.co.uk)