

Specialty Effects for Polymer Processing



Slip & Anti-block
Migrating Anti-static
Permanent Anti-static
Scratch Resistance
Anti-fog
Mold Release
Torque Release
Plasticization



Specialty Effects for Polymer Processing

Cargill is a leading global supplier of specialty ingredients for the plastics industry, working with our customers to meet market demands and consumer needs. Supported by scientific testing, Cargill's diverse range brings functionality and innovation together to deliver additives that offer differentiated solutions. This guide provides an overview of the polymer additive offering from Cargill, giving essential information for initial product selection.

Our product ranges are used in:

- Automotive applications
- Caps & closures
- Film structures
- Extrusion
- Rein production
- Foamed polymers
- Injection molding
- Liner compounds & plastisols

PRODUCT NAME	CHEMICAL DESCRIPTION	PHYSICAL FORM AT 25 °C	RAW MATERIAL ORIGIN	PRIMARY EFFECT	COMMENTS
Slip & Anti-block					
Optislip™ ER	Erucamide	Powder/Microbead/Bead	Vegetable	High slip	Polyolefins and copolymers, PVC and many other polymers
Optislip™ VRX	Oleamide	Powder/Bead	Vegetable	High slip	Polyolefins, PVC and many other polymers
Optislip™ OR	Oleamide	Powder/Pastille	Non-vegetable	High slip	Polyolefins, PVC and many other polymers
Optislip™ 203	Oleyl palmitamide	Bead	Vegetable	Medium slip	Polyolefins and laminated / co-extruded structures, polyamides and engineering polymers
Optislip™ 212	Stearyl erucamide	Bead	Vegetable	Medium slip	Polyolefins and laminated / co-extruded structures, polyamides and engineering polymers
Optislip™ EBO	Ethylene-bis-oleamide	Bead	Vegetable	Medium slip	Polyolefin polar copolymers and anti-tack agent for EVA
Optislip™ SR	Stearamide	Powder/Bead	Non-vegetable	Anti-block	Polyolefins
Optislip™ SRV	Stearamide	Bead	Vegetable	Anti-block	Polyolefins
Optislip™ BR	Behenamide	Bead	Vegetable	Anti-block	Polyolefins
Optislip™ EBS	Ethylene-bis-stearamide	Powder/Microbead/Bead	Non-vegetable	Anti-block, mold release, process aid	Polyolefins, PVC and engineering polymers
Optislip™ EBSV	Ethylene-bis-stearamide	Powder	Vegetable	Anti-block, mold release, process aid	Polyolefins, PVC and engineering polymers
Atmer™ 7772	50% concentrate in polyethylene	Pellet	Inorganic mineral	Anti-block, EPE foam nucleator	High loaded talc concentrate
High Performance Slip					
Incroslip™ SL	Proprietary	Bead	Vegetable	Slip, anti-scratch, torque release	For use when the ultimate in high slip and stability is required
Incroslip™ C	Proprietary	Powder/Bead	Vegetable	Torque release, slip	For use when high slip is required with good organoleptic properties
Incroslip™ Q	Proprietary	Bead	Vegetable	Torque release	For use when both slip and stability are required
Incroslip™ B	Proprietary	Bead	Vegetable	Torque release	For use when high stability is required
Incroslip™ G	Proprietary	Bead	Vegetable	Mold release, anti-scratch	For use when high slip, improved temperature and UV stability are required

POLYMER ADDITIVES

PRODUCT NAME	CHEMICAL DESCRIPTION	PHYSICAL FORM AT 25 °C	RAW MATERIAL ORIGIN	PRIMARY EFFECT	COMMENTS
Anti-static					
Permanent					
lonphase™ abSTAT	Proprietary	Pellets	Synthetic	Permanent anti-static	ABS and PP; in extrusion, compounding and injection molding. Suitable for thermoformed trays used in electronics industry and for various injection molding applications (ATEX, EPA, dust prevention).
lonphase™ eSTAT2	Proprietary	Pellets	Synthetic	Permanent anti-static	Styrenics (HIPS, GPPS); in extrusion. Suitable for thermoformed trays used in electronics industry.
lonphase™ fSTAT series	Proprietary	Pellets	Synthetic	Permanent anti-static	Polyolefins; in extrusion. For use in general extrusion applications such as films, bags, liners and thermoformable sheets.
lonphase™ hSTAT2	Proprietary	Pellets	Synthetic	Permanent anti-static	mPPO, PPS, PC and PBT; in compounding and injection molding. Recommended for engineering plastics requiring high processing temperatures.
lonphase™ rSTAT series	Proprietary	Pellets	Synthetic	Permanent anti-static	HDPE; in extrusion. Designed for extrusion blow molding applications (IBCs, drums, canisters).
lonphase™ trSTAT	Proprietary	Pellets	Synthetic	Permanent anti-static	PMMA, PLA, PVC; in extrusion, compounding and injection molding. For use in transparent PMMA applications and for low processing temperature polymers.
lonphase U1	Proprietary	Pellets	Synthetic	Permanent anti-static	PC blends (PC/ASA, PC/ABS), PMMA, TPU, SEBS; in extrusion, compounding and injection molding. Suitable for various injection molding and extrusion applications such as dust prevention in automotive interior parts and consumer appliances.
lonphase™ U2	Proprietary	Pellets	Synthetic	Permanent anti-static	Styrenics (PS, HIPS, ABS) and POM; in extrusion, compounding and injection molding. Recommended for thick POM sheets/profiles and various styrenics applications.
lonphase™ U3	Proprietary	Pellets	Synthetic	Permanent anti-static	HDPE, PS, PA12; in compounding and injection molding. Suitable for injection molding applications (ATEX, EPA, dust prevention).
lonphase™ PE0108M	Proprietary	Pellets	Synthetic	Permanent anti-static	Polyolefins; in extrusion. Suitable for blown film liners and other extrusion applications. Product has food contact compliancy according to EU 10/2011 regulation.

