
ADK STAB

Polymer Additives

Products List



POLYMER ADDITIVES R&D LABORATORY



MIE PLANT (ISO 9001, ISO 14001 and OHSAS 18001 factory)



ADK STAB

POLYMER ADDITIVES

Polymer additives are one of the essential materials for polyolefins and polyvinyl chloride to give longer life and special properties.

Based on over 60 years of experience and knowledge, ADEKA offers the best solution for you to meet your demands.

The products in this brochure are just a part of our portfolio. For more details, technical data or any other requests, please feel free to contact us.

ADEKA GROUP

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| CHINA | ADEKA (CHINA) CO., LTD. | Phone: 86-21-6229-6622 |
| KOREA | ADEKA KOREA CORP. | Phone: 82-2-726-0600 |
| SINGAPORE | ADEKA (ASIA) PTE. LTD. | Phone: 65-6776-8809 |
| THAILAND | ADEKA FINE CHEMICAL (THAILAND) CO., LTD. | Phone: 66-3-895-9032 |
| INDIA | ADEKA INDIA PVT.LTD | Phone: 91-22-4026-3301 |
| UAE | ADEKA AL GHURAIR ADDITIVES LLC | Phone: 971-2-5508-361 |
| FRANCE | ADEKA POLYMER ADDITIVES EUROPE SAS | Phone: 33-3-6875-0530 |
| USA | ADEKA CHEMICAL CORP. | Phone: 1-201-818-0159 |
| JAPAN | ADEKA CORPORATION | Phone: 81-03-4455-2845 |

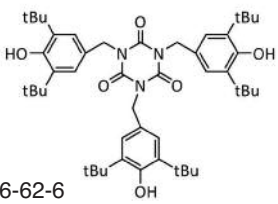
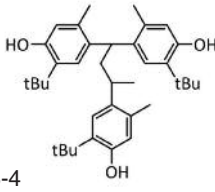
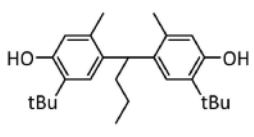
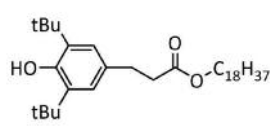
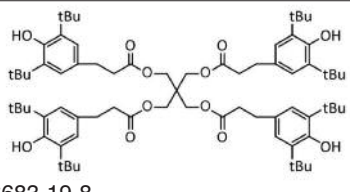
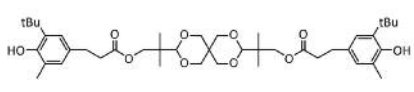
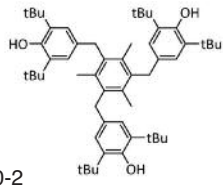
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ADK STAB HINDERED PHENOL TYPE ANTIOXIDANTS

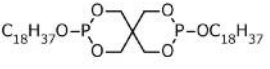

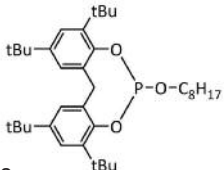
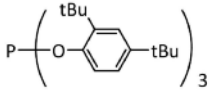
Hindered phenols are radical scavengers which prevent thermal degradation of many organics and polymeric materials. Showing synergistic effect when used with phosphites, thioethers and light stabilizers.

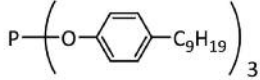
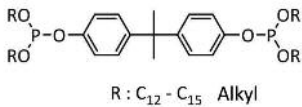
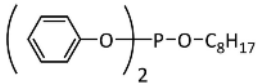
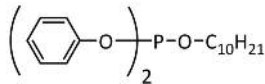
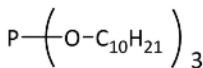
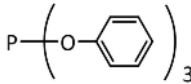
| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|-------------------------|---|--|--|---|
| | | | | US EU JAPAN Packaging |
| AO-20 |  27676-62-6 | White powder M.P. 220~222 C M.W.784 | <ul style="list-style-type: none"> • Excellent resistance to discoloration • Low volatility and excellent retention in the resin | Approved Approved [B]NM-0095 20kgB/G |
| AO-30 |  1843-03-4 | White powder M.P. 183~185 C M.W.545 | <ul style="list-style-type: none"> • Highly efficient radical scavenger due to sterically-less-hindered structure • Excellent resistance to extraction • For polymers which contain unsaturated bonds such as ABS and elastomers | Approved Approved [B]NM-0893 20kgB/G |
| AO-40 |  85-60-9 | White powder M.P. 210~214 C M.W.383 | <ul style="list-style-type: none"> • Highly efficient radical scavenger due to sterically-less-hindered structure • Good compatibility with many polymers • For polymers which contain unsaturated bonds such as ABS and elastomers | Approved — [B]NM-1038 20kgB/G |
| AO-50 AO-50F |  2082-79-3 | White powder (F: granule) M.P. 51~54 C M.W.531 | <ul style="list-style-type: none"> • Excellent compatibility with many polymers • Excellent resistance to discoloration | Approved Approved [B]NM-0894 20kgB/G |
| AO-60 AO-60G |  6683-19-8 | White powder (G: granule) M.P. 110~130 C M.W.1178 | <ul style="list-style-type: none"> • Very low volatility and excellent resistance to extraction due to high M.W • Excellent processing and long-term heat stabilization | Approved Approved [B]NL-0972 20kgB/G |
| AO-80 |  90498-90-1 | White powder M.P. 110~120 C M.W.741 | <ul style="list-style-type: none"> • Highly efficient radical scavenger • Exceptional processing and long-term heat stabilization • Excellent resistance to discoloration, particularly against NOx gas | Approved Approved [B]NL-1309 20kgB/G |
| AO-330 |  1709-70-2 | White powder M.P. 243~245 C M.W.775 | <ul style="list-style-type: none"> • Low volatility • Excellent resistance to extraction from the polymer, particularly in hot water | Approved Approved [B]NL-1119 20kgB/G |

