

Plasticizers/PVC stabilizers

---

# ADEKA CIZER ADEKA STAB

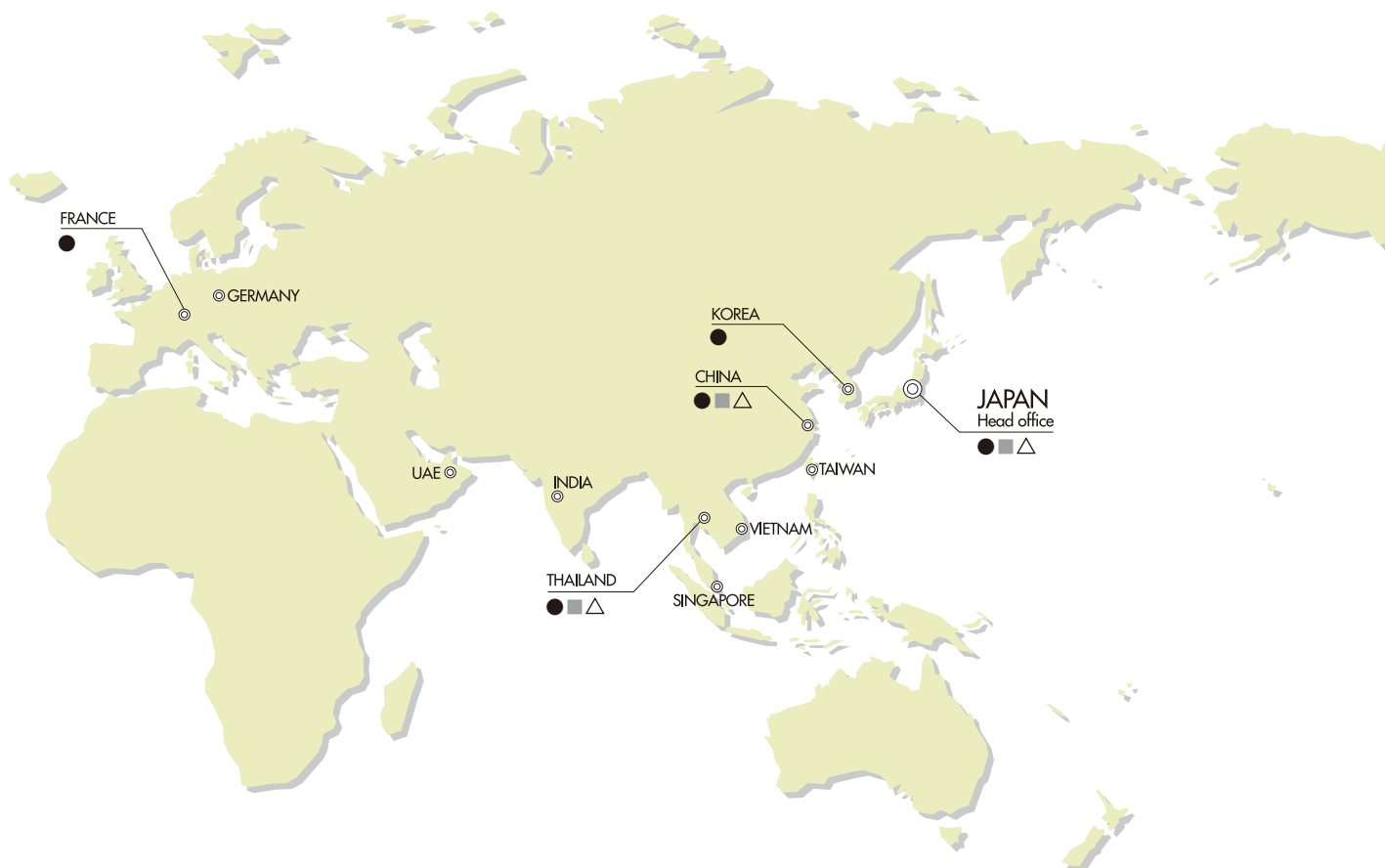
---

Products List

---



# NETWORK



## JAPAN

### HEAD OFFICE

7-2-35, Higashi-ogu, Arakawa-ku, Tokyo  
116-8554, JAPAN  
Phone: 81-3-4455-2848

### POLYMER ADDITIVES R&D

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

### MIE FACTORY ●■△

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

## GLOBAL

### ADEKA KOREA CORP. ●

(Sogong-dong, Seoul Center Bldg), 301, 116, Sogong-ro, Jung-gu,  
Seoul, 04533, 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, Changchun 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, 201102, CHINA  
Phone: 86-21-6428-4415 Fax: 86-21-6428-4417