PRODUCT NAME	CHEMICAL DESCRIPTION	PHYSICAL FORM AT 25 °C	RAW MATERIAL ORIGIN	PRIMARY EFFECT	COMMENTS
Anti-static					
Migratory					
Atmer™ 122	Glycerol ester	Microbead	Vegetable	Anti-static, process aid, mold release	Polyolefins and flexible PVC Lubrication/anti-stat balance
Atmer™ 125†	Glycerol ester	Microbead	Vegetable	Anti-static, mold release	LDPE and flexible PVC Lubrication/anti-stat balance
Atmer™ 129	Glycerol ester	Microbead	Vegetable	Anti-static, mold release	Polyolefins and flexible PVC
Atmer™ 129 NV	Glycerol ester	Microbead	Non-vegetable	Anti-static, mold release	Polyolefins, EPEs and flexible PVC
Atmer™ 154	Alkoxylated fatty acid ester	Liquid	Vegetable/Synthetic	Anti-static	Flexible PVC
Atmer™ 190	Alkyl sulphonate	Pastille	Synthetic	Anti-static	HIPS, ABS, non-transparent rigid PVC
Atmer™ 262	Ethoxylated amine	Liquid	Vegetable/Synthetic	Anti-static	Polyolefins & styrenics
Atmer™ 1012	Glycerol ester	Pastille	Non-vegetable	Anti-static, process aid, mold release	Polyolefins and flexible PVC Lubrication/anti-stat balance
Atmer™ 1013	Glycerol ester	Pastille	Vegetable	Anti-static, mold release	Polyolefins
Atmer™ 1013 NV	Glycerol ester	Pastille	Non-vegetable	Anti-static, mold release	Polyolefins, EPEs and flexible PVC
Atmer™ 7001	50% concentrate in polypropylene	Pellet	Vegetable/Synthetic	Anti-static	Fast acting, long-lasting anti-static effect
Atmer™ 7002	50% concentrate in polypropylene	Pellet	Vegetable	Anti-static, mold release	Recommended for PP closures for anti-static and other mold release benefits
Atmer™ 7103	50% concentrate in polyethylene	Pellet	Vegetable/Synthetic	Anti-static	Mixture of additives to provide a synergistic anti-static effect
Atmer™ 7105	50% concentrate in polyethylene	Pellet	Vegetable/Synthetic	Anti-static	Fast acting, long-lasting anti-static effect
Atmer 7300	50% concentrate in polyethylene	Pellet	Non-vegetable	Processing aid, anti-static	Recommended for expanded polyethylene to improve cell size distribution and foaming gas/air exchange
Atmer™ 7306	40% concentrate in polypropylene	Pellet	Vegetable	Anti-static	Additional mold release benefits as well as effective anti-static agent with wide food approvals
Atmer™ 7325	30% concentrate in universal polyolefin carrier	Pellet	Non-vegetable/Synthetic	Anti-static	Mixture of additives to provide a synergistic anti-static effect
Externally coated					
Atmer™ 110	Ethoxylated sorbitan ester	Liquid	Vegetable/Synthetic	Anti-static (external)	All polymers, particularly PET
Atmer™ 116	Ethoxylated sorbitan ester	Liquid	Vegetable/Synthetic	Anti-static (external)	All polymers, particularly PET

