

# Plastic additives for the electrical and electronic industry

#### Recommended additives for electrical components

Substrates* and typical applications	PS & LTTS*	Light stabilizers	Specialties
Polyamides for connectors	Irganox® 1098, Irganox® B 1171	Chimassorb® 2020, Tinuvin® 234, Tinuvin® 312 , Uvinul® 4050	Irgastat <sup>®</sup> P, Melapur <sup>®</sup> MC, Melapur <sup>®</sup> 200, Tinopal <sup>®</sup> OB
PET/PBT for connectors, solar panels, frames	Irgafos® 126, Irgafos® 168, Irganox® 245, Irganox® 1010, Irganox® B 561	Tinuvin® 234, Tinuvin® 622, Tinuvin® 1577	Irgastat® P, Melapur® 200, Tinopal® OB
PC for housings and frames	Irgafos® 168, Irganox® B 900	Tinuvin® 234, Tinuvin® 329, Tinuvin® 360, Tinuvin® 1577, Uvinul® 3030	
POM for a variety of parts	Irganox® 245, Irganox® 259, Irganox® 1010	Tinuvin® 144, Tinuvin® 234, Tinuvin® 622, Tinuvin® 770	Irgastat® P Tinopal® OB

<sup>\*</sup>Abbreviations: Please refer to the terminology

## Recommended additives for wire & cable

Substrates* and typical applications	PS & LTTS*	Light stabilizers	Specialties
HDPE for power cable jackets	Irganox® B-blends	Chimassorb® 2020	Irganox® MD 1024
LDPE for power cable insulation	Irganox® B-blends, Irgastab® Cable KV 10	Chimassorb® 2020	Irganox® MD 1024
Elastomers for jackets	Irganox® 565, Irganox® 1098, Irgastab® Cable KV 10	Chimassorb® 2020, Tinuvin® 234, Tinuvin® 622, Tinuvin® 770, Uvinul® 3035	
TPU for jackets	Irganox® 1010, Irganox® 1098, Irganox® 245, Irgafos® 168	Chimassorb® 81, Tinuvin® 326, Tinuvin® 571, Tinuvin® 622	Tinopal® OB
PVC for jackets	Irganox® 1010, Irganox® 1076	Chimassorb® 81 Tinuvin® XT 835	
PP, LDPE for low-voltage cable insulation and jackets	Irganox® B-blends	Chimassorb® 2020, Tinuvin® 622, Uvinul® 4050	Irganox® MD 1024

<sup>\*</sup>Abbreviations: Please refer to the terminology





## Recommended additives for PV applications

Substrates* and typical applications	PS & LTTS*	Light stabilizers	Specialties
EVA in encapsulants	Irganox® 1010, Irganox® 1076, Irgastab® FS 301	Chimassorb® 81, Tinuvin® 770, Tinuvin® 622	
PA/PBT in electrical components	Irganox® 245, Irganox® 1098, Irganox® B 1171, Irgafos® 126	Chimassorb® 2020, Tinuvin® 234, Tinuvin® 770, Uvinul® 4050	Melapur® 200 Melapur® MC
PET in backsheet films	Irganox® 1010, Irganox® B 561, Irgafos® 168, Irgafos® 126	Tinuvin® 1577 Tinuvin® 1600	
PET/PBT/PA in frames	Irganox® B 1171, Irganox® B 215, Irgafos® 126, Irgafos® 168	Tinuvin® 234, Tinuvin® 622, Tinuvin® 770, Tinuvin® 1577, Uvinul® 4050	Melapur <sup>®</sup> 200 Melapur <sup>®</sup> MC

### Recommended additives for housings

Substrates* and typical applications	PS & LTTS*	Light stabilizers	Specialties
ABS in consumer electronics	Irganox® 1076, Irganox® 245,	Tinuvin <sup>®</sup> 234, Tinuvin <sup>®</sup> 770,	Irgastat® P
	Irganox® B 900, Irganox® PS 800	Tinuvin <sup>®</sup> P, Uvinul <sup>®</sup> 4050	Tinopal® OB
PC/ABS in consumer electronics	Irgafos® 168, Irganox® 245, Irganox® 1076	Tinuvin® 234	Irgastat® P Tinopal® OB
PS, HIPS in appliances, white goods	Irganox® 245, Irganox® 1076,	Tinuvin® 234, Tinuvin® P,	Irgastat® P
	Irganox® B 900	Uvinul® 4050	Tinopal® OB
PC in components	Irgafos® 168, Irganox® B 900	Tinuvin® 234, Tinuvin® 329	Tinopal® OB
PA in power tools	Irganox® 245, Irganox® 1098,	Tinuvin® 234, Tinuvin® 770,	Melapur <sup>®</sup> 200
	Irganox® B 1171	Uvinul® 4050	Melapur <sup>®</sup> MC
PP in small appliances	Irganox® B 215, Irganox® B 225,	Chimassorb <sup>®</sup> 2020, Tinuvin <sup>®</sup> 326,	Irgaclear® XT, Irgastab® NA,
	Irganox® PS 802	Tinuvin <sup>®</sup> 783, Tinuvin <sup>®</sup> 791	Irgastat® P, Tinopal® OB
PBT/PET in components	Irgafos® 126, Irgafos® 168, Irganox® 245, Irganox® 1010	Tinuvin <sup>®</sup> 234, Tinuvin <sup>®</sup> 622, Tinuvin <sup>®</sup> 1577	Melapur® 200

<sup>\*</sup>Abbreviations: Please refer to the terminology

#### Terminology

ABS: Acrylonitrile Butadienestyrene
EBA: Ethylene Butyl Acrylate
EVA: Ethylene Butyl Acrylate
EVA: Ethylene-Vinyl Acetate
HDPE: High-Density Polyethylene
HIPS: High-Impact Polystyrene
LDPE: Low-Density Polyethylene
LLDPE: Linear Low-Density Polyethylene
LLDPE: Linear Low-Density Polyethylene
LS: Light Stabilizer
LTTS: Long-Term Thermal Stabilizer
PA: Polyamide
PBT: Polybutylene Terephtalate
PC: Polycarbonate
PE: Polyethylene
PES: Polyester
PET: Polyethylene Terephtalate
PMMA: Polymethylene Terephtalate
PMMA: Polymethylene
PES: Polyoster
PO: Polyogymethylene
PP: Polyorpopylene
PS: Polyostyrene
PS: Process Stabilizer
PU: Polyurethane
PVB: Polyvinylbutyral
PVC: Polyvinyl Chloride
TPO: Thermoplastic Polyolefin
TPU: Thermoplastic Polyurethane
UVA: UV Absorber

