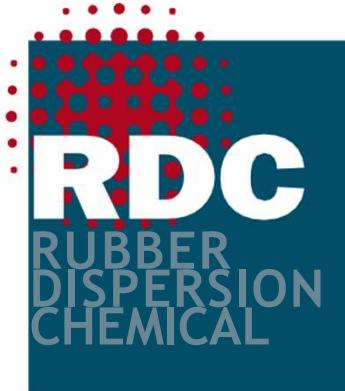




PRODUCTS AND
SERVICES
FOR THE RUBBER &
THERMOPLASTIC
INDUSTRIES

PRODUCTS AND
SERVICES
FOR THE RUBBER &
THERMO
PLASTIC
INDUSTRIES



the way
and means
of achieving
your needs





powder
blends



dry liquids



pre-weighed



chemical
auxiliaries



predispersed
chemicals



predispersed
chemical
specialties



granular
blends



films and bags
for chemicals
predosing

RDC PRODUCTS AND SERVICES



METHOD: RESEARCH QUALITY CUSTOMER CARE

RDC-RUBBER DISPERSION CHEMICALS, since being founded in 1975, has established a formidable reputation in the market for being a flexible manufacturer and distributor of high quality products and services for the rubber and thermoplastic industries.

Over the years the tight cooperation, not only with the main national and international compounders, but also with medium and small-sized producers, has enabled us to fix every specific needs of each customer and at the same time to improve our know-how reaching absolute levels of quality in the planning, the development and supply of the products/services. This quality is guaranteed since 1995 by the UNI-EN-ISO 9001 certification.



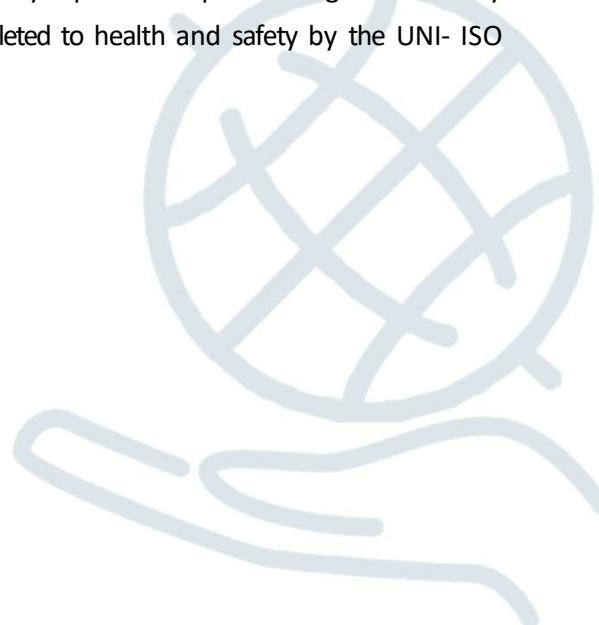


R&D AND LABORATORY CENTRE have been the mainstay at RDC, right from inception. Our laboratory centre is equipped with “state-of-the-art” devices and, together with the quality of raw materials and products and the processing control, guarantees any kind of technical or analytical assistance to our customers.

RDC, through such a combination of technical background, appropriate production techniques, continuous technological improvement and a strict control on raw materials and final products, offers a wide range of products/services matching the most advanced requirements of the market.

HEALTH, SAFETY, QUALITY & ENVIRONMENTAL POLICY

RDC follows the principles of responsible company citizenship and respect for the environment health and safety of the workers: any aspect of the process is guaranteed by the UNI-EN-ISO 14001:2015 and those related to health and safety by the UNI- ISO 45001:2018.





