



Plastic additives for the agricultural industry

Recommended additives for greenhouse and tunnel films

Benefit	HALS	UVA	Antioxidants
Long-lasting protection against UV light and heat Resistance to critical levels of sulfur (> 3000ppm) and chlorine (200ppm) Optimum optical properties for crops and natural pollinators	Tinuvin® NOR® 371 Tinuvin® NOR® 356	Tinuvin® 326 Tinuvin® 329	Irganox® range Irgafos® range
Long-lasting protection against UV light and heat Resistance to severe levels of sulfur (2000ppm) and chlorine (150ppm) Optimum light for crops and natural pollinators	Tinuvin® XT 200	Tinuvin® 326 Tinuvin® 329	Irganox® range Irgafos® range
Long-lasting protection against UV light and heat Resistance to severe levels of sulfur (> 1500ppm) and chlorine (100ppm) Optimum light for crops and natural pollinators	Tinuvin® 494 AR	Chimassorb® 81 Tinuvin® 326 Tinuvin® 329	Irganox® range Irgafos® range
Durable protection against UV light and heat Resistance to moderate levels of sulfur and chlorine Optimum light for crops and natural pollinators	Tinuvin® 111 Chimassorb® 2020 Chimassorb® 944 Tinuvin® 783	Chimassorb® 81 Tinuvin® 326 Tinuvin® 329	Irganox® range Irgafos® range

Recommended additives for mulch and soil disinfection films

Benefit	HALS	UVA	Antioxidants
Protection against UV light and heat Resistance to critical levels of sulfur and chlorine Low interaction with film pigmentation	Tinuvin® NOR® 371 Tinuvin® NOR® 356 Tinuvin® XT 200	not typically used	Irganox® range Irgafos® range
Protection against UV light and heat Resistance to severe levels of sulfur and chlorine	Tinuvin® 111	not typically used	Irganox® range Irgafos® range
Protection against UV light and heat Resistance to moderate levels of sulfur and chlorine	Chimassorb® 2020 Tinuvin® 783	not typically used	Irganox® range Irgafos® range

Recommended additives for silage films and bale wrap nets

Benefit	HALS	UVA	Antioxidants
Protection against UV light and heat Resistance to severe levels of sulfur and chlorine	Tinuvin® 111	not typically used	Irganox® range Irgafos® range
Protection against UV light and heat Resistance to moderate levels of sulfur and chlorine	Chimassorb® 2020 Tinuvin® 783	not typically used	Irganox® range Irgafos® range

Recommended additives for floating covers, drip irrigation pipes, nets, non-woven, twines, clips, substrate bags

Benefit	HALS	UVA	Antioxidants
Protection against UV light and heat Resistance to severe levels of sulfur and chlorine	Tinuvin® XT 200 Tinuvin® 494 AR Tinuvin® 111	Chimassorb® 81 Tinuvin® 326	Irganox® range Irgafos® range
Protection against UV light and heat Resistance to moderate levels of sulfur and chlorine	Chimassorb® 2020 Tinuvin® 783 Chimassorb® 944	Chimassorb® 81 Tinuvin® 326	Irganox® range Irgafos® range