* For detail information, please contact us.
JAPAN : This number is the "Resistry No." sanctioned by JHOSPA
(Japan Hygienic Olefin and Styrene Plastics Association)

ADK STAB PHOSPHITES

Phosphites are excellent peroxide decomposers, halogen acceptors and masking agents.
Phosphites provide good heat stability, color stability, process stability and weatherability to polymers.

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|------------------------------|---|---|---|------------------------------------|
| | | | | US EU JAPAN Packaging |
| PEP-8 |  C ₁₈ H ₃₇ O-P-O-C ₁₈ H ₃₇ 3806-34-6 | White flake Softening point 50~62°C M.W.733 | <ul style="list-style-type: none"> Reduces discoloration effectively during processing For resins which are easy to discolor | Approved — [B]NL-3037 |
| | | | | 15kgC/S |
| PEP-36 |  80693-00-1 | White powder M.P.234~240°C M.W.633 | <ul style="list-style-type: none"> Exceptional process stability Reduces discoloration effectively during processing For resins which need high-temperature processing and/or severe color stability | Approved Approved [B]NM-1310 |
| | | | | 20kgB/G |
| HP-10 |  126050-54-2 | White powder M.P.146~152°C M.W.583 | <ul style="list-style-type: none"> Excellent process stability Excellent compatibility with low-polar polymers such as PE and elastomers | Approved — [B]NL-1428 |
| | | | | 15kgC/S |
| 2112 2112RG |  31570-04-4 | White powder (RG: granule) M.P.180~190°C M.W.647 | <ul style="list-style-type: none"> Generic phosphite with the highest resistance to hydrolysis among commercial phosphites | Approved Approved [B]NM-0846 |
| | | | | 20kgB/G |

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|------------------------|--|--|--|--------------------------------|
| | | | | US EU JAPAN Packaging |
| 1178 |  26523-78-4 | Clear liquid Vis. 4000mPa · s M.W.689 | <ul style="list-style-type: none"> Highly cost-effective liquid phosphite For PS, ABS, PVC, elastomers, etc | — — [B]NL-0092 |
| | | | | 200kgD/M |
| 1500 |  96152-48-6 R : C ₁₂ - C ₁₅ Alkyl | Clear liquid Vis. 1200mPa · s M.W.approx. 1112 | <ul style="list-style-type: none"> Higher heat stability and resistance to hydrolysis than ADK STAB 1178 | Approved — [B]NL-0094 |
| | | | | 190kgD/M |
| C |  15647-08-2 | Clear liquid Vis. 10mPa · s M.W.346 | <ul style="list-style-type: none"> Generic alkylarylphosphite For PS, elastomers, etc | — — — |
| | | | | 200kgD/M |
| 135A |  26544-23-0 | Clear liquid Vis. 15mPa · s M.W.375 | | — — — |
| | | | | 200kgD/M |
| 3010 |  25448-25-3 | Clear liquid Vis. 20mPa · s M.W.503 | <ul style="list-style-type: none"> Trialkylphosphite Resistance to discoloration during/after processing For resins which require high-temperature processing | — — — |
| | | | | 180kgD/M |
| TPP |  101-02-0 | Clear liquid Vis. 18mPa · s M.W.310 | <ul style="list-style-type: none"> Generic arylphosphite Resistance to discoloration during/after processing For PS, PU, elastomers, etc | — — — |
| | | | | 200kgD/M |

● Usage note

Phosphite are easy to be hydrolyzed when exposed to humidity.
 Please store in the original container securely under cool and dry conditions.
 After opening, please use immediately.

ADK STAB BLEND TYPE ANTIOXIDANTS

Blended type AO is consisted from phenols and phosphites. Easy to use and offer high performance. The blend ratio is able to be arranged to meet specific requirements.

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|--------------------------------|-------------------------------|-----------------------------------|---|--|
| | | | | US EU JAPAN Packaging |
| A-611 A-611RG | AO-60/2112=1/1 | White powder (RG: granule) | • Mixture of ADK STAB AO-60 and ADK STAB 2112 | Approved Approved [B]NL-4243 20kgB/G |
| A-612 A-612RG | AO-60/2112=1/2 | White powder (RG: granule) | • Protects polymers effectively against thermal degradation during/after processing • Provides long-term heat stabilization for the life time of the article due to the synergistic effect of phenolic antioxidant and phosphite | Approved Approved [B]NL-4244 20kgB/G |
| A-613 A-613RG | AO-60/2112=1/3 | White powder (RG: granule) | | Approved Approved [B]NL-4245 20kgB/G |
| A-512RG | AO-50/2112=1/2 | White granule | • Mixture of ADK STAB AO-50 and ADK STAB 2112 • Protects polymers effectively against thermal degradation during / after processing | Approved Approved [B]NM-36318 20kgB/G |
| AO-15 | Blend | White powder M.P. 206~219 C | • Provides excellent resistance to discoloration against heat and/or light and/or NOx gas • For polyolefins, rubber, PBT | Approved — [B]NM-3035 15kgC/S |
| AO-18 | Blend | White powder M.P. \geq 210 C | • Provides long-term heat stabilization for filled/cross-linked polyolefins | Approved — — 12kgC/S |

