

EXPLORE OUR OFFERINGS

Performance additives for the plastics industry



Greater chemistry

Clariant is a leading international producer of specialty chemicals with a global network of service and research centers and one clear focus: to provide our customers with safer, more sustainable and highly innovative chemical solutions that benefit the business of all who follow in the value chain because – ultimately – they make life better for the end consumer.



Business Unit Additives offers a wide range of performance additives for plastics such as antioxidants, acid scavengers, heat stabilizers, light stabilizers, process stabilizers and antistatic agents. In addition to single additives, Clariant offers under its AddWorks™ brand ready-to-use additive solutions for various markets and applications.



TECHNICAL SERVICE

In order to efficiently respond to its customer's need, Clariant's Business Unit Additives develops differentiated market-specific solutions from our state-of-the-art research and development and application centers.

Our know-how allows a high level of reactivity for challenges in application development. As a result our Technical Service is prepared to offer support and tailor made solutions that are adapted to the large number of demanding applications and increasing performance targets.

Acid scavenger & antioxidants improved processing and durability

APPLICATIONS

	STANDARD PLASTICS								ENGINEERING PLASTICS							
	LDPE	HDPE	LLDPE	PP	PS	PS-HI	PVC	EVA	ABS/ SAN	PET	PBT	PMMA	PA	PC	POM	TPU
ACID SCAVENGER																
Hycite 713																
ANTIOXIDANTS																
PROCESSING STABILIZER																
Hostanox P-EPQ																
PHENOLIC ANTIOXIDANTS																
Hostanox O 3																
Hostanox O 310																
THIO CO-STABILIZERS																
Hostanox SE 4																
Hostanox SE 10																
METAL DEACTIVATOR																
Hostanox OSP 1																

Recommended
Applicable

ACID SCAVENGER

Hycite™ 713 is an inorganic multifunctional high performance additive, specifically tailored for the use in polyolefins. It contributes to corrosion protection and does not migrate.

ANTIOXIDANTS

They protect polymers from oxidative damage. They prevent discoloration, degradation by chain scission and (or) cross linking of polymers during processing and ensure long term properties of the finished articles.

PROCESSING STABILIZER

Hostanox™ P-EPQ™ is a highly effective processing stabilizer also referred to as a secondary antioxidant of the phosphonite type. It stabilizes the polymer melt against thermooxidative degradation ensuring excellent color stability as well as constant melt viscosity.

PHENOLIC ANTIOXIDANTS

Hostanox™ O 3 and Hostanox™ O 310 are phenolic stabilizers also referred to as primary antioxidants, behaving as radical scavengers. During processing, they maintain a consistent melt viscosity and prolong the lifetime of finished articles.

Hostanox™ O 3 shows a high resistance to extraction particularly when the plastic article is exposed to liquid media such as water or detergent, making it the preferred stabilizer for demanding applications. In addition Hostanox™ O 3 shows a high color retention.

Hostanox™ O 310 combines the good stabilizing effect of a multinuclear, standard phenolic antioxidant with the extraordinary high extraction resistance of Hostanox™ O 3 in a synergistic way.

PRODUCT INFORMATION

	CHEMICAL CLASS	MOLECULAR WEIGHT [g/mol]	MELTING RANGE [°C]	TGA [°C, 10 % mass loss]	SUPPLY FORM	GHS*
ACID SCAVENGER						
Hycite 713	Hydrotalcite	415	N/A	N/A	Powder	
ANTIOXIDANTS						
PROCESSING STABILIZER						
Hostanox P-EPQ	Di-phosphonite	1035 (main component)	85-95 (softening point)	319	Powder, Pills	
PHENOLIC ANTIOXIDANTS						
Hostanox O 3	Phenolic	794	167-171	355	Powder, Pills	
Hostanox O 310	Phenolic	N/A	85-92	N/A	Micro Pills	
THIO CO-STABILIZERS						
Hostanox SE 4	Thio-ester	683	63-67	330	Flakes	
Hostanox SE 10	Alkyl disulfide	571	57-60	289	Powder, Pills	
METAL DEACTIVATOR						
Hostanox OSP 1	Thio based phosphite	1067 (main component)	106-124	309	Micro Pills	N

* GHS classification class chemicals according to European Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP-Classification, Labelling and Packaging): N = Skin sensitization

THIO CO-STABILIZERS

Hostanox™ SE 4 and Hostanox™ SE 10 are secondary antioxidants containing sulfur. They form synergistic mixtures with phenolic antioxidants maintaining the physical properties of the polymers throughout the service life of the final product.