WHO WE ARE AND WHAT WE DO

ADVANCED PRODUCTION AND CONTROL TECHNOLOGIES

- State-of-art equipments for masterbatch production
- Total automatization of production lines
- Equipped chemical and physical laboratories

COMPLETE RANGE OF QUALITY CONTROL MEASUREMENTS

- Real time monitoring (process control)
- Chemical, analysis of raw materials & products
- Testing of rheometry and dispersion properties

DEVELOPMENT OF TAILOR MADE SOLUTION

- Attention to product/process criticities
- Study of feasibility with different approaches
- Technical development of blends of chemicals

CUSTOMER ASSISTANCE

- Support in problem solving
- Development of new curing systems

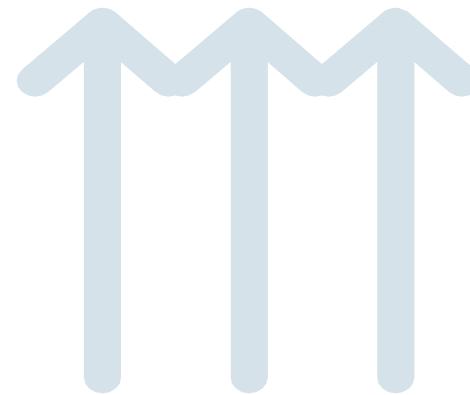




PREMIX® PREDISPersed CHEMICALS

Premix® is RDC brand for polymer bound materials. In a Premix® the chemical, named “active part”, is homogeneously dispersed in a proper polymeric matrix. RDC technology is unique in the field of predispersed material production: the manufacture of Premix® is carried out in very mild condition, in order to avoid any decomposition of the “active part”. The polymeric matrix has an high compatibility with the elastomeric material and has no effect on the compound cure and technical properties, moreover its low viscosity ensures a fast and complete dispersion of the material even in very soft compounds.





HIGHER QUALITY
COST SAVING
ENVIRONMENTAL
BENEFITS

BENEFITS BY USING PREMIX®

IMPROVEMENT IN QUALITY

- Better dispersion of chemicals
- More consistent cure
- Reduction of off-spec batches
- Possibility of supplying with various colour codes to better identify different products

REDUCTION IN COSTS

- Faster mixing
- Reduction of lost chemicals
- Higher productivity

ENVIRONMENTAL BENEFITS

- Reduced airborne dust
- Elimination of residual dust
- Less skin contact to operators
- Easier handling and dosage of chemicals



PREMIX® & PREMIX/S®

2 brands covering every application



PREMIX historical RDC brand, well-known and available on the market since 1975.



PREMIX/S: a new-concept line of predispersed materials.

PREMIX/S have been originally planned for foamed rubber compounds now its use is extended in all the processes involving very low viscosity compounds.

PREMIX/S are based on a special elastomeric matrix that provides:

- > lower viscosity and hardness,
- > best compatibility with elastomeric compound,
- > possibility to obtain predispersed products with a very high concentration of active part without penalize their properties of viscosity and hardness.





PREMIX® SPECIALTIES

On customer demand RDC is able to produce special predispersed materials:

PremiX/FA: predispersed chemicals based on food approved polymeric matrix

PremiX/N: predispersed chemicals based on nitrile rubber polymeric matrix



In the following tables, divided by function of the material, are listed the standard RDC PREMIX's with the available colours (appearance) and the concentration of active part.

In addition to the standard products listed, RDC is able to produce PREMIX with different active part concentration, on specific request by the customer.

Thanks to the constant cooperation between RDC Research & Development and the Technical Department the availability of new products is continuously updated. What is not listed might be already available on stock.