† Only available for supply in Asia

POLYMER ADDITIVES

PRODUCT NAME	CHEMICAL DESCRIPTION	PHYSICAL FORM AT 25 °C	RAW MATERIAL ORIGIN	PRIMARY EFFECT	COMMENTS
Mold release					
IncroMold™ F	Proprietary	Bead	Vegetable	Mold release	Temperatures up to 230 °C, recommended for Polyolefins, such as PE
IncroMold™ S	Proprietary	Bead	Vegetable	Mold release	Temperatures up to 280 °C, recommended for Polyolefins, such as PP
IncroMold™ K	Proprietary	Bead	Vegetable	Mold release, scratch resistance	Temperatures above 280 °C, recommended for Polyolefins, such as PP and polar polymers such as Ionomers
IncroMold™ T	Proprietary	Bead	Vegetable	Mold release	Temperatures above 280 °C, recommended for polyamide
IncroMax™ PS	Proprietary	Powder/Bead	Vegetable	Friction reduction, mold release, scratch resistance	Recommended for use in styrenics and PMMA
IncroMax™ 100	Proprietary	Pastille	Vegetable	Friction reduction, mold release, scratch resistance	Recommended for use in PET and other polyester polymers
IncroMax™ 300	Proprietary	Liquid	Vegetable/Synthetic	Friction reduction, mold release, scratch resistance	Recommended for use in PC and polyester polymers
Atmer™ 7650	50% concentrate in PC carrier	Pellet	Vegetable/Synthetic	Friction reduction, mold release	Recommended for use in PC
IncroMax™ 400	Proprietary	Bead	Non-vegetable	Friction reduction, anti-tack	Recommended for high temperature or polar polymers, especially EVA
Anti-fog					
Atmer™ 100	Sorbitan ester	Liquid	Vegetable	Anti-fog	PE and EVA food wrap
Atmer™ 103	Sorbitan ester	Powder	Vegetable (Non-vegetable [§])	Anti-fog	Recommended for agricultural films in LDPE and PVC
Atmer™ 116	Ethoxylated sorbitan ester	Liquid	Vegetable/Synthetic	Anti-fog	Food wrap in conjunction with Atmer 1010. Especially suitable for PVC
Atmer™ 185	Glycerol ester	Microbead	Vegetable	Anti-fog	Recommended for agricultural films especially EVA
Atmer™ 1006[†]	Glycerol ester	Liquid	Vegetable	Anti-fog	Polyolefin food wrap
Atmer™ 1010[§]	Glycerol ester	Paste	Vegetable	Anti-fog	Cling in food wrap, used in conjunction with Atmer 116. Especially suitable for PVC
Atmer™ 1440 NV	Glycerol ester	Paste	Non-vegetable	Anti-fog	Polyolefin food wrap
Atmer™ 1440	Glycerol ester	Paste	Vegetable	Anti-fog	Polyolefin food wrap
Atmer™ 7301	50% concentrate in polyethylene	Pellet	Vegetable	Anti-fog	Long lasting benefits in agricultural film
Atmer™ 7326	50% concentrate in universal polyolefin carrier	Pellet	Vegetable	Anti-fog	Long lasting benefits for use in green house films, particularly multi-layer films
Atmer™ 7340	20% concentrate in polyethylene	Pellet	Non-vegetable	Anti-fog	Clear food wrap applications
Atmer™ 7373	40% concentrate in polypropylene	Pellet	Non-vegetable	Anti-fog	Long lasting benefits in hPP

[†] Only available for supply in Asia [§] Only available for supply in USA

PRODUCT NAME	CHEMICAL DESCRIPTION	PHYSICAL FORM AT 25 °C	RAW MATERIAL ORIGIN	PRIMARY EFFECT	COMMENTS
Plasticizers					
Syncroflex™ 3019	Di-fatty acid ester	Liquid	Vegetable/Synthetic	Plasticizer	PVC cables, gaskets, upholstery
Syncroflex™ 3142	Polyazelate ester	Liquid	Vegetable/Synthetic	Plasticizer	PVC flexible pipes, conveyor belts, oil resistant applications
Syncroflex™ 3157	Polyadipate ester	Liquid	Vegetable/Synthetic	Plasticizer	PVC electrical tapes, protective clothing, crash pads
Syncroflex™ 3159	Polyadipate ester	Liquid	Vegetable/Synthetic	Plasticizer	PVC can coating, conveyor belts, crash pads, NBR
Other specialties					
Atmer™ 163	Ethoxylated amine	Liquid	Synthetic	Process anti-static, anti-fouling agent, continuity additive	Recommended for polyolefin polymerization anti-fouling
Atmer™ 7749	75% concentrate in LDPE	Pellet	Inorganic/Synthetic	Flame retardant	For use in PE

Further Information

Cargill Bioindustrial sales and distribution are coordinated through an extensive worldwide network of technical and commercial experts. For further information or guidance please contact us:

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