### CHANG CHIANG CHEMICAL CO., LTD.

No.237, 16TH FL., SONGKIANG RD., TAIPEI, 10477, TAIWAN  
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: 66-38-959-032 Fax: 66-38-959-036

### 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 No.206&207, Wing-B, 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 48, 40212 Dusseldorf, GERMANY  
Phone: 49-211-179-2450 Fax: 49-211-171-0470

### ADEKA PALMAROLE SAS ●

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

# ADEKA CIZER ADEKA STAB

Plasticizers /  
PVC stabilizers



AMFINE CHEMICAL CORP. ● ■  
777 TERRACE AVENUE, SUITE #602B, HASBROUCK HEIGHTS,  
NJ 07604, USA  
Phone:1-201-818-0159 Fax:1-201-818-0259

AM STABILIZERS CORP.  
705 Silhavy Road Valparaiso, Indiana 46383, USA  
Phone:1-219-844-3980 Fax:1-219-844-7287

ADEKA BRASIL 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

〈MANUFACTURING SITE〉

● =PVC STABILIZERS(Powder) ■ =PVC STABILIZERS(Liquid)  
△ =PLASTICIZERS

ADEKA has a large variety of polymer additives.  
Please ask our sales section for more detail.

## CONTENTS

### ADEKA CIZER Plasticizers

- 2 ..... Epoxy Plasticizers  
Heat-Resistant Plasticizers  
Anti-static Plasticizers
- 3 ..... Polymeric Plasticizers
- 5 ..... Plasticizers for Rubbers  
Plasticizers for Rubbers' property

### ADEKA STAB PVC stabilizers

- 6 ..... General purpose stabilizers  
Stabilizers for electric wires  
Stabilizers for automotive upholstery  
Heavy metal free stabilizers  
Stabilizers for PVC foam
- 7 ..... Stabilizers for dispersion PVC for floorings  
Stabilizers for dispersion PVC for wall paper  
Stabilizers for food approved & medical applications  
Organo Tin stabilizers

## 1 Epoxy Plasticizers

Epoxy plasticizers have both function, stabilization and plasticizing effects for PVC resin. ADK CIZER O-130P is a typical epoxidized soybean oil plasticizer used for general purpose.

ADK CIZER	Composition	Viscosity mPa·s /25°C	Specific Gravity 25/25°C	Color APHA	Acid value KOH mg/g	Oxirane Oxygen %	Flash point °C	Freezing point °C	SP	Packaging (kg)	
										C/N	D/M
<b>O-130P</b>	Epoxidized soybean oil	(※)280	0.993	160	0.3	6.7	300	5	9.0	18	200
<b>O-180A</b>	Epoxidized linseed oil	(※)650	1.036	140	0.3	9.1	308	-2	9.3	18	200

(※)30°C

ADK CIZER	Selection criteria																					
	Characteristics										Applications											
	Compatibility	Plasticizing efficiency	Heat stability	Low volatility	Heat aging stability	Resistance to water extraction	Resistance to solvent extraction	Electrical insulation property	Non migration		Processability	Film and sheet	Food packing film	Agricultural film	Electric wire & cable	Medical parts	Rigid PVC	Blow bottle	Gasket	Hose/Tube	Injection molding	Paints/Adhesives
<b>O-130P</b>	○	○	◎	◎	◎	○	○	○	◎	○	◎	◎	◎	◎	◎	○	○	◎	◎	○	○	◎
<b>O-180A</b>	○	○	◎	◎	◎	○	○	○	◎	○	◎	◎	○	◎	◎	○	◎	○	○	○	○	○

◎ = Excellent ○ = Good

## 2 Heat-Resistant Plasticizers

Heat-resistant plasticizers provide excellent in heat aging stability, volatility and electrical insulation property. They are mainly used for wire & cable, automotive upholstery and etc.