ADK STAB THIOETHERS

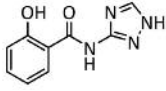
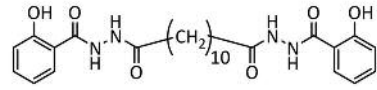
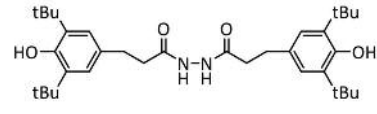
Thioethers decompose polymer peroxide to inert substance. Particularly, thioethers exhibit remarkable synergistic effect in combination with hindered phenols.

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|------------------------|---|---|--|--------------------------------|
| | | | | US EU JAPAN Packaging |
| AO-412S | 29598-76-3 R : C ₁₂ alkyl | White powder M.P.46~52 C M.W.1162 | • Excellent long-term heat stability compared to DLTDP or DSTDP • Very low volatility • Excellent resistance to extraction | Approved — — 10kgC/S |
| AO-503 | 10595-72-9 | Clear liquid Vis. 55mPa·s M.W.543 | • Liquid type • Good dispersibility/solubility in adhesives, coatings, latexes, etc | — — — 16kgC/N |

* For detail information, please contact us.
JAPAN : This number is the "Resistry No." sanctioned by JHOSPA (Japan Hygienic Olefin and Styrene Plastics Association)

ADK STAB METAL DEACTIVATORS

Metal deactivators prevent oxidative degradation caused by copper or other metal by chelating them.
Suitable for wire and cable application.

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|------------------------|--|--|---|---|
| | | | | US EU JAPAN Packaging |
| CDA-1 |  36411-52-6 | White powder M.P.315~325 C M.W.204 | <ul style="list-style-type: none"> • Excellent metal deactivator • Non discoloring • For Polyolefins, ABS & Others | — — — 10kgC/S |
| CDA-1M | Blend 36411-52-6 (main component) | White powder M.P.≥214 C | | — — — 10kgC/S |
| CDA-6 |  63245-38-5 | White powder M.P.209~215 C M.W.498 | | — — — 10kgC/S |
| CDA-10 |  32687-78-8 | White powder M.P.224~229 C M.W.553 | | <ul style="list-style-type: none"> • Low cost conventional type • For Polyolefins, ABS & Others |

ADK STAB ADDITIVES FOR FILLED POLYMERS

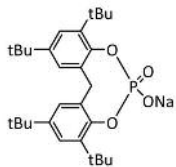
Specialized for filled polymers. Improves heat stability and processing stability etc.

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|------------------------|------------------------------------|----------------------------|---|---|
| | | | | US EU JAPAN Packaging |
| ZS-27 | Blend 108-78-1 (main component) | White powder M.P.≥65 C | <ul style="list-style-type: none"> • Effective heat stabilizing metal deactivator • For filled PP | — — [B]PM-3232 15kgC/S |
| ZS-90 | Blend | White powder M.P.>110 C | <ul style="list-style-type: none"> • Improves compatibility with filled PP | Approved Approved [B]PL-3812 15kgC/S |
| ZS-91 | Blend | White powder M.P.>110 C | <ul style="list-style-type: none"> • For filled PP | Approved Approved [B]NL-3871 15kgC/S |

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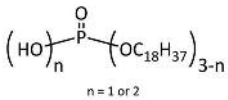
ADK STAB NUCLEATING AGENTS / CLARIFIERS

Nucleating agents give high degree of crystallinity to polymers, providing higher mechanical properties such as hardness, elasticity modulus etc, and improve optical properties such as transparency.

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|------------------------|---|--|--|-------------------------------------|
| | | | | US EU JAPAN |
| | | | | Packaging |
| NA-11 |  85209-91-2 | White powder M.P. ≥ 400 °C M.W. 508 | <ul style="list-style-type: none"> Effectively improves stiffness, heat distortion temperature, crystallization temperature/rate and clarity of PP High resistance to heat and extraction Odorless | Approved Approved [B]NL-1174 |
| | | | | 10kgC/S |
| NA-27 | Blend | White powder M.P. ≥ 210 °C | <ul style="list-style-type: none"> Effectively improves stiffness, heat distortion temperature, crystallization temperature/rate and clarity of PP Better performance than NA-11, particularly in one pack granule for | Approved Approved [B]PL-36058 |
| | | | | 10kgC/S |
| NA-902 | Blend | White powder M.P. ≥ 210 °C | <ul style="list-style-type: none"> Highly cost-effective For Polyolefins | Approved Approved [B]PL-36013 |
| | | | | 10kgC/S |
| NA-21 | Blend 151841-65-5 (main component) | White powder M.P. ≥ 210 °C | <ul style="list-style-type: none"> Improves both transparency and mechanical properties effectively Superior performance, even at lower loading level, compared to conventional clarifiers | Approved Approved [B]NL-4108 |
| | | | | 10kgC/S |
| NA-71 | Blend | White powder M.P. ≥ 210 °C | <ul style="list-style-type: none"> Odorless For Polyolefins | Approved Approved [B]PL-5290 |
| | | | | 10kgC/S |

