



Biesterfeld
Thailand

Product Range
Polymer Additives

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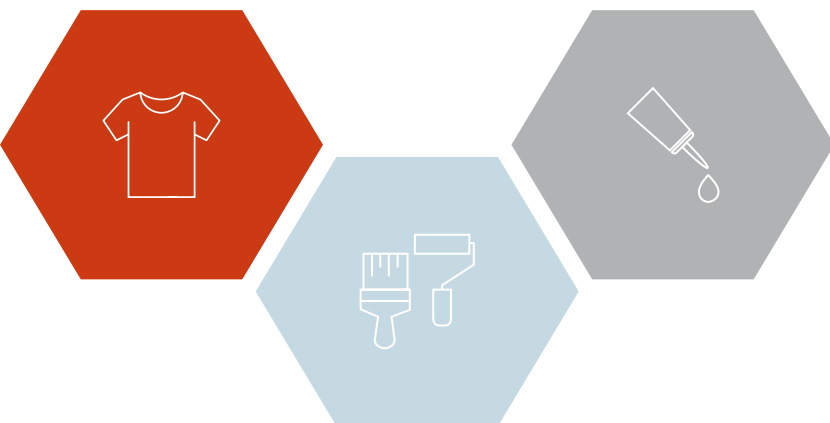
Flame Retardant

Trade Name	Chemical Name	Application
ATO 99.5%	Antimony Trioxide	ATO is used as assistant additive into plastic FR compound like PP, PE, PVC, PS, ABS, PBT, PA, etc.
ATO 99.8%	Antimony Trioxide	ATO is used as assistant additive into plastic FR compound like PP, PE, PVC, PS, ABS, PBT, PA, etc.
ATO 99.9 %	Antimony Trioxide	PET catalyst.
DBDPE	Decabromodiphenyl Ethane	DBDPE is used in high-impact polystyrene, PE, PP, ABS, PBT, UPE, Epoxy, and thermoset plastics etc. For wires and cables, insulator, elastomer industries.
BDDP	Tetrabromobisphenol A bis (2, 3-dibromopropyl ether)	Flame retardant containing both aromatic and aliphatic bromine with optimal thermal stability. It is very effective in PP.
TBC	Tris (2, 3-dibromopropyl) Isocyanurate	TBC provides highly effective on polyolefin, PVC, foaming polyurethane, polyphenyl alkene, ABS, unsaturated polyester, synthetic rubber and fiber
FR105	Brominated polystyrene-polybutadiene tri-block polymer	FR105 is a macromolecular bromine flame retardant which has excellent UV stability and thermal stability.
FR245	Tris(tribromophenyl) Cyanurate	FR-245 is used in ABS and HIPS, combines good UV, impact and flow properties. It's non blooming.
DF920	Octabromobisphenol-S bis(2,3-dibromopropyl) ether	Flame retardant for PP



Halogen Free Flame Retardant (HFFR)

Trade Name	Chemical Name	Application
EPFR-100 A	Ammonium Polyphosphate (APP) based intumescent system	HFFR for polyolefins with antidripping agent
EPFR-100 D	Ammonium Polyphosphate (APP) based intumescent system	HFFR for polyolefins without antidripping agent
EPFR-110 DL	APP free intumescent system	HFFR especially for GF reinforced polyolefins
EPFR-110 DM	APP free intumescent system	HFFR especially for GF reinforced polyolefins
EPFR-110 T	APP free intumescent system	HFFR especially for GF reinforced polyolefins and TPE
MCA-15	Melamine Cyanurate	HFFR for TPE, TPU
MCA-25	Melamine Cyanurate	HFFR for PA, PBT
MCA-50	Melamine Cyanurate	HFFR for PA
EPFR-MPP300	Melamine Polyphosphate	HFFR for GF reinforced PA and PBT as well as polyolefins a. o. applications
Aluminium Hydroxide	High Purity Submicron Aluminium Hydroxide	Widely used for low smoke halogen free PC, PE, PP wire and cable compounds as flame retardant and additive, for epoxy resin, polyurethane, unsaturated vinyl resin and fiberglass as additive, for PCB as flame retardant.
Zinc Borate	Zinc Borate	Zinc borate is primarily used as a flame retardant in plastics and cellulose fibers, paper, rubbers and textiles. It is also used in paints, adhesives, and pigments. As a flame retardant
Zinc hydroxystannate	Zinc Hydroxystannate	Alternative to antimonytrioxide, reduction of smoke density, toxicity and heat release rate; flame retardant and synergist for PVC, polyolefines, PUR, UP, EP a. o. applications.
Zinc stannate	Zinc Stannate	Alternative to antimonytrioxide, reduction of smoke density, smoke toxicity and heat release rate; flame retardant and synergist for PA, PBT, PP a. o. applications Inorganic intumescent system.



Antiblock and Slip Agent

Trade Name	Chemical Name	Application
Innoslip E	Erucamide	High performing slip agent and good anti-block agent in polyolefin resins, in particular polyethylene and polypropylene for film applications, by migrating to the surface to form a thin layer of external lubrication that adds the slip property.
Innoslip O	Oleamide	Slip agent in polyolefin resins by migrating to the surface to form a thin layer of external lubrication.
Innoslip S	Stearamide	INNOSLIP – S has a limited slip property but is an excellent anti-blocking agent that migrates to the surface to form a non-sticking layer. Especially in film applications, it can prevent two layers of PP or PE films from adhering to each other, while maintaining high film clarity.
Innoslip B	Behenamide	INNOSLIP – B serves as an excellent and high performing anti-blocking agent for both polyethylene and polypropylene films. It can be also used with cellophane and polystyrene. However, behenamide has limited slip properties.