ADK CIZER	Composition	Viscosity	Specific Gravity 25/25°C	SP	Acid Value (KOHmg/g)	Flash point	Packaging (kg)	
							C/N	D/M
<b>C-8</b>	Trimellitate Tri octyl	220	0.990	8.9	0.1	242	17	200
<b>C-880</b>	Trimellitate Tri n-octyl	100	0.997	8.9	0.1	214	17	200
<b>UL-80</b>	Tetra octyl pyromerllitate	450	0.993	8.6	0.3	264	17	—

## 3 Anti-static Plasticizers

Anti-static Plasticizers are suitable for flooring, curtain, hose, foot wear, and so on.

ADK CIZER	Composition	Viscosity mPa·s /25°C	Specific Gravity 25/25°C	SP	(Plasticizer : 50phr)		Packaging (kg)	
					VR (Ωcm)	SR (Ω)	C/N	D/M
<b>LV-70</b>	Anti-static agent	250	1.083	—	—	—	18	—
<b>LV-808</b>	Adipic acid ester type	18	0.996	8.8	2.2×10 <sup>9</sup>	3.1×10 <sup>9</sup>	17	190
<b>LV-848</b>	Phthalate type	50	1.01	9.1	2.2×10 <sup>9</sup>	3.6×10 <sup>9</sup>	17	200

ADK CIZER LV-70 is used in combination with ADK CIZER LV-808 or LV-848 to achieve maximum results. ADK CIZER LV-70 can be used in combination with other plasticizer. (DOP→1.5×10<sup>12</sup> 1.0×10<sup>13</sup>)

## 4 Polymeric Plasticizers

Polymeric plasticizers provide excellent resistance to extraction by oil and solvent, excellent low volatility and high aging stability for flexible PVC. They are mainly used for heat resistance cable compounds, gasket and other applications required resistance to oil extraction.

Viscosity	ADK CIZER	Composition	Viscosity mPa·s/25°C	Specific Gravity 25/25°C	SP	Reflective Index 25°C	Color APHA	Freezing point	Plasticizing efficiency	Characteristics	Packaging (kg)	
											C/N	D/M
Low ↑ ↓ High	<b>PN-7650</b>	Adipic acid Polyester	3,000	1.081	9.2	1.467	70	-22	1.10	Low temperature property, Oil resistance, Non migration PS	18	200
	<b>PN-1030</b>		3,000	1.064	9.0	1.464	90	-25	1.23	Weatherability, Non migration ABS/PS, Electrical resistivity	18	200
	<b>PN-1430</b>		3,000	1.061	9.0	1.467	130	-25	1.10	Low temperature property, Non migration ABS/PS	18	200
	<b>HPN-3130</b>		3,000	1.036	8.6	1.468	125	-18	1.21	Low temperature property, Non migration ABS/PS	18	200
	<b>PN-400</b>		4,000	1.078	9.3	1.465	140	5	1.22	Oil resistance	18	210
	<b>PN-280</b>		6,500	1.067	9.1	1.465	120	-17	1.28	Weatherability, Non migration ABS/PS, Electrical resistivity	18	190

Viscosity	ADK CIZER	Selection criteria																	
		Characteristics							Applications										
		Low temperature property	Low volatility	Heat aging stability	Weatherability	Oil resistance	Non migration		Anti-Migration electric wires	Anti-Migration leather	Gasket	Boots	Tape	Hose/tube	Sealant	Paints/ Adhesives	Marking film	Automotive	
							A B S	P S										exterior	interior
Low ↑ ↓ High	<b>PN-7650</b>	○	◎	◎		◎		◎	◎	◎	◎	○	○	○	○			◎	
	<b>PN-1030</b>		○	○	○		◎	◎	◎	◎	○	○				○	○		
	<b>PN-1430</b>	○	◎	◎	○	◎	◎	◎	◎	◎		○	○		○	○	○	○	
	<b>HPN-3130</b>	◎	◎	◎	○	◎	◎	◎	◎	○		○			○	○	○	○	
	<b>PN-400</b>		◎	◎				◎		○		○			◎				
	<b>PN-280</b>		◎	◎	○	◎	◎	◎	○	○		○			○	○	○		