PREMIX®

PREMIX® N

PREMIX® FA

PRODUCT LIST



COLOUR	PRODUCT	CHEMICAL DESCRIPTION	NAF	ACTIVE PART	STD	SOFT
ACCELERATORS						
 	PREMIX CBS	N-Cyclohexyl-2-benzothiazylsulphenamide	✓	80	✓	
	PREMIX DCBS	N,N'-Dicyclohexyl-2-benzothiazylsulfenamide	80		✓	
	PREMIX DDTs/MPTD	Dimethyl diphenyl thiuram disulphide	80		✓	
	PREMIX DETU	N-N'-Diethylthiourea	✓	80	✓	
	PREMIX DOTG	Di-ortho-tolylguanidine	✓	70/75/80	✓	
 	PREMIX DPG	1,3-Diphenylguanidine	✓	80	✓	
	PREMIX DPTT	Dipentamethylene thiuram tetrasulphide	70/75/80		✓	
	PREMIX DPTU	N-N'-Diphenylthiourea	80		✓	
	PREMIX ETU	N-N'-Ethylenethiourea	✓	80	✓	
	PREMIX HMDC	Hexamethylene diaminecarbamate	70		✓	
	PREMIX HVA-2	m-Phenylenedimaleimide	✓	70	✓	
	PREMIX MBT	2-Mercaptobenzothiazole	✓	80	✓	
 	PREMIX MBTS	Dibenzothiazyl disulphide	✓	70/80	✓	
	PREMIX OTBG	o-tolyl-bisguanidine	✓	50	✓	
	PREMIX PO	Zinc dialkyldithiophosphate	✓	50/60	✓	
 	PREMIX TBBS	N-tert-butyl-2-benzothiazylsulphenamide	✓	80	✓	
	PREMIX TBzTD	Tetrabenzyl thiuram disulphide	✓	75/80	✓	
	PREMIX TDEC	Tellurium diethyldithiocarbamate	75		✓	
	PREMIX TETD	Tetraethyl thiuram disulphide	75		✓	
 	PREMIX TMTD	Tetramethyl thiuram disulphide	80		✓	
	PREMIX TMTM	Tetramethyl thiuram monosulphide	80		✓	
	PREMIX XLA	Combination of active amine and retarder	60			
	PREMIX ZADP	Zinc dialkyldithiophosphate low odor	✓	50	✓	
 	PREMIX ZBEC	Zinc dibenzylidithiocarbamate	✓	70/80	✓	✓
	PREMIX ZBOP	HMW Zinc dialkyldithiophosphate	✓	50	✓	
	PREMIX ZDBC	Zinc dibutylidithiocarbamate	80		✓	
	PREMIX ZDEC	Zinc diethyldithiocarbamate	80		✓	
	PREMIX ZDMC	Zinc dimethyldithiocarbamate	70/80		✓	
	PREMIX ZMBT	Zinc salt of 2-mercaptobenzothiazole	✓	80	✓	

COLOUR	PRODUCT	CHEMICAL DESCRIPTION	NAF	ACTIVE PART	STD	SOFT
SULPHUR AND SULPHUR DONORS						
	PREMIX S	Sulphur	80		✓	
	PREMIX S Insoluble	Insoluble sulphur	80		✓	
	PREMIX S Insoluble HS	High stability Insoluble sulphur	65		✓	
	PREMIX DTDM	4-4'-Dithio-dimorpholine	80		✓	
	PREMIX CLD	Dithiocaprolic acid	✓	80	✓	
RETARDERS						
	PREMIX PTC	N-Cyclohexylthiophthalimide	50/80		✓	
	PREMIX VEAXIL	Trichloromethylthiophthalimide derivative retarder	80		✓	
	PREMIX VE	N-phenyl-N-(trichloromethylsulphenyl)benzene sulphonamide	80		✓	
INORGANIC METAL SALTS						
	PREMIX ACTIVE	Active Zinc Oxide	80		✓	
	PREMIX MgO	Magnesium Oxide	74		✓	
	PREMIX Sb2O3	Antimony Trioxide	90		✓	
	PREMIX TRANSPARENT	Transparent Zinc Oxide	80			
	PREMIX ZnO	Zinc Oxide	80		✓	✓
PREMIX Zn ATTIVO Z		High BET Active Zinc Oxide	80		✓	
ANTIOXIDANTS						
	PREMIX MBM	Methyl-2-Mercaptobenzimidazole	50/65/70/80		✓	
	PREMIX NDBC	Nickel dibutylthiocarbamate	80		✓	
	PREMIX ZMMBI	Zinc 4,5-Methyl-2-Mercaptobenzimidazole	70		✓	

