

Move on to Rhodiasolv® IRI S!



Move on to Rhodiasolv® IRIS!



It is not a dream anymore, with today's technology it is possible to have your production area completely free from highly flammable solvents such as acetone.

Euroresins offers alternative, high boiling, recyclable solvents for cleaning of machines, rollers, brushes as well as cleaning of floor resins. In addition we have cleaning stations and recycling machines in our program.

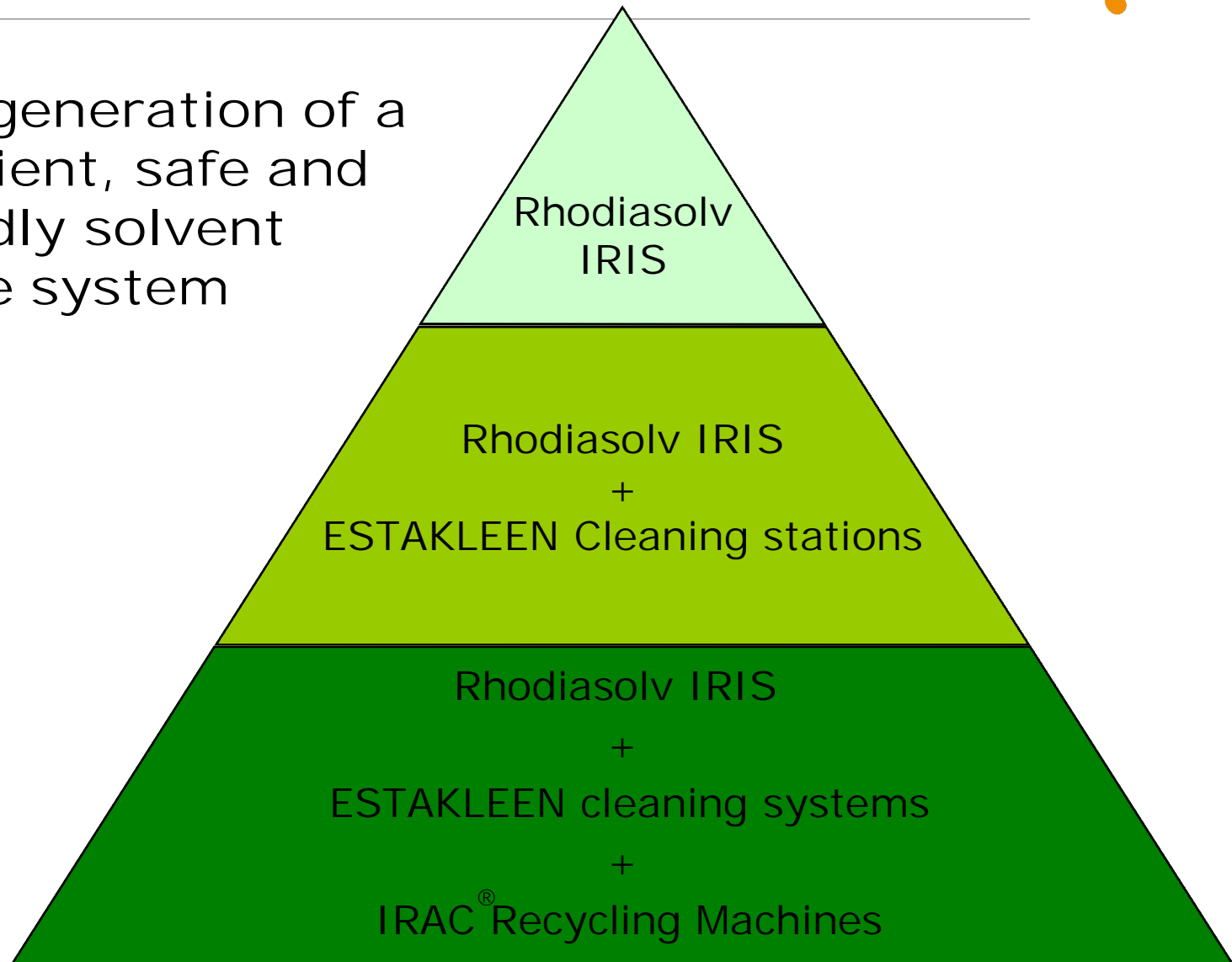
We recommend to process resins using personal protection equipment, but in case that your hands need cleaning as well, we offer non-flammable solutions.

At Euroresins we care for your well being and the environment.

Steef Bouwmeester
Managing Director

Move on to Rhodiasolv[®] IRIS!

The new generation of a cost-efficient, safe and eco-friendly solvent substitute system



Euroresins can provide you with a complete system:

1. The non-toxic, non-flammable, non-VOC, recycable and biodegradable solvent substitute Rhodiasolv IRIS
2. Cleaning stations ESTAKLEEN[™]
3. IRAC[®] IRIS Recycling Machines

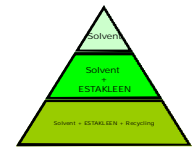


Level 1 – a non-VOC, none-toxic solvent substitute

Rhodiasolv IRIS

Rhodiasolv IRIS can be used as substitute for acetone for almost any cleaning process in the composites industry.