Antistatic

Trade Name	Chemical Name	Application
GMS	Glycerol Monostearate	Antistatic agent



Lubricant

Trade Name	Chemical Name	Application
EBS Wax	Ethylene Bis Stearamide	Used as internal and external lubricants in many thermoplastic and thermosetting plastics, e.g. ABS, PS, PVC, PA, PE,PP, PC, POM, PBT phenolic resin. Used as dispersant of pigments, masterbatch, e.g. PE, PP ABS and PS.
Zinc Stearate	Zinc Stearate	Polystyrene H.I. and expandable, lubricant and mould releaser. PVC processing, it is mainly used for the stability and lubrication, and calcium soap or other metal composite stabilizer formula Polyethylene manufacture and processing, employed mainly as an acid acceptor and lubricant. Polyesters, used as lubricant and mould releaser
PE wax	Polyethylene Wax	Internal/External lubricants for thermoplastic, Improve the fluidity of PVC, PE, PP and ABS.
EBO	Ethylene Bis Oleamide	An anti-sticking agent and mould release aids for PE, PP films and PA. Anti-blocking agent and slop agent of EVA hot melt adhesive and PVC.

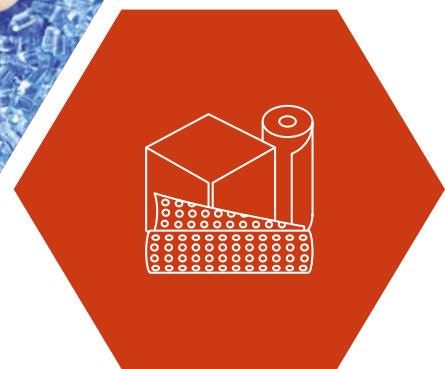


PVC additives

Trade Name	Application
PVC Processing Aid	PVC, Sheet, Film, Foam board, Profile, Pipe, Fitting.
PVC Foaming regulator	PVC Foam Shoes and WPC.
PVC Impact Modifier (MBS)	PVC Pipe, Fitting, Credit card.
PVC Impact Modifier (CPE)	PVC Foam board, Pipe, Roofing.
PVC Impact Modifier (ACM)	PVC Profile.

Antioxidant

Trade Name	Chemical Name	Application
AO 1010	Pentaerythritoltetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)	The product is especially suitable for polyolefin, engineering plastics, elastomer, adhesive, rubber and petroleum product.
AO 1076	Octadecyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate	The product is widely used in PP, PE, POE, ABS, PS, PVC, engineering plastics, synthetic fibers, elastomers, adhesives, wax, synthetic rubber and petroleum products.
AO 168	Tris(2,4-di-tert-butylphenyl)phosphite	The product is suitable for polyolefin, PC, TPU, ABS, PMMA, POM, PA, PET, PS, and also suitable for elastomers materials and products.
AO 3114	Tris(3,5-di-tert-butyl-4-hydroxybenzyl)isocyanurate	The product is especially suitable for PP, PE, PS, ABS, PVC, PA and PU, especially effective for polyolefin.
AO DLTPD	Dilauryl Thiodipropionate	This product is in plastics (PE, PP, PVE, ABS, HIBS, PET, PA), rubber, synthetic fiber, grease and other petrochemical products.



UV stabilizer

Trade Name	Chemical Name	Application
LS-770 (HALS)	Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	The product is suitable for PP, TPO, EPDM, PS, ABS, SAN, ASA, PU, and is also effective in PA and polyacetals.
LS-622 (HALS)	Poly(4-hydroxy-2,2,6,6-tetramethyl-1-piperidine ethanol-alt-1,4-butanedioic acid)	The product is particularly usefully in PE applications, injection molding, rotational molding, film and tape), EVA, PP fibers, PU, polyacetal, PA, elastomer, adhesive.
LS-783 (HALS)	Light Stabilizer 783 (compound light stabilizer)	The product is suitable for polyolefin, particularly effective in PP fiber, tape, thin or thick LLDPE, LDPE products.
LS-2020 (HALS)	N,N'-Bis(2,2,6,6-tetramethyl-4-piperidiny)-1,6-hexanediamine polymer with 2,4,6-trichloro-1,3,5-triazine reaction products with-butyl-1-butamine and N-butyl-2,2,6,6-tetramethyl-4-piperidinamine	The product is suitable for polyolefin materials, cross-linked polyethylene, olefin copolymer and other polymer materials.
UV-326	2-(5-Chloro-2H-benzotriazole-2-yl)-6-(1,1-di-methylethyl)-4-methylphenol	The product is mainly used for PVC, PS, unsaturated resin, PC, PMMA, PE, ABS, epoxy resin.
UV-234	2-(2H-Benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol	The product is mainly used for PC, polyesters, polyacetal, polyamides, polyphenylene sulfide, polyphenylene oxide, aromatic copolymer, thermoplastic polyurethane.



Other product solutions based on customer specific enquiry available

Contact

For more information feel free to reach out to the Polymer Additives experts at Polymer-additives.TH@biesterfeld.com

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Biesterfeld Thailand Ltd.

P.B. Tower 1000/44, 11 th Floor.

Sukumvit 71 rd.

North Klongtan, Wattana,

Bangkok. 10110

Phone: 02-107-0455

Fax: 02 713 3337

www.biesterfeld.com

Polymer-additives.TH@biesterfeld.com

