UNITED INITIATORS



Specialties - Accelerators, Promoters & Inhibitors Thermoset Applications

We initiate value

United Initiators ("UI") is the largest, focused global producer of specialty chemical initiators and the only player worldwide providing a full range of both organic peroxides and persulfates (inorganic peroxides). We are the leading manufacturer of persulfates and among the top three suppliers of organic peroxides worldwide. Our network allows us to serve our customers both on a local and global scale. Supply reliability and quality are critical when it comes to peroxides and this is one of the key factors why customers choose United Initiators.

Our products are essential ingredients for many applications and products in our daily life and are necessary to produce a large range of polymers and polymerbased materials. The application of our products goes well beyond polymers. They are used in consumer areas such as hair bleaching, disinfection, denture cleansing and tooth whitening. Industrial applications include etching of printed circuit boards, chemical synthesis, oil & gas exploration, soil remediation and many more. Continuous improvement and innovation on all levels enables us to effectively respond to changing and growing market needs.

Safety is a very crucial factor to be successful in our industry. United Initiators adheres to highest safety standards in production and the entire supply chain. We offer all our customers in-depth service and training to handle our products in a safe and efficient manner. In our daily global operations our continuous focus is on maintaining high environmental standards. Sustainability is another focal point within our organization and we are committed to optimizing our processes and enhancing our energy efficiency.

It is among our primary goals to serve our customers with products of consistent quality and highly reliable services. We continuously optimize our operations and supply chain to assure high safety and overall reliability. Our global footprint allows us to offer services both to regional and global customers in an effective manner.

Locations

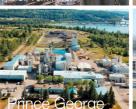
United Initiators is a global company with headquarters in Pullach/Germany and operations in various sites in North America, Asia and Australia.





















A Leading Peroxide Producer - Serving a **Growing World**

More than 100 years of experience make us the leading global provider of organic peroxides, persulfates and specialty products. The company's history has been marked by constant and sometimes profound changes: through mergers, acquisitions and joint ventures as well as through market and product development. This has created United Initiators, the globally leading manufacturer fully focused on peroxides. Our strong position makes us the right partner to "drive your success".

2020 PeroxyChem Acquisition of H₂O₂ plant in Canada

SOLVAY

. Peroxid-Chemie

2019 HP

Acquisition of Hidrojen Peroksit

2018 VR

Joint Venture with VR Persulfates

2016 EQUISTONE

Equistone acquires majority stake

2012 SYRGIS

Acquisition of Syrgis

2008 UNITED INITIATORS

United Initiators

2007 @ EVOOR

Evonik Ind

2001 degussa.

Laporte acquires Aztec Catalysts

1968 Peroxid-Chemie

Peroxid-Chemie

1961 APPORTE

| | EV | U | 00 | 1 | ļ | ļ | |
|------|------|---|----|---|---|---|--|
| lust | ries | ; | | | | | |

Degussa acquires Laporte

| | porte Organics | | |
|-------------------------|--|------|---|
| 1911 | | | |
| Elektroche Werke Mür | | | |
| | | | |
| 1909 | Patent for the production of Hydrogen Peroxide | 1970 | Joint Venture of Laporte and S forms Interox |
| 1911 | Foundation of Elektrochemische Werke Adolph & Pietzsch | 1992 | Demerger of the Interox Group becomes again a 100% Laport |
| 1928 | Merck AG becomes shareholder. Conversion into EWM AG | 2001 | Takeover of Laporte by Deguss |
| 1930's | Inorganic Peroxide production | 2004 | Peroxid-Chemie becomes Deg |
| 1035 | Breakthrough: Concentration of | 2007 | Degussa becomes Evonik Indu |

te subsidiary gussa Initiators 1935 Breakthrough: Concentration of Hydrogen Peroxide solutions up to 81%, fuel for submarines and aero planes 1936 Production of sodium percarbonate 2008 Sale to Speyside Equity. Birth of United Initiators Production of carbamide peroxid 2012 Acquisition of Syrgis Performance Initiators 1938 1944 80% of the Pullach plant destroyed 2016 Equistone acquires majority stake alongside in an air-raid current management Entry into the field of organic chemistry Joint Venture of United Initiators and VR Persulfates 1954 2018 (Organic Peroxides) Takeover by Laporte Industries, Acquisition of Hidrojen Peroksit in Turkey 1961 2019 new Hydrogen Peroxide process 2020 Acquisition of the Hydrogen Peroxide plant from Evonik Industries in Canada