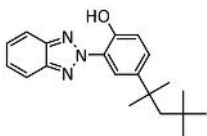
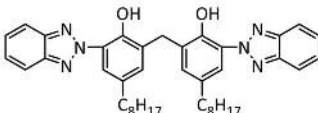
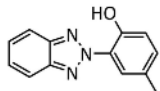
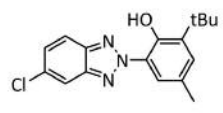
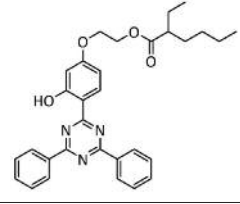
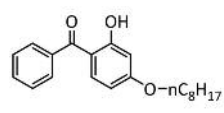
ADK STAB LUBRICANTS

Lubricants improve internal and external fluidity of polymers during processing

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
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| | | | | US EU JAPAN |
| | | | | Packaging |
| FC-113 | Blend 25767-47-9 (main component) | White powder Softening point 100~125 °C | <ul style="list-style-type: none"> Excellent lubricant for FR-ABS & others | Approved — — |
| | | | | 15kgC/S |
| AX-71 |  39471-52-8 | Light amber flake M.P. 68~75 °C M.W. 490 | <ul style="list-style-type: none"> Excellent lubricant for EVA, TPE & Others Catalyst-deactivator for Polyesters | — Approved — |
| | | | | 15kgC/S |

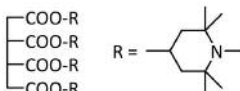
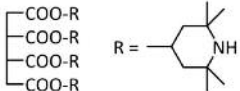
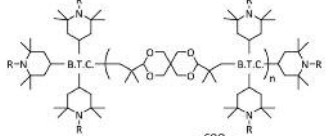

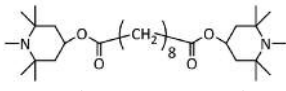
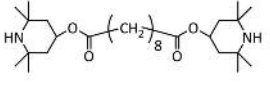
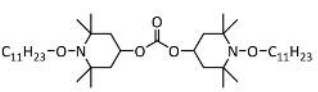
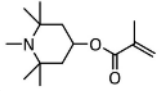
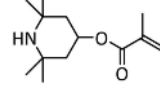
ADK STAB UV ABSORBERS

UV absorbers convert photochemical energy of light into harmless heat, prevent polymers from degradation. Showing excellent synergistic effect when used with HALS.

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|---------------------------------|--|--|---|--|
| | | | | US EU JAPAN Packaging |
| LA-29 |  3147-75-9 | Pale yellow powder M.P.102~106 C M.W.323 | <ul style="list-style-type: none"> • Less initial coloration • Low volatility • Good compatibility with many polymers | Approved |
| | | | | — [B]NM-13068 20kgB/G |
| LA-31RG LA-31G |  103597-45-1 | Light yellow powder (G: granule) M.P.194~200 C M.W.659 | <ul style="list-style-type: none"> • Very low volatility due to high M.W • Excellent thermal stability • Excellent long term retention in the resin • For engineering plastics requiring high processing temperatures | Approved |
| | | | | — [B]NM-1672 [B]QM-2442 15kgC/S LA-31G:20kgB/G |
| LA-32 |  2440-22-4 | Pale yellow powder M.P.127~132 C M.W.225 | <ul style="list-style-type: none"> • Strong UV absorber • Less initial coloration • For PVC, PS, PU, Acrylic resins, elastomers, etc | Approved |
| | | | | Approved [B]NL-0895 20kgB/G |
| LA-36 LA-36RG |  3896-11-5 | Pale yellow powder(RG: granule) M.P.138~141 C M.W.315 | <ul style="list-style-type: none"> • Common benzotriazole-type UVA • Excellent absorption in longer-wavelength UV regions, compared to other benzotriazole-type UVAs | Approved |
| | | | | Approved [B]NL-0896 20kgB/G |
| LA-46 |  371146-04-2 | Light yellow powder M.P.106~108 C M.W.512 | <ul style="list-style-type: none"> • High absorption from 280nm to 300nm wavelength • Excellent thermal stability and discoloration resistance against heat • Low volatility | — |
| | | | | — — |
| 1413 |  1843-05-6 | Pale yellow powder M.P.47~49 C M.W.326 | <ul style="list-style-type: none"> • Benzophenone-type UVA • Less initial coloration • High absorption in short-wavelength • Good compatibility with many polymers | Approved |
| | | | | Approved [B]NM-0098 10kgC/S |

ADK STAB HINDERED AMINE LIGHT STABILIZERS

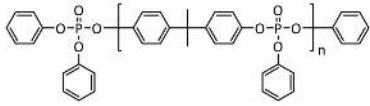
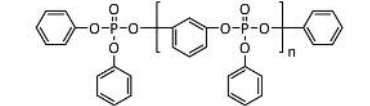
Hindered amine light stabilizers (HALS) shows excellent UV protection by scavenging radicals generated by photo degradation.