METAL DEACTIVATOR

Hostanox™ OSP 1 belongs to metal deactivator group of additives. It is mainly used in polyolefin applications in contact with copper or other metals found in wire & cable applications, polyolefin articles containing mineral fillers, etc. For high demanding conditions (high extraction resistance), Hostanox™ OSP 1 is well suitable. In addition Hostanox™ OSP 1 contributes highly to oxidation induction time and offers excellent thermal stability and a high solubility in xylene.



Light & multifunctional stabilizers your ideal protection

APPLICATIONS

	STANDARD PLASTICS								ENGINEERING PLASTICS							
	LDPE	HDPE	LLDPE	PP	PS	PS-HI	PVC	EVA	ABS/ SAN	PET	PBT	PMMA	PA	PC	POM	TPU
HINDERED AMINE LIGHT STABILIZERS (HALS)																
Hostavin N 30	Recommended	Recommended	Recommended	Recommended	Applicable	Applicable	Recommended	Recommended	Applicable				Recommended		Applicable	Applicable
MULTIFUNCTIONAL STABILIZERS																
Nylostab S-EED													Recommended			
Hostavin NOW	Recommended	Recommended	Recommended	Recommended	Applicable		Recommended	Recommended								
UV ABSORBERS																
Hostavin VSU							Recommended			Applicable	Applicable	Applicable	Recommended	Applicable		Applicable
Hostavin PR-25							Applicable	Applicable	Applicable	Applicable	Applicable	Recommended		Applicable		
Hostavin B-CAP							Applicable	Applicable	Applicable	Recommended	Recommended	Applicable		Recommended		
Hostavin ARO 8	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended								Applicable

■ Recommended
■ Applicable

LIGHT STABILIZERS

protect polymers against UV light induced degradation. They prevent deterioration of mechanical and aesthetic properties of polymer articles and significantly extend their service life.

HINDERED AMINE LIGHT STABILIZERS (HALS)

Hostavin™ N 30 is an high molecular weight HALS. It has excellent resistance to extraction and very low volatility. Hostavin™ N 30 is distinguished from many other oligomeric HALS mainly by its lower basicity and higher resistance to chemicals and high contribution to thermal stability. In contrast to triazine containing HALS, Hostavin™ N 30 has lower tendency towards yellowing. Last but not least, Hostavin™ N 30 provides outstanding color stability.

MULTIFUNCTIONAL STABILIZERS

Nylostab™ S-EED™ is an unique multifunctional additive specially tailored for polyamides to be used in polymerization and in compounding. Nylostab™ S-EED™ improves processability of fiber spinning, molding and fiber manufacturing. It also enhance thermal and light stability as well as dyeability.

Hostavin™ NOW is a non-hazardous and vegetable based solution that contains more than 20 % renewable content. Its high molecular weight combined with compatibility in polyolefins provides non migratory properties during the manufacturing process and the long term use of plastic articles.

PRODUCT INFORMATION

	CHEMICAL CLASS	MOLECULAR WEIGHT [g/mol]	MELTING RANGE [°C]	TGA [°C, 10 % mass loss]	SUPPLY FORM	GHS*
HINDERED AMINE LIGHT STABILIZERS (HALS)						
Hostavin N 30	HMW HALS	>1500	≥148 (softening point)	352	Powder, Pills	
MULTIFUNCTIONAL STABILIZERS						
Nylostab S-EED	LMW HALS	443	270–274	349	Powder, FF	A, G
Hostavin NOW	Aminoether HALS	>1500	94–106	288	Pills	
UV ABSORBERS						
Hostavin VSU	Bis-oxalanilide	312	126–128	265	Powder	
Hostavin PR-25	Benzylidene malonate	250	55–58	208	Granules, Powder	G, C
Hostavin B-CAP	Benzylidene bis-malonate	418.4	137–139	286	Powder	N
Hostavin ARO 8	Benzophenone	326	min. 48	269	Powder	N, C

* GHS classification class chemicals according to European Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP-Classification, Labelling and Packaging): A = Acute toxicity, B = Acute aquatic toxicity, C = Chronic aquatic toxicity, G = Eye irritation, N = Skin sensitization



UV ABSORBERS

Hostavin™ VSU, Hostavin™ PR 25, Hostavin™ B-CAP™ and Hostavin™ ARO 8 are strongly absorbing harmful UV radiations. The special advantage of Hostavin™ PR-25, Hostavin™ B-CAP™ and Hostavin™ VSU is their absence of interaction with traces of metal ions. Such catalytically active impurities may be present in the virgin polymer e.g. from polymerization catalyst residues, contact surfaces of the processing equipment, metal impurities in fillers, etc.