COLOUR	PRODUCT	CHEMICAL DESCRIPTION	NAF	ACTIVE PART	STD	SOFT
OTHER PRODUCTS						
	PREMIX AZ	Azodicarbonamide	80	✓	✓	
	PREMIX AZ/T	Kickerized Azodicarbonamide	80	✓		
	PREMIX OSH	4-4'-Oxydibenzenesulfonyl Hydrazide	50	✓		
	GB VEASIL 6498	Low VOC vinyl silane	50	✓		
	PREMIX SITS/S	Bis (triethoxysilylpropyl) silane tetrasulfide	50	✓		
	PREMIX VEASLIP	HMW Silicon fluid processing aid	50	✓		
	PREMIX VEALUB 50M	Process aid for injection moulding	100			
	PREMIX ZDA	Zinc Diacrylate	75	✓		
	PREMIX RESORCINA	Resorcinol	80	✓		
	PREMIX HMT	Hexamethylene Tetramine	80	✓		
	PREMIX PENTAERITRITE	Pentaeritrol	80	✓		
	PREMIX BARITINA	Barium Sulphate	80			
	MASTER GRAPHITE/E	Graphite	40	✓		

COLOUR	PRODUCT	CHEMICAL DESCRIPTION	ACTIVE PART
NITRILE BASED			
	PREMIX S/N	Sulphur	75
	PREMIX PTFE	Polytetrafluoroethylene	80

PREMIX® FA

FOOD GRADES

COLOUR PRODUCT

CHEMICAL DESCRIPTION

NAF ACTIVE PART

FOOD APPROVED ACCORDING TO FDA 177.2600

			NAF	ACTIVE PART
	PREMIX AO2246/FA	2,2'-methylenebis(4-methyl-6-tert-butylphenol)	✓	75
	PREMIX CLD/FA	Dithiocaprolactam	✓	80
	PREMIX CBS/FA	N-Cyclohexyl-2-benzothiazylsulphenamide	✓	80
	PREMIX DPG/FA	1,3-Diphenylguanidine	✓	80
	PREMIX DTDM//FA	4-4'-Dithio-Dimorpholine		80
	PREMIX MBT/FA	2-Mercaptobenzothiazole	✓	80
	PREMIX MBTS/FA	Dibenzothiazyldisulphide	✓	80
	PREMIX S/FA	Sulphur		80
	PREMIX TMTD/FA	Tetramethyl thiuram disulphide		80
	PREMIX TMTM/FA	Tetramethyl thiuram monosulphide		80
	PREMIX ZBEC/FA	Zinc dibenzylthiocarbamate	✓	80
	PREMIX ZDBC/FA	Zinc dibutylthiocarbamate		80
	PREMIX ZDEC/FA	Zinc diethyldithiocarbamate		80
	PREMIX ZDMC/FA	Zinc dimethyldithiocarbamate		80
	PREMIX ZnO/FA	Zinc Oxide		80

More products and different concentrations are available on request



Premix®

MASTERBATCHES OF ORGANIC AND INORGANIC PIGMENTS

VEACOLOR is our brand for predispersed organic pigments on elastomeric matrix supplied in slab form.

WHY VEACOLOR ?

After more than 40 years of experience blending powders, RDC is perfectly aware how difficult is the handling and the dispersion of organic pigments. This factor has been the driving force for our R&D department to design a new line of polymer blend pigments to ease the dispersion and to improve the environment cleaning.

SOLUTION FOR EVERY APPLICATION

Our standard grades are based on SBR matrix but our technology allows on demand to also develop pigments on different elastomers (NBR, EPDM, IR, etc...)

Moreover the continous request of food approved grades made RDC developing a line of colour masterbatches suitable to meet FDA requests in accordance to CFR 21, Regulation 177.2600 "Rubber articles intended for repeated use".

VEACOLOR products are suitable to meet both UV and heat stability requirements.