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|--------------------------|---|--|---|--|
| | | | | US EU JAPAN Packaging |
| LA-52 |  91788-83-9 | Pale yellow powder M.P. > 65 °C M.W. 847 | <ul style="list-style-type: none"> Low basic N-CH₃-type HALS with high amine content Provides excellent light/heat stability, especially to filled/pigmented polymers | — — [B]PM-2311 15kgC/S |
| LA-57 |  64022-61-3 | Pale yellow powder M.P. 125~135 °C M.W. 791 | <ul style="list-style-type: none"> N-H-type HALS with high amine content Provides excellent light stability to many polymers | — — — 10kgC/S |
| LA-63P |  101357-36-2 85631-00-1 | Pale yellow powder M.P. 85 °C~105 °C M.W. approx. 2000 | <ul style="list-style-type: none"> High molecular weight HALS Very low volatility Excellent resistance to extraction Provides excellent light stability to thin applications, such as olefin films and engineering plastics which require high processing temperature | — — — 10kgC/S |
| LA-68 |  101357-37-3 85631-01-2 | Pale yellow powder M.P. 80 °C~110 °C M.W. approx. 1900 | <ul style="list-style-type: none"> Provides excellent light stability to thin applications, such as olefin films and engineering plastics which require high processing temperature | — — — 10kgC/S |
| LA-72 |  41556-26-7 (main component) | Light yellow liquid SG. 0.99 Vis. 240mPa·s | <ul style="list-style-type: none"> Liquid HALS Main component is N-CH₃-type HALS Good dispersibility/solubility in coatings, sealants, etc | — — — 16kgC/N |
| LA-77Y LA-77G |  52829-07-9 | White powder (G: granule) M.P. 82 °C~87 °C M.W. 481 | <ul style="list-style-type: none"> Low molecular weight N-H-type HALS Provides excellent light stability to polymer molded articles, etc | Approved — [B]NM-1679 20kgB/G |
| LA-81 |  705257-84-7 | Light yellow liquid SG 0.94 Vis. 1600mPa·s M.W. 681 | <ul style="list-style-type: none"> Very low basic NO-Alkyl-type HALS Provides excellent light stability to low-polar polymers, such as polyolefins, etc Particularly for applications exposed to acid compounds such as agrochemicals | — — — 16kgC/N |
| LA-82 |  68548-08-3 | Clear liquid Vis. 12mPa·s M.W. 239 | <ul style="list-style-type: none"> Polymerizable HALS having metacrylate group Copolymerizable with a variety of monomers | — — — 15kgC/N |
| LA-87 |  31582-45-3 | Pale yellow powder M.P. 58 °C~60 °C M.W. 225 | <ul style="list-style-type: none"> Copolymerizable with a variety of monomers | — — — 15kgC/S |
| LA-402AF | Blend 167078-06-0 (main component) | Light yellow pellet Softening ≥ 120 °C | <ul style="list-style-type: none"> Light stabilizer system PP masterbatch Designed for use in pigmented polyolefins Excellent compatibility with polyolefins For PP/TPE automotive parts | — — — 20kgB/G |
| LA-502XP | Blend 91788-83-9 (main component) | Light yellow pellet Softening ≥ 120 °C | <ul style="list-style-type: none"> Light stabilizer system PP masterbatch Designed for use in pigmented polyolefins Main component is LA-52 For PP/TPE automotive parts | — — [B]PM-4859 20kgB/G |

* For detail information, please contact us.
JAPAN : This number is the "Resistry No." sanctioned by JHOSPA (Japan Hygienic Olefin and Styrene Plastics Association)

ADK STAB FLAME RETARDANTS

Flame retardants give flame retardancy to plastics and make them applicable for electronic equipments parts or construction materials. Our FR products are all halogen free and generate much less smoke.

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|------------------------|---|---|---|--------------------------------|
| | | | | US EU JAPAN Packaging |
| FP-600 |  5945-33-5, 181028-79-5 | Colorless viscous liquid Vis. >20000mPa·s | <ul style="list-style-type: none"> • Halogen-free liquid type oligomeric phosphate flame retardant for engineering plastics • Hydrolysis stability, thermal stability and low volatility | — — — 220kgD/M |
| PFR |  125997-21-9 | Colorless viscous liquid Vis. 500~800mPa·s | <ul style="list-style-type: none"> • Halogen-free liquid type oligomeric phosphate flame retardant for engineering plastics • High phosphorus content and low volatility | — — — 220kgD/M |
| FP-2100JC | Blend | White powder | <ul style="list-style-type: none"> • Halogen-free intumescent flame retardant for polyolefins, TPE, etc • Less effect on mechanical properties and density compared with metal hydroxides • Generates almost no smoke and CO during combustion • Higher heat stability than FP-2200S | — — — 20kgB/G |
| FP-2200S | Blend | White powder | <ul style="list-style-type: none"> • Halogen-free intumescent flame retardant for polyolefins, TPE, etc • Less effect on mechanical properties and density compared with metal hydroxides • Generates almost no smoke and CO during combustion • Higher heat stability than other intumescent types • Offers the highest performance in the series | — — — 20kgB/G |
| FP-2500S | Blend | White powder | <ul style="list-style-type: none"> • Less dust type of FP-2200S | — — — 20kgB/G |

● Usage note

Intumescent flame retardant could aggregate and lead to processing trouble under humid condition. Please use immediately after opening.