◎ = Excellent ○ = Good

Plasticizers properties of composition [Composition] PVC( $\bar{P}$ =1050)100, Plasticizer 50, Ba-Zn Stabilizer 2.5

ADK CIZER	Mechanical Strength (30°C)			Low temperature property	Electrical insulation property	Heat aging stability				Oil resistance			Resistance to water extraction				Plasticizing efficiency		
	100%Mod	Tensile strength	Elongation	Tf	VR (30°C)	Volatile loss	100%Mod	Tensile strength retention	Elongation retention	Extracted volume	100%Mod	Tensile strength retention	Elongation retention	Absorbed moisture	Extracted volume	100%Mod		Tensile strength retention	Elongation retention
	MPa	MPa	%	°C	Ωcm	%	MPa	%	%	%	MPa	%	%	%	%	MPa		%	%
<b>O-130P</b>	9.4	20.6	376	-14	4.9×10 <sup>11</sup>	0	10.0	100	98	0	9.4	100	99	2.9	0	9.2	98	103	1.10
<b>O-180A</b>	9.9	21.1	370	-5	7.8×10 <sup>11</sup>	0	10.0	100	101	0	9.9	100	99	3.2	0.2	9.8	99	102	1.10
<b>PN-280</b>	12.3	22.1	341	-1	7.9×10 <sup>11</sup>	0	12.3	97	100	0	12.3	100	98	3.9	0.1	12.3	99	94	1.28
<b>PN-400</b>	11.8	22.4	354	-7	1.1×10 <sup>11</sup>	0	11.9	100	101	0	11.8	98	99	3.7	0.1	11.8	98	101	1.22
<b>PN-1030</b>	11.2	23.1	360	-6	7.5×10 <sup>11</sup>	0	11.0	101	101	-	-	-	-	-	-	-	-	-	1.23
<b>PN-1430</b>	10.2	22.4	378	-12	2.7×10 <sup>11</sup>	0	10.1	100	100	-	-	-	-	-	-	-	-	-	1.10
<b>HPN-3130</b>	10.2	23.0	381	-15	2.5×10 <sup>11</sup>	0	10.0	101	101	-	-	-	-	-	-	-	-	-	1.21
<b>C-8</b>	11.3	21.8	371	-17	5.2×10 <sup>12</sup>	0	11.4	100	100	0	11.3	104	95	1.4	0.1	11.3	102	102	1.20
<b>C-880</b>	11.4	21.3	368	-26	5.4×10 <sup>11</sup>	0	11.4	101	101	0	11.5	103	94	1.5	0.1	-	-	-	1.20
<b>UL-80</b>	12.2	22.1	360	-15	9.0×10 <sup>12</sup>	0	12.2	100	102	0	12.4	102	99	1.6	1.2	-	-	-	1.28
Notes	200mm/min Dumbbell No.2(JIS)			-	500Volt	100°C × 120hrs				70°C × 4hrs Insulating oils No.2(JIS)			Distilled water dipping : 100°C × 24hrs Drying : 100°C × 2hrs						