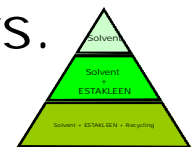
It is up to 80% recyclable.



Level 2 – Solvent substitute and cleaning station

Rhodiasolv IRIS
+ Cleaning system ESTAKLEEN™

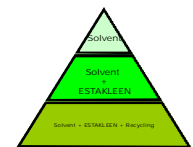
For an easy and efficient application of Rhodiasolv IRIS use the ESTAKLEEN™ cleaning stations for up to 44 workers.



Level 3 – Solvent substitute, cleaning station + recycling

Rhodiasolv IRIS
+ Cleaning system ESTAKLEEN™
+ Recycling Machines by IRAC®

Use Rhodiasolv IRIS as cost-efficient and sustainable as possible with the IRAQ IRIS recycling machines.



Rhodiasolv® Infinity - The water-based cleaner

The water-dilutable eco-friendly cleaner is based on Rhodiasolv IRIS. Rhodiasolv Infinity is highly efficient and quickly drying - perfect for floor resin cleaning.

The concentrate can be simply customized to your needs by mixing it with cold water.



Rhodiasolv[®] Infinity – The water-based cleaner

Advantages

Surface dries quickly

No heating or special equipment necessary

Readily accepts glycols and other water-soluble solvents

Infinitely dilutable concentrate

Non-flammable, pH-neutral and non-caustic



The cost-efficient, sustainable and eco-friendly alternative to traditional chlorinated or high VOC solvents.

Extremely efficient in:

resins manufacture clean-up

foundry resins

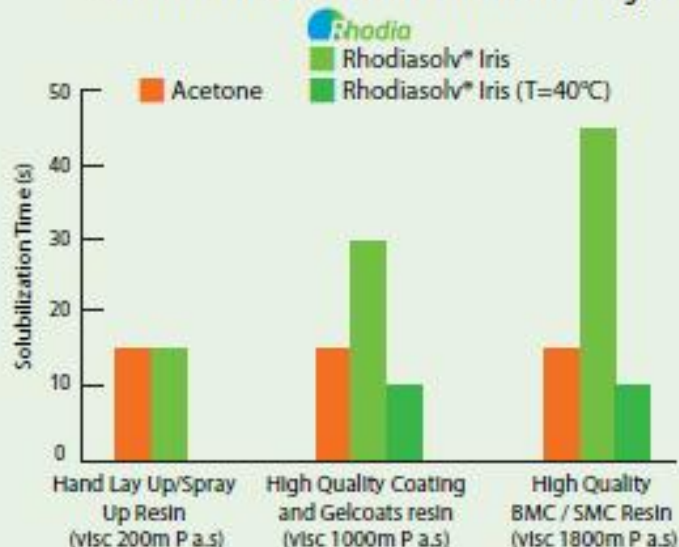
industrial cleaning for heavily soiled UPR substrates



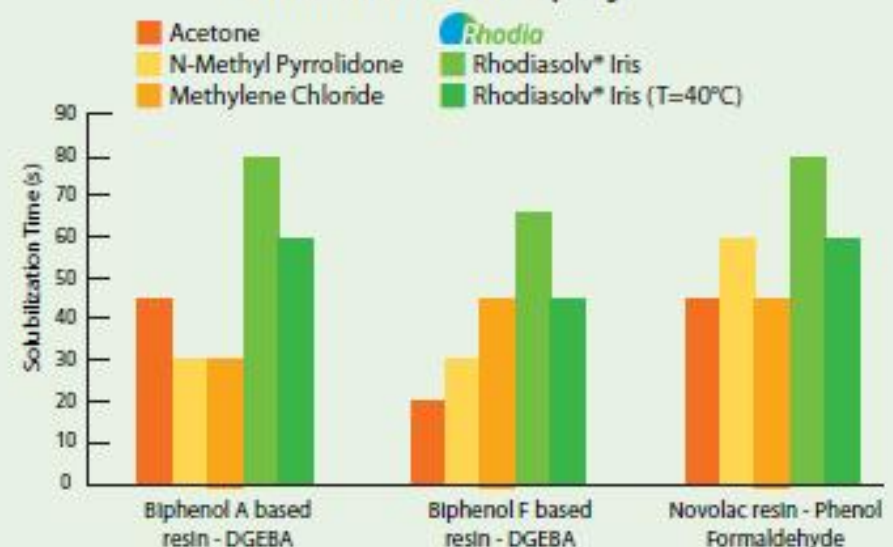
Rhodiasolv® dissolution performance

Rhodiasolv® IRIS has comparable dissolution performance to traditional clean-up solvents

Time to Dissolve Unsaturated Polyester



Time to Dissolve Epoxy






Cleaning time was assessed by measuring the time required in seconds for complete dissolve 1 part resin in 1 part solvent at room temperature.