OTHERS

| ADK STAB Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
|--------------------------------|-------------------------------|--|---|----------------------------------|
| | | | | US EU JAPAN Packaging |
| LX-803A | Blend | White suspension | <ul style="list-style-type: none"> • Non-staining AO for rubber latex • Improving stain and color • For SBR latex and others | — — — 17kgC/N |
| ADK CIZER Trade name | Chemical structure CAS-No. | Properties | Features and applications | Food contact approval* |
| BF-1000 | Epoxidized 1,2-polybutadiene | Colorless liquid SG (30 C) 0.96 Vis. (45 C) 15000~50000mPa·s M.W. approx. 1000 | <ul style="list-style-type: none"> • Having epoxy group and vinyl group • For Coating, Adhesives & Others | — — [B]EL-2605 17kgC/N |
| D-32 | Epoxidized octyl stearate | Colorless liquid SG (30 C) 0.915 Vis. 52mPa·s | <ul style="list-style-type: none"> • For Polyolefins | — — [B]NL-0096 180kgD/M |

* For detail information, please contact us.
JAPAN : This number is the "Resistry No." sanctioned by JHOSPA
(Japan Hygienic Olefin and Styrene Plastics Association)



NETWORK & TESTING INSTRUMENTS



JAPAN

HEAD OFFICE

7-2-35, Higashi-ogu, Arakawa-ku Tokyo
116-8554, JAPAN
Phone:81-3-4455-2845

POLYMER ADDITIVES R&D LABORATORY

5-2-13, Shirahata, Minami-ku Saitama-shi,
Saitama 336-0022, JAPAN
Phone:81-48-838-2222

MIE PLANT

3707-1, Yamada, Touin-cho, Inabe-gun,
Mie 511-0251, JAPAN
Phone:81-594-76-2330

GLOBAL NETWORK

ADEKA KOREA CORP.

(Sogong-dong, Seoul Center Bldg), 301, 116, Sogong-ro, Jung-gu, Seoul, Korea
Phone:82-2-726-0600 Fax:82-2-753-8069

ADEKA (CHINA) CO., LTD.

Rm.1006-1010, 10F METRO PLAZA, No.555 Loushanguan Road, Shanghai 200051, CHINA
Phone:86-21-6229-6622 Fax:86-21-6228-7290

ADEKA FINE CHEMICAL (SHANGHAI) CO., LTD.

228 Banqiao East Road, Shanyang Town, Jinshan District, Shanghai 201508, CHINA
Phone:86-21-5724-5988 Fax:86-21-5724-5829

ADEKA FINE CHEMICAL (CHANGSHU) CO., LTD.

No.101, Changechun RD., Riverside Industrial Park, Changshu Economic Development
Zone, Jiangsu 215537, CHINA
Phone:86-512-5264-8000 Fax:86-512-5264-6575

CHANG CHIANG CHEMICAL (SHANGHAI) CO., LTD.

Room 708, Lotus Plaza, Tower 1, No.7866, Humin Road, Shanghai, China 201102
Phone:86-21-6428-4415 Fax:86-21-6428-4417

CHANG CHIANG CHEMICAL CO., LTD.

No.237, 16th fl., Songkiang Road, Taipei 10477 TAIWAN R.O.C
Phone:886-2-2509-7431 Fax:886-2-2509-7433

ADEKA FINE CHEMICAL (THAILAND) CO., LTD.

Eastern Seaboard Industrial Estate (Rayong), 300/12 Moo 1, Tambon Tasit,
Amphur Pluak Daeng, Rayong, 21140, THAILAND
Phone:66-3-895-9032 Fax:66-3-895-9036

ADEKA (ASIA) PTE. LTD.

8 Jurong Town Hall Road, #23-02 The JTC Summit, Singapore 609434
Phone:65-6776-8809 Fax:65-6778-5731

ADEKA INDIA PVT.LTD.

Unit 206 & 207, B-Wing, Dynasty Business Park, Andheri-Kurla Road, Andheri East, Mumbai-
400059, INDIA
Phone:91-22-4026-3301 Fax:91-22-4026-3306

ADEKA AL GHURAIR ADDITIVES LLC

Industrial City of Abu Dhabi 1, Plot No. 37B4, Abu Dhabi, UAE (P.O.Box 40306)
Phone:971-2-5508-361 Fax:971-2-5508-396

ADEKA EUROPE GmbH

Berliner Allee 22, 40212 Dusseldorf, GERMANY
Phone:49-211-179-2450 Fax:49-211-171-0470

ADEKA POLYMAR ADDITIVES EUROPE SAS

13 rue du 17 Novembre, FR-68100, Mulhouse, FRANCE
Phone:33-3-6875-0530 Fax:33-3-8942-8389

AMFINE CHEMICAL CORP.

777 TERRACE AVENUE, SUITE #602B, HASBROUCK HEIGHTS, NJ 07604, USA
Phone:1-201-818-0159 Fax:1-201-818-0259

ADEKA BRAZIL LTDA

Rua Cubatao, 86-Conjunto 509/510, Paraiso, Sao Paulo-SP, CEP 04013-000 BRAZIL
Phone:55-11-3080-2666

The Representative Office of ADEKA Corporation in Ho Chi Minh City

Room#25, 9th Floor, 180 - 192 Nguyen Cong Tru Street, Nguyen Thai Binh Ward,
District 1, Ho Chi Minh City, Vietnam
Phone:84-8-6287-9138 Fax:84-8-6288-4692

TESTING INSTRUMENTS

Processing & Processability

Single screw extruder
Twin screw extruder
Injection molding machine
Press
Calender roll
Henschel mixer
Flow tester
Plastograph
Melt indexer