Antistatic agents for safer and easier manufacturing

APPLICATIONS

	STANDARD PLASTICS								ENGINEERING PLASTICS							
	LDPE	HDPE	LLDPE	PP	PS	PS-HI	PVC	EVA	ABS/ SAN	PET	PBT	PMMA	PA	PC	POM	TPU
ANTISTATIC AGENTS																
Hostastat FA 14	Recommended	Recommended	Recommended	Recommended	Applicable	Applicable		Applicable	Recommended							
Hostastat FA 24	Recommended	Recommended	Recommended	Recommended	Applicable	Applicable		Applicable	Recommended							
Hostastat FA 38	Applicable	Recommended	Applicable	Recommended	Applicable	Applicable		Applicable	Applicable							
Hostastat FA 68 V	Applicable	Recommended	Recommended	Recommended	Applicable	Applicable		Applicable	Applicable							
Hostastat FE 1	Applicable	Applicable		Recommended	Applicable	Applicable		Applicable								
Hostastat FE 2	Applicable	Applicable		Recommended	Applicable	Applicable		Applicable								
Hostastat FE 20	Applicable	Applicable	Applicable	Applicable	Recommended	Recommended	Recommended	Recommended	Applicable	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Applicable
Hostastat HS 1	Applicable	Applicable	Applicable	Applicable	Recommended	Recommended	Recommended	Applicable	Recommended	Applicable	Applicable	Applicable	Applicable	Applicable	Recommended	Applicable

■ Recommended
■ Applicable

ANTISTATIC AGENTS

The main purpose for using migratory antistatic agents in polymers is to reduce the static electricity build-up. In doing so they improve the aesthetic appearance by avoiding dust attraction, films sticking as well as safe spark-free handling of the plastic articles. They are also used in polyolefin polymerization processes to reduce static build-up inside different reactor systems.

Hostastat™ FA 14, Hostastat™ FA 24, Hostastat™ FA 38 and Hostastat™ FA 68 V are ethoxylated alkyl amines based on renewable fatty acids, mainly used in polyolefins. With excellent long lasting antistatic performance, high thermal stability and low volatility, Hostastat™ FA 68 V is especially recommended for BOPP applications. Hostastat™ FA 24 is recommended to reduce static charge build up in PP polymerization reactors.

Hostastat™ FE 1, Hostastat™ FE 2 and Hostastat™ FE 20 are fatty acid esters. Hostastat™ FE 2 is often combined with Hostastat™ FA 14 or Hostastat™ FA 24 in order to achieve immediate plus long term effect. Hostastat™ FE 20 is mainly used in PVC as it doesn't impede the transparency of finished articles.

Hostastat™ HS 1 is the ideal antistatic agent for polystyrene and styrenic copolymers. It is also very effective in opaque/translucent PVC applications. Hostastat™ HS 1 has an excellent water solubility. It often is externally applied as an aqueous solution, e.g. spraying.

PRODUCT INFORMATION

	CHEMICAL CLASS	MOLECULAR WEIGHT [g/mol]	MELTING RANGE [°C]	TGA [°C, 10 % mass loss]	SUPPLY FORM	GHS*
ANTISTATIC AGENTS						
Hostastat FA 14	Ethoxylated alkyl-amine	273-357	< 5 (solidification point)	221	Liquid	A, L, K, J, B, C
Hostastat FA 24	Ethoxylated alkyl-amine	273-357	< 10 (solidification point)	240	Liquid	A, L, K, J, B, C
Hostastat FA 38	Ethoxylated alkyl-amine	301-357	97 (drop point)	270	Micro Pills	M, G, B, C
Hostastat FA 68 V	Ethoxylated alkyl-amine (veg. based)	301-385	45	> 260	Solid	M, G, B, C
Hostastat FE 1	Glycerol mono-stearate (90 %)	359	> 65	259	Pills	
Hostastat FE 2	Glycerol mono-stearate (55 %)	359	60 (drop point)	259	Powder	
Hostastat FE 20	Polyglycerol fatty acid ester	N/A	< 19 (solidification point)	233	Viscous Liquid	N, C
Hostastat HS 1	Alkyl sulfonate	300-342	≈ 220	412	FF, Pills, Pills Zn	A, M, K, C

* GHS classification class chemicals according to European Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP-Classification, Labelling and Packaging: A = Acute toxicity, B = Acute aquatic toxicity, C = Chronic aquatic toxicity, G = Eye irritation, J = Reproductive toxicity, K = Serious eye damage, L = Skin corrosion, M = Skin irritation, N = Skin sensitization



From single additives to a portfolio of powerful solutions

AddWorks™ is Clariant's range of all-in-one solutions that simplify production while ensuring optimized performance – thanks to our long-term expertise, deep technical knowledge and market insights.