UNITED INITIATORS – Accelerators, Promoters & Inhibitors 3

| 4 | |
|------------|-----------|
| r of Hedri | |
| ici Ori | I DENOMIN |
| | TO SELLY |

| ASAT / | • |
|--------|---|
| 12 | |

| APPLICATION TEMPERATURE PROBLEM CONCRETE MARIOE BUTTONS TO COMPANY | A mire dolts Onting to the light of the lig | Antinating Survision Sur But St. C. | A RESTINES ACTIVES |
|--|--|-------------------------------------|--------------------|
| AMBIENT | ELEVATED | HIGH | |
| • • | • • • | | |
| | | | |

| | | | % |
|--------------------------------|---------------------------|---|-----|
| Standard Cobalt Accelerators | Accelerator COB 1 XS | Cobalt octoate solution in Xylene and Styrene | 1 |
| Standard Cobalt Accelerators | Accelerator COB 2 | Cobalt octoate solution in Xylene | 2 |
| Standard Cobalt Accelerators | Accelerator COB 6 | Cobalt octoate solution in Xylene | 6 |
| Standard Cobalt Accelerators | Accelerator COB 10 | Cobalt octoate solution in Xylene | 10 |
| Standard Cobalt Accelerators | Accelerator COB 12 | Cobalt octoate solution in Xylene | 12 |
| Standard Cobalt Accelerators | Accelerator COB 1 TX | Cobalt octoate solution in TXIB | 1 |
| Standard Cobalt Accelerators | Accelerator COB 6 TX | Cobalt octoate solution in TXIB | 6 |
| Standard Cobalt Accelerators | Accelerator CA 12 X | Cobalt octoate and DMA solution in TXIB | 2 |
| New generation Co Accelerators | Cobalt Neodecanoate 6% TX | Cobalt neodecanoate solution in TXIB | 6 |
| New generation Co Accelerators | Cobalt Neodecanoate 12% | Cobalt neodecanoate solution in White-Spirit | 12 |
| New generation Co Accelerators | POLCOB® Pro 1 | Polymer cobalt solution | 1 |
| New generation Co Accelerators | POLCOB® Pro 6 | Polymer cobalt solution in DPM | 6 |
| New generation Co Accelerators | POLCOB® 5 | Polymer cobalt solution in Bio-Ethyl Lactate | 5 |
| New generation Co Accelerators | POLCOB® A12 | Polymer cobalt and DEAA solution in Bio-Ethyl Lactate | 2 |
| Amine Accelerators | Accelerator A 305 X | N,N-Dimethylaniline solution in TXIB | 10 |
| Amine Accelerators | DMA | N,N-Dimethylaniline (technical pure) | 100 |
| Amine Accelerators | DEA | N,N-Diethylaniline (technical pure) | 100 |
| Amine Accelerators | DMPT | N,N-Dimethyl-p-toluidine (technical pure) | 100 |
| Amine Accelerators | EPT | Ethoxylated-p-toluidine (technical pure) | 100 |