Weathering & Heat Aging

Xenon weather meter
(xenon arc lamp)
Sunshine weather meter
(carbon arc lamp)
Dew panel weather meter
(fluorescent lamp)
Super UV tester
(metal halide lamp)
Outdoor exposure
(Shizuoka, JAPAN)
Humidity cabinet
Geer oven

Physical Properties

Tensile tester
Stiffness tester
(Charpy, Izod, tensile)
Torsion tester
(Clash-Berg)
Brittleness tester
Surface tension meter
Falling ball impact tester
Colorimeter
Contact angle meter
Haze meter
Gloss meter
Color meter
Surface resistivity meter
Volume resistivity meter

Analyses

GC
HPLC
FT-IR
FT-NMR
Ultraviolet-visible Spectrophotometer
Atomic absorption spectrometer
X-ray fluorescence analyzer
Mass spectrometer
ICP spectrometer
Fluorescence spectrometer
TG-DTA
DSC
Oxygen index meter
Cone Calorimeter

APPLICATION TABLE

| ADK STAB Trade name | Polyolefins | | | | | Styrenics | | | Engineering Plastics | | | | | | | Others | | | | |
|------------------------|-------------|------|-------|------|--------|-----------|------|-----|----------------------|-----|----|-----|-----|----|------|---------|-----|-----|-------|---------|
| | PP | HDPE | LLDPE | LDPE | Others | HIPS | GPPS | ABS | PBT | PET | PC | POM | PPO | PA | PMMA | Sealant | PUR | PVC | Latex | Coating |
| AO-20 | ■ | ■ | | | | | | ■ | | | | | ■ | ■ | | | ■ | ■ | | |
| AO-30 | ■ | ■ | | | | | | ■ | | | | | ■ | ■ | | | | | ■ | |
| AO-40 | | | | | | | | ■ | | | | ■ | | | | | | | ■ | |
| AO-50 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | | | | | ■ | | ■ | ■ | ■ |
| AO-60 | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | ■ |
| AO-80 | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ | ■ | | ■ | | ■ | ■ | ■ | ■ | | ■ | |
| AO-330 | ■ | ■ | ■ | | | | | | ■ | ■ | | | | ■ | | | | | | |
| PEP-8 | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ | ■ | ■ | | | ■ | ■ | | | ■ | | |
| PEP-36 | ■ | ■ | | | ■ | ■ | | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | |
| HP-10 | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | | ■ | | |
| 2112 | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | ■ |
| 1178 | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | | | ■ | ■ | ■ | ■ |
| 1500 | | | | | | ■ | | ■ | | | ■ | | | | | | | ■ | | |
| C | | | | | | ■ | | ■ | | | ■ | | | | | | | ■ | | |
| 135A | | | | | | ■ | | ■ | | | ■ | | | | | | | ■ | | |
| 3010 | | | | | | | | | | | | | ■ | | | | ■ | ■ | | |
| TPP | | | | | | | | | | | | | | | | | ■ | | | |
| AO-412S | ■ | ■ | | ■ | | | | ■ | ■ | | ■ | | ■ | ■ | | | ■ | | ■ | |
| AO-503 | | | | ■ | ■ | | | ■ | ■ | | | | | | | ■ | ■ | | ■ | |
| A-611 | ■ | ■ | ■ | ■ | ■ | | | ■ | | | ■ | | | ■ | ■ | | | | | |
| A-612 | ■ | ■ | ■ | ■ | ■ | | | ■ | | | ■ | | | ■ | ■ | | | | | |
| A-613 | ■ | ■ | ■ | ■ | ■ | | | ■ | | | ■ | | | ■ | | | | | | |
| A-512RG | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | |
| AO-15 | ■ | ■ | | | | | | ■ | ■ | | | | | ■ | | | | | | |
| AO-18 | ■ | | | ■ | | | | | ■ | | | | | ■ | | | | | | |
| CDA-1 | ■ | ■ | ■ | ■ | | | | ■ | | | | | ■ | | | | | | ■ | |
| CDA-1M | ■ | ■ | ■ | | | | | ■ | | | | | | | | | | | | |
| CDA-6 | ■ | ■ | ■ | ■ | | | | ■ | | | | | ■ | | | | | | ■ | |
| CDA-10 | ■ | ■ | ■ | ■ | | | | ■ | | | | | ■ | | | | | | ■ | |
| ZS-27 | ■ | | | | | | | | | | | | | | | | | | | |
| ZS-90 | ■ | | | | ■ | | | | | | | | | | | | | | | |
| ZS-91 | ■ | | | | ■ | | | | | | | | | | | | | | | |