PRODUCT LIST VEACOLOR

COLOR NAME	COLOR INDEX*	BINDER	ACTIVE PART	FDA COMPLIANCE
VEACOLOR RED 8040	PR-48:1	SBR	50	NO
VEACOLOR RED 1547	PR-48:2	SBR	50	NO
VEACOLOR ORANGE 2900	PO-16	SBR	50	NO
VEACOLOR YELLOW G2200	PY-14	SBR	50	NO
VEACOLOR YELLOW G2500	PY-55	SBR	50	NO
VEACOLOR YELLOW 2080D	PY-154	SBR	50	NO
VEACOLOR BLUE BX	PB-15	SBR	50	YES
VEACOLOR BLUE BX 15.1	PB-15.1	SBR	50	YES
VEACOLOR GREEN 2GO	PG-7	SBR	50	YES

* Other pigments are available on request

INORGANIC PIGMENTS

A range of inorganic pigment masterbatches is also available. By using a different technology the physical appearance is in granules.

NAME	PIGMENT*	BINDER	ACTIVE PART	FDA COMPLIANCE
PREMIX YELLOW 30	Fe ₂ O ₃	WAX	50	NO
PREMIX RED 1021	Fe ₂ O ₃	WAX	50	NO
PREMIX TiO ₂ R	TiO ₂ Rutile	TPE	80	YES
PREMIX TiO ₂ A	TiO ₂ Anatase	TPE	80	YES



GRANULAR BLENDS

dose all your additives in one step!

Granular Blends, as suggested by name, consist of a mixture of several additives blended together in compact granules. The use of **Granular Blends** by one hand provides all the advantages already seen for PREMIX, by the other hand allows to add in the mixing the whole or the main part of additives in one step.

The **Granular Blends** are usually projected and manufactured on customer recipe:

- > **RDC chooses the right polymeric support and the active part concentration**
- > **RDC manufactures the Granular Blends in very mild conditions**
- > **RDC tests the relative stability of the recipe formulation in order to**
 - check an eventual degradation process and the shelf life of the blend**
- > **The automatic control of weight of any component during the process**
 - and the final quality control in laboratory, guarantees concentration levels.**

RDC-FORMULATED GRANULAR BLENDS

PRODUCT	CHEMICAL DESCRIPTION	ACTIVE PART
GB JO 4061	Curing sistem formulated for EPDM	100



VEAFLAME

a new class of flame suppressors

Veaflame is a new RDC generation of highly active flame suppressors for polymeric composites:

- > Halogen and Antimony free synergistic blends
- > Boosting effect on existing flame retardant systems
- > Highly effective in char promoting and dripping suppression
- > Available in easy handling pellet form
- > No regulatory concern and friendly ecotox profile
- > Customizable to meet specific requests

STANDARD GRADES

VEAFLAME 13

PROPERTIES AND APPLICATIONS

Extremely effective in char promoting No interaction with foaming
Reccomended for solid and sponge rubber



DRY LIQUIDS

In order to avoid the problematic dosage of liquid additives, RDC is able to supply any kind of dry liquids. Our advanced technology allows homogeneous absorptions of any liquids, even the more viscous ones. The carrier, unless specific request of customer, consists in an inert silicate with high specific surface in order to minimize the wet effect and to increase the flowability.

RDC-FORMULATED DRY LIQUIDS PRODUCT LIST

PRODUCT	CHEMICAL DESCRIPTION	ACTIVE PART
ANTIOXIDANT TSP	Styrenated Phenols	60
EDMA DL	Ethylene dimethacrylate peroxide activator	70
HMMM DL	Hexamethoxymethylenmelamine	50/65
PO DL	Zinc dialkyl dithiophosphate	70
SILANE Si 69 DL	Bis (triethoxysilylpropyl) silane tetrasulfide	70
TAC DL	Triallyl Cyanurate	50/70
TBTD DL	Tetrabutyl thiuram disulphide	60
TRIM (TMPTMA) DL	Trimethylolpropane trimethacrylate	50/60/70
VEALUB 23 DL	Zinc 2-hexyl-hexanoate	70
ZADP MX	Zinc dialkylthiophosphate low odor	70



POWDER BLENDS

RDC is able to supply perfectly homogeneous powder blends, produced on customer demand. The production is carried out under strict control of relative concentration of the components and process condition in order to avoid degradation effect. The blends are supplied in 20Kg net multi-ply paper bags, or, on specific request, in handy predosed and preweighed low temperature melt bags.