| | | AME | SIENT | | | | | EL | EVATE | D |
|---|---|-----|-------|---|---|---|---|----|-------|---|
| • | • | | | | | | • | • | | • |
| • | • | • | • | • | | • | • | | | • |
| • | • | • | • | | | • | • | | • | |
| • | • | • | | | | | | | • | |
| • | • | • | | | | | | | | |
| • | • | • | • | • | | • | • | • | • | • |
| • | • | • | • | | | • | • | | • | • |
| • | | • | | • | | | • | | | • |
| • | • | • | • | | | • | • | | • | • |
| | | | | | | | | | | |
| • | • | • | | | | | | • | | |
| • | • | | • | | | • | • | | • | • |
| • | • | • | • | | | • | • | • | • | • |
| • | • | • | • | | | • | • | • | • | • |
| • | | • | • | • | | | • | | | • |
| • | | • | | • | • | | | • | | |
| • | | • | | • | • | | | | | |
| • | | • | | • | • | | | | | |
| • | | • | | • | • | | | | | |
| • | | • | | • | • | | | | | |
| | | | | | | | | | | |





All Specialties are available in IBC, drum, 25 kg can, 5 kg jerrycan and 850 g bottle. For any specific request, please contact United Initiators SAS directly!



| a Roduct chiteoph | UI DENOMINATION | CHEMICAL MANE | ASSA* | ROPLICATION TEMPERATURE TRANSPORTED POWNET CONCRETE STRANGE BUTCHES AND THE PROPERTY OF THE PR | Coatings Pure Polits Coatings Pure Polits Ashing Schrift Continuous Puring Schrift Continuous Puring Charles Charles Continuous Puring Charles | E SPECIAL RESINS |
|-------------------|--------------------|--|-------|--|--|------------------|
| | | | % | AMBIENT | ELEVATED HIGH | |
| Promoters | Promotor AA | Acetylacetone (technical pure) | 100 | • | | • |
| Promoters | Promotor DEAA | Diethylacetoacetamide (technical pure) | 100 | • • | | • |
| Inhibitors | Inhibitor TC 501 | 4-tert-Butylcatechol solution in Styrene | 100 | • • | • | • |
| Inhibitors | Inhibitor TC 510 | 4-tert-Butylcatechol solution in Styrene | 10 | • • • | • | • |
| Inhibitors | Inhibitor TC 510 X | 4-tert-Butylcatechol solution in TXIB | 10 | • • | • | • |
| Inhibitors | 4-TBC in flakes | 4-tert-Butylcatechol (technical pure) | 100 | • | | • |
| Inhibitors | Inhibitor BC 500 | 2,6-Di- <i>tert</i> -butyl- <i>p</i> -cresol solution in Xylene | 40 | | • • • • | |
| Inhibitors | Inhibitor BC 530 | 2,6-Di- <i>tert</i> -butyl- <i>p</i> -cresol solution in Styrene | 30 | | • • • • | |
| Inhibitors | ВНТ | 2,6-Di- <i>tert</i> -butyl- <i>p</i> -cresol solution in Styrene | 100 | | • • | |









UNITED INITIATORS



Germany United Initiators GmbH Pullach T: +49 89 74 422 237 cs-initiators.eu@united-in.com

France

United Initiators SAS Chalon-sur-Saône T: +33 (0)3 85 48 59 37 contact-chalon@united-in.com

Turkey

Hidrojen Peroksit A.S T: +90 266 7210312 cs-initiators.tr@united-in.com

India

UI VR Private Limited Ahmedabad T: +91 9909724733 sales@vrpersulfates.com

USA

United Initiators Inc. Elyria, OH

United Initiators Inc. Helena, AR

United Initiators Inc. Mobile, AL

United Initiators Inc. Houston, TX

United Initiators Inc. Springtown, TX

T: +1 800 231 2702 cs-initiators.nafta@united-in.com

Canada United Initiators Canada Ltd. Prince George, BC T +1 250 561 4200 customer-service.princegeorge@united-in.com

United Initiators (Shanghai) Co., Ltd.
United Initiators Hefei Co., Ltd.
T: +86 21 6117 2760 cs-initiators.cn@united-in.com

United Initiators (Huaibei) Co., Ltd. T: +86 561 7888 168 cs-initiators.cn@united-in.com

Australia

United Initiators Pty Ltd. Banksmeadow T: +61 2 9316 0046 cs-initiators.au@united-initiators.com