■ Recommended ■ Applicable

| ADK STAB Trade name | Polyolefins | | | | | Styrenics | | | Engineering Plastics | | | | | | | Others | | | | |
|------------------------|-------------|------|-------|------|--------|-----------|------|-----|----------------------|-----|----|-----|-----|----|------|---------|-----|-----|-------|---------|
| | PP | HDPE | LLDPE | LDPE | Others | HIPS | GPPS | ABS | PBT | PET | PC | POM | PPO | PA | PMMA | Sealant | PUR | PVC | Latex | Coating |
| NA-11 | ■ | ■ | | | ■ | | | | | | | | | | | | | | | |
| NA-27 | ■ | ■ | | | | | | | | | | | | | | | | | | |
| NA-902 | ■ | ■ | | | | | | | | | | | | | | | | | | |
| NA-21 | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | | |
| NA-71 | ■ | ■ | ■ | ■ | | | | ■ | | | | | | | | | | | | |
| FC-113 | | | | | | | | ■ | | | | | | | | | | ■ | | |
| AX-71 | | | | | ■ | | | | ■ | ■ | ■ | | | | | | | | | |
| LA-29 | | | | | | ■ | | ■ | | | ■ | | | | ■ | | | ■ | | |
| LA-31RG | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | ■ | | | ■ | | |
| LA-32 | ■ | | | | | ■ | ■ | ■ | ■ | | ■ | | ■ | | | | ■ | ■ | | |
| LA-36 | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | | ■ | | ■ | | | ■ | | ■ | | ■ |
| LA-46 | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | | | | ■ | ■ | ■ | ■ | | ■ |
| 1413 | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | | | | | | | | ■ | ■ | ■ | | ■ |
| LA-52 | ■ | ■ | | | | ■ | | ■ | | | | ■ | ■ | ■ | ■ | ■ | | | | ■ |
| LA-57 | ■ | ■ | | | | ■ | ■ | ■ | | | | | | ■ | ■ | ■ | | ■ | | |
| LA-63P | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ | | | ■ | ■ | | ■ | ■ | ■ | ■ | | ■ |
| LA-68 | ■ | ■ | ■ | ■ | | | | ■ | ■ | | | | | | | ■ | | | | |
| LA-72 | ■ | ■ | | | | | | | | | | | | | | ■ | | | | ■ |
| LA-77Y | ■ | ■ | | | | ■ | ■ | ■ | | | | | | | | ■ | | | | ■ |
| LA-81 | ■ | ■ | ■ | ■ | ■ | | | ■ | | | | | | | | ■ | | ■ | | ■ |
| LA-82 | | | | | | | | | | | | | | | | | | | | ■ |
| LA-87 | | | | | | | | | | | | | | | | | | | | ■ |
| LA-402AF | ■ | | | | ■ | | | | | | | | | | | | | | | |
| LA-502XP | ■ | | | | ■ | | | | | | | | | | | | | | | |
| FP-600 | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | | ■ | ■ | | | |
| PFR | | | | | | ■ | ■ | ■ | | | ■ | | ■ | | | | | | | |
| FP-2100JC | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| FP-2200S | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| FP-2500S | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| LX-803A | | | | | | | | ■ | | | | | | | | | | | ■ | ■ |

| ADK CIZER Trade name | Polyolefins | | | | | Styrenics | | | Engineering Plastics | | | | | | | Others | | | | |
|-------------------------|-------------|------|-------|------|--------|-----------|------|-----|----------------------|-----|----|-----|-----|----|------|---------|-----|-----|-------|---------|
| | PP | HDPE | LLDPE | LDPE | Others | HIPS | GPPS | ABS | PBT | PET | PC | POM | PPO | PA | PMMA | Sealant | PUR | PVC | Latex | Coating |
| BF-1000 | | ■ | ■ | ■ | | | | | | | | | | | | | | | | |
| D-32 | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |

NOTES

Review SAFETY DATA SHEET (SDS) before use.

The data shown in this brochure are based on specific method and typical analysis.

The data shown in this brochure may be changed without notice.

The application and the data in this brochure do not warrant final function of your application.

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※Please feel free to contact our R&D or sales section for more detail.



<http://www.adeka.co.jp>

HEAD OFFICE (POLYMER ADDITIVES SALES DEPT.)
POLYMER ADDITIVES R&D

7-2-35 Higashi-ogu, Arakawa-ku, Tokyo 116-8554, JAPAN
5-2-13 Shirahata, Minami-ku, Saitama City, Saitama 336-0022, JAPAN

Tel: 81-3-4455-2845
Tel: 81-48-838-2222



CHINA ADEKA (CHINA) CO.,LTD.

Rm.1006-1010, 10F METRO PLAZA, No.555 Loushanguan Road, Shanghai 200051, CHINA

Tel: 86-21-6229-6622

KOREA ADEKA KOREA CORP.

(Sogong-dong, Seoul Center Bldg), 301, 116, Sogong-ro, Jung-gu, Seoul, Korea

Tel: 82-2-726-0600

SINGAPORE ADEKA (ASIA) PTE.LTD.

8 Jurong Town Hall Road, #23-02 The JTC Summit, Singapore 609434

Tel: 65-6776-8809

THAILAND ADEKA FINE CHEMICAL (THAILAND) CO.,LTD.

Eastern Seaboard Industrial Estate (Rayong), 300/12 Moo 1, Tambon, Tasit,
Amphur Pluak Daeng, Rayong, 21140, THAILAND

Tel: 66-3-895-9032

INDIA ADEKA INDIA PVT.LTD

Unit 202, B-Wing, Dynasty Business Park, Andheri-Kurla Road, Andheri East,
Mumbai-400059, INDIA

Tel: 91-22-4026-3301

UAE ADEKA AL GHURAIR ADDITIVES LLC

Industrial City of Abu Dhabi 1, Plot No. 37B4, Abu Dhabi, UAE (P.O.Box 40306)

Tel: 971-2-5508-361

FRANCE ADEKA POLYMER ADDITIVES EUROPE SAS

13 rue du 17 Novembre, FR-68100, Mulhouse, FRANCE

Tel: 33-3-6875-0530

USA AMFINE CHEMICAL CORP.

777 TERRACE AVENUE, SUITE #602B, HASBROUCK HEIGHTS, NJ 07604, USA

Tel: 1-201-818-0159



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