Simply by adding them you profit from a multitude of benefits. That is why we call them »AddWorks™«: You ADD them and they WORK for you.

Reliable, proven and ready-to-use solutions: Our AddWorks™ product family lowers total cost of ownership, reduces process complexity and allows you to fully focus your workforce and assets on your business. We offer solutions to a broad range of requirements – thanks to our very comprehensive portfolio for a wide variety of application areas. Our additive blends are supplied in various free flowing and low dusting physical forms.

For more information on our whole AddWorks™ portfolio please visit our website:



Clariant is continuously developing its portfolio of additive solutions for the plastics and coatings industry according to your needs. We started with single components for a multitude of technical challenges such as e.g. thermal stabilization, sun and oxidation protection as well as flame retardancy and process stabilization, which form the foundation of our portfolio.

Listening closely to our customers and understanding their needs, we are using our long-term expertise and profound technical knowledge to develop new state-of-the-art special additive combinations which are designed and optimized for the needs of particular market segments and application fields. We focus on both chemistry and the physical form to address easy and safe material handling.

Like in a kaleidoscope, where colored pieces of glass are reflected by mirrors and create ever-changing patterns, our performance additives are combined into an endless variety of solutions to help you optimize the performance of your products and production processes.

Simply by adding them you profit from a multitude of benefits. That is why we call them »AddWorks™«: You ADD them and they WORK for you. Reliable, proven and ready-to-use solutions: Our AddWorks™ product family lowers total cost of ownership, reduces process complexity and allows you to fully focus your workforce and assets on your business. Discover the multitude of opportunities they offer for your line of work and make a tangible difference in your market!



AGRICULTURE

AddWorks™ AGC solutions provide agricultural films and other agroplastics with exactly the properties to make customers happy: improved agrochemical resistance – e.g. against sulfur used to increase crop yield – and better durability, effective light stability and longer service life.



AUTOMOTIVE AND TRANSPORTATION

The AddWorks™ ATR series comprises a full range of high performance light, heat and processing stabilization solutions. AddWorks™ ATR contribute to enhancing the features of plastics wherever it is needed: be it under-the-hood or for interior as well as exterior applications.



BUILDING AND CONSTRUCTION

In the area of building and construction, very few things are as important as the protection from climatic conditions. With the AddWorks™ IBC solutions Clariant provides powerful protection, e.g. in the form of light stabilizer solutions or additives to strengthen the heat resistance against even extremely high temperatures.



PACKAGING

Whether acid scavengers, antistatics, slip agents, antioxidants, light or thermal stabilizers, UV absorbers, and processing aids, Clariant combines excellent services with strict quality and regulatory standards. The AddWorks™ PKG series offers the features well suited to the specific requirements of the packaging industry.



TEXTILE AND FIBERS

Our AddWorks™ TFB range for textile and fibers contributes to improve processing conditions and processability. They also provide a broad variety of advantages to final articles such as enhanced durability, light protection, improved thermal stability, flame retardancy, dyeability and tenacity retention among others.

CLARIANT INTERNATIONAL LTD
Rothausstrasse 61
4132 Muttenz
Switzerland

BUSINESS UNIT
ADSORBENTS & ADDITIVES
Phone +41 61 469 5111
Email adsorbents.additives@clariant.com

[CLARIANT.COM/ADDWORKS](https://clariant.com/addworks)
[CLARIANT.COM](https://clariant.com)

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Clariant makes no warranties, express or implied, as to the information's accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Clariant's products for its particular application. *Nothing included in this information waives any of Clariant's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing. Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Clariant products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products. For additional information, please contact Clariant.

*For sales to customers located within the United States and Canada the following applies in addition
NO EXPRESS OR IMPLIED WARRANTY IS MADE OF THE MERCHANTABILITY, SUITABILITY, FITNESS FOR
A PARTICULAR PURPOSE OR OTHERWISE OF ANY PRODUCT OR SERVICE.

™ Trademark of Clariant
Hostavin, Hostanox and Hostastat are trademarks
© 2024 Clariant International Ltd, Rothausstrasse 61, 4132 Muttenz, Switzerland