BENEFITS

- > **Warehouse rationalisation**
- > **Reduced and clean handling of raw materials**
- > **Lower costs for packing disposals**
- > **Reduced risks and environmental impact**
- > **Compound uniformity**
- > **Possibility to pack up in customer's required gram-weight**

VEAFILL 11

Powder blend composition of grinded resorcinol and silica tightly mixed suitable for rubber-stell or rubber-textile bond

ANTI UV PRUVASOL

Formulated blend for white and light coloured articles. It works both as UV absorber and UV stabiliser.



PREWEIGHED MATERIALS

one bag or bag-in-bag

The preweighing is one of the more appreciated RDC service.

RDC can supply in predosed and preweighed low melting temperature bags, the entire range of chemical auxilliaries produced and/or distributed, including aromatic amines (IPPD, 6PPD, DTPD, ODPA), mixture of aformentioned auxiliaries and **liquids** (silanes, low molecular polybutadiene, etc...).

The “bag-in-bag” predosing is preferred when RDC tests, show that, the contact between one or more components should give chemical instability of the blends, or also when the customer would like to look at the number of components. Each bag, comprising one or more additivies, is then put together and sealed in one larger bag.



Black fillers weighing

from Big Bag to bags and from bags to tailor made eva sacks.





FILMS AND BAGS FOR CHEMICALS PREDOSING

VEAFILM and VEABAG are the newest RDC brands for low melting point plastic films and bags. VEAFILM and VEABAG, produced with either EVA or LDPE, are designed for the pre-dosing operations in the rubber and plastics mixing processes.

Thanks to our state-of-the-art technology, film extrusion and bag-making process ensure outstanding quality and constancy in terms of thickness, flowability, thermal and mechanical properties.

On requests, VEAFILM and VEABAG can be provided in different colors, with barcode printings and out-of-standard sizes and thicknesses.

VEAFILM

Width: 280 ÷ 1280 mm

Thickness: 45 ÷ 120 µm

Tubular

Single fold

Single sheet

With gussets

VEABAG

Width: 280 ÷ 1100 mm

Thickness: 45 ÷ 120 µm

Length: 300 ÷ 1200 mm

One side open

One side open with gussets

Pre-cut wrapped on coils

Melting Point (°C)