The cleaning speed can be further enhanced by using Rhodiasolv® IRIS at higher temperatures, eg 40 °C. This is possible because **Rhodiasolv® IRIS** is non-flammable and has a relatively low evaporation rate.

Rhodiasolv[®] health & safety profile

Rhodiasolv[®] IRIS has an excellent health & safety profile and is non-VOC (EU directive 1999/13/EC).

Solvents	Boiling Point @760mm Hg	Flash Point Closed cup	Vapour Pressure @20°C	Evaporation Rate @25°C (n-Bu. Ac.=1)	Hazard Statements	Signal Words	Symbols
Rhodiasolv [®] IRIS	222-224°C	98°C	6.1 Pa	0.006	None	None	None
Acetone	56.5°C	-18°C	24100 Pa	7.7	H225 H319 H336	Danger	
Methylene Chloride	40°C	-	46900 Pa	9.9	H351	Warning	
N-Methyl Pyrrolidone	202°C	86°C	40 Pa	0.03	H360D*** H319 H335 H315	Danger	

Example 1: Application Rhodiasolv[®] I R I S



Application

Tank cleaning for resins producer and formulator

Traditionally used chemicals

Methylene chloride

NMP

PMA

Toluene, Xylene

Acetone, MEK

Advantages when using Rhodiasolv[®]

Non-toxic

Non-flammable

Non-VOC

Easily recyclable

Example 2: Application Rhodiasolv[®] I R I S



Application

Foundry resins for cores and moulds

Traditionally used chemicals

Toluene, Xylene
Isophorone

Advantages when using Rhodiasolv[®]

Non-toxic
Excellent performance
Compliance (VOC, waste sand disposal)

Example 3: Application Rhodiasolv[®] I R I S



Application

Cleaning parts, tools and equipments

GRP

PU injection moulding

Traditionally used chemicals

Toluene, Xylene

Isophorone

Advantages when using Rhodiasolv[®]

Safe for workers and users

Low environmental impact

Efficiency

ESTAKLEEN cleaning stations

Available as 2 or 4 person cleaning-station

Heated baths for quick and easy cleaning/drying of paint and resin tools in GRP processing.

Cleans all commercial resins.

Without any environmental pollution or smell!



Rhodiasolv IRIS can easily be distilled up to 80% using recycling machines by the company IRAC[®].

IRAC BS-IRIS recycling units
(14 to 31l loading capacity)

IRAC AV-IRIS recycling units
(70 to 150l loading capacity)

IRAC MAV-IRIS recycling units
(70 to 500l loading capacity)



3G AV-IRIS recycler
with integrated crane

What does the use of Acetone really cost?

High evaporation loss

Exposure of workers to VOC

Risk of fire

Equipment has to be explosion proof

Compliance to safety and VOC regulations

Waste disposal

When you replace acetone or other solvent substitute products with Rhodiasolv you can save up to 30% of your costs.

Success Story Chemowerk - Replacement of acetone

Chemowerk GmbH, Germany	Acetone	Rhodiasolv RPDE	Rhodiasolv RPDE with recycling	Savings
Annual usage (kg)	35,000	8,000	4,500	30%

Statement by NorcoGRP Ltd. Managing Director
Mark Northey:

“IRIS is without question the most efficient and cost effective solution to the issue of complete removal of acetone from the workshop floor.

I would recommend IRIS for use in all environmentally and economically conscious GRP/FRP workshops.”

Awards

JEC Asia 2010 Award



Prix Pierre Potier 2009*

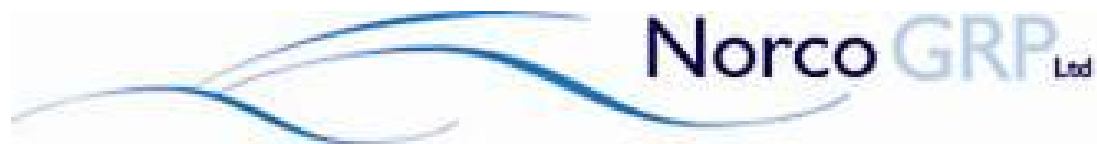
*Ministère de l'économie,
de l'industrie et
de l'emploi de la France



Supported by the European Commission's Life+ program

Rhodiasolv[®] References

euro
resins



Examples of industrial references usage of I R I S for resin clean up and regeneration systems:

Marine

www.sunseeker.co.uk

www.norco.co.uk

www.dragon.de

www.steiner-frp.com

Polymere Concrete, Panels

www.holonite.nl

Containers

www.chemo.de

Epoxy Prepreg

www.gurit.com

Diverse other parts

www.buk-gmbh.de

Rhodiasolv[®] IRIS

has a better bottom line cost than
traditional solvents

is non-toxic and sustainable

non-flammable and non-VOC

So what's keeping you from moving on to the new generation of solvents?

Contact us now for your customized solution