EVA

LDPE

71 ÷ 86

110

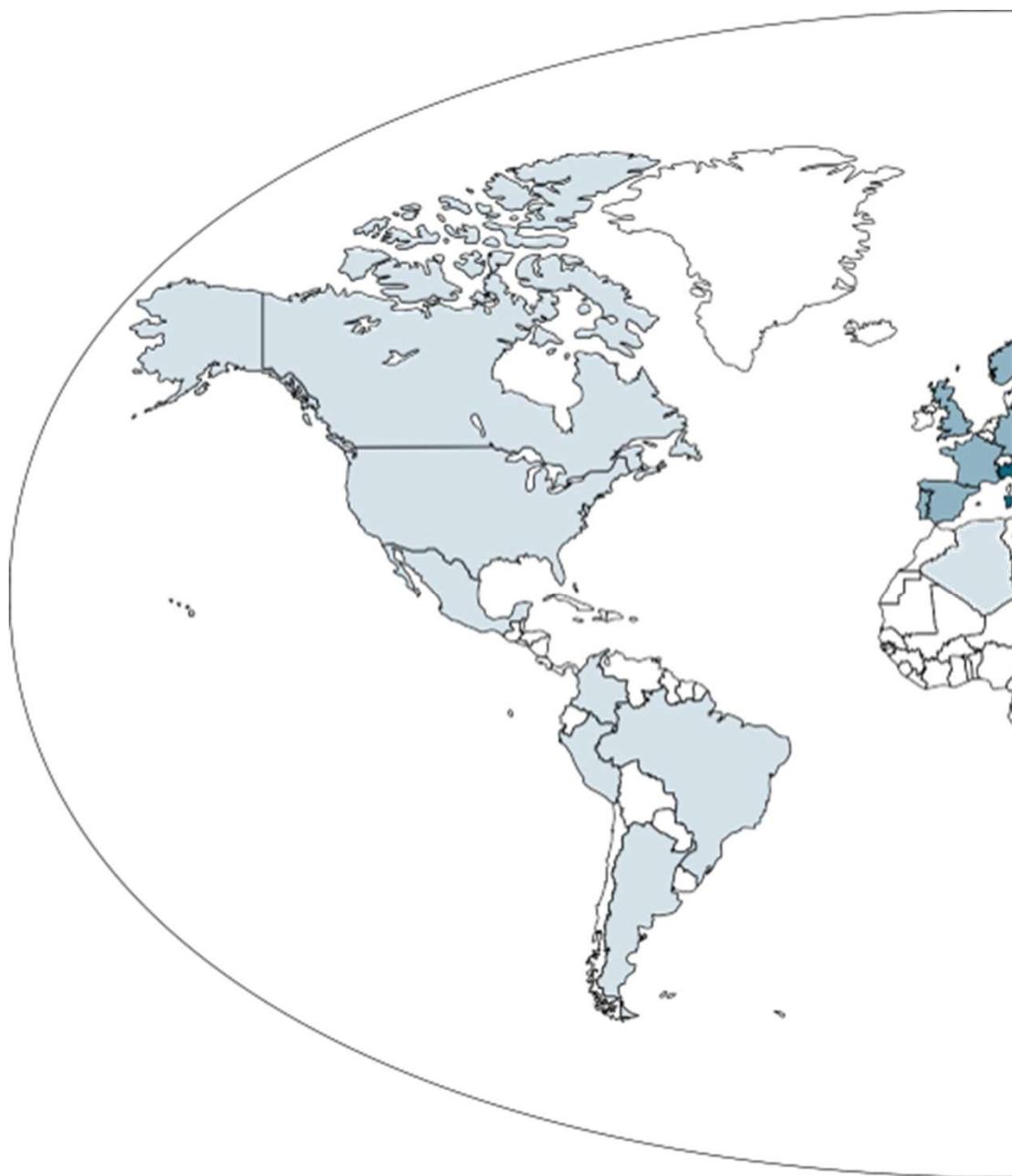
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OUR PARTNERS

EUROPE	
NORDIC:	RDC
GERMANY:	NGS ELASTOMER GmbH
GERMANY:	KRUMMENERL
SPAIN:	POLICHEMI GROUP
POLAND:	TORIMEX CHEMICALS
TURKEY:	RESINEX
FRANCE:	SODIVAS
PORTUGAL:	AGAMI
BALCANIC:	KEMOST
ROMANIA:	CAROCO COMIMPEX
HUNGARY:	VARIACHEM
GREECE:	PEGASUS
SLOVAKIA:	TATRACHEM
ISRAEL:	PETRUS
UK:	RDC





REST OF THE WORLD

BRASIL:	PARABOR
COLOMBIA & PERÚ:	PARABOR
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CENTRAL AMERICA:	IPISA
ARGENTINA:	JOM SALVA
USA & CANADA:	RDAbbott
INDIA:	S.R.I. IMPEX
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RDC S.r.l. Via Monte Nevoso, 16

20008 Bareggio - Milano

Tel. + 39 02.903.60.785

E-mail info@rdcsrl.com - www.rdcsl.com

www.rdcsl.com