ADK CIZER	Heat aging stability				Oil resistance				Detergent resistance	Gasoline resistance	Toluoles resistance	※Bleed		※Migration		
	Volatile loss	100%Mod	Tensile strength retention	Elongation retention	Extracted volume	100%Mod	Tensile strength retention	Elongation retention	Extracted volume	Extracted volume	Extracted volume	Compulsion	Indoor exposure	Trace		
	%	MPa	%	%	%	MPa	%	%	%	%	%			ABS	Styrene	Rubber
<b>O-130P</b>	3.4	22.4	115	30	9.8	20.3	119	57	0.9	12.3	1.7	×	○	△	○	△
<b>O-180A</b>	3.2	-	119	21	9.4	19.3	120	54	0.7	11.2	1.4	×	○	△	○	△
<b>PN-280</b>	6.7	15.4	93	64	1.1	15.6	104	90	0.5	0.3	1.3	○	◎	◎	◎	○
<b>PN-400</b>	6.2	14.5	103	66	0.4	14.7	97	98	0.5	0.5	1.0	○	◎	◎	◎	○
<b>PN-1030</b>	6.7	13.8	100	67	2.1	15.4	105	83	-	-	-	○	◎	◎	◎	○
<b>PN-1430</b>	6.3	12.1	98	67	1.3	11.6	110	85	-	-	-	○	◎	◎	◎	○
<b>HPN-3130</b>	6.2	12.1	98	67	1.1	12.1	104	83	-	-	-	○	◎	◎	◎	○
<b>C-8</b>	5.7	14.0	99	85	8.1	19.8	103	59	-	-	-	◎	◎	◎	△	×
<b>C-880</b>	2.0	12.3	101	96	11.3	21.0	102	49	1.7	19.9	6.0	○	○	○	△	×
<b>UL-80</b>	0.8	12.9	102	100	6.1	17.1	102	75	1.2	15.4	2.3	○	-	◎	○	△
Notes	136°C × 168hrs				ASTM No.2 Oil 100°C × 96hrs				3%Detergent Dipping : 100°C × 2hrs Drying : 100°C × 2hrs	Dipping : Room temperature × 168hrs Drying : Room temperature × 48hrs	Dipping : Room temperature × 10min Drying : Room temperature × 190hrs	Room temperature × Three months	1kg Load 70°C			

※Evaluation method (Migration, bleed) ◎ = Excellent ○ = Good △ = Average × = Poor

## 5 Plasticizers for Rubber

Plasticizers for rubbers have good low temperature properties and high heat aging stability.

They are suitable for applications such as automotive tube, hose, conveyor belt and important functional parts. polymeric plasticizers for PVC are also used for rubbers.

ADK CIZER	Composition	M.N	Viscosity mPa·s /25°C	Specific Gravity 25/25°C	Color APHA	Flash point °C	Freezing point °C	SP	Characteristics	Packaging (kg)	
										C/N	D/M
<b>RS-107</b>	Adipic acid ester type	434	20	1.020	60	215	-47	9.2	General use	18	200
<b>RS-700</b>	Polyetherester type	approx. 550	30	1.005	80	221	-53	8.9	Low temperature property Heat resistance	17	200
<b>RS-735</b>	Polyetherester type	approx. 850	80	1.043	120	252	-8	9.2	Low temperature property Super heat resistance	18	200

ADK CIZER	Selection criteria												
	Characteristics					Rubber							
	Heat resistance	Low temperature property	Non oil-leaching properties	Resistance to water extraction	Electrical resistivity	Nitrile rubber	Chloroprene rubber	Epichlorohydrin rubber	Acrylic rubber	Hydration NBR	Chlorination Polyethylene	Chlorosulfonic PE	Polyurethane
<b>RS-107</b>	△	○	×	×	△	○	○	○	○	○	○	○	○
<b>RS-700</b>	○	○	×	×	△	○	○	○	○	○	○	○	○
<b>RS-735</b>	◎	○	△	×	△	○	—	○	○	—	—	—	—

◎ = Excellent ○ = Good △ = Average × = Poor

### Plasticizers based on Rubbers' properties

[CompositionI] NBR(High) 100, ZnO 5, Sulfur 0.3, Stearic acid 1.0, Carbon FEF 50, Vulcanizing accelerant TT 2.0, CZ 1.5, Plasticizers 20

ADK CIZER	Normal state 150°C × 20min Vulcanization				Heat aging stability 120°C × 70hrs			
	T <sub>b</sub> MPa	E <sub>s</sub> %	Hardness	Brittle temperature°C	Volatile loss %	T <sub>b</sub> Change %	E <sub>s</sub> Change %	Hardness change
<b>RS-107</b>	18.2	560	57	-38	-4.4	+2	-29	+6
<b>RS-700</b>	18.0	560	57	-36	-2.2	+1	-25	+5

ADK CIZER	Oil resistance JIS No.1 Oil 100°C × 70hrs				Oil resistance JIS No.3 Oil 100°C × 70hrs			
	Volume change %	T <sub>b</sub> Change %	E <sub>s</sub> Change %	Hardness Change	Volume change %	T <sub>b</sub> Change %	E <sub>s</sub> Change %	Hardness change
<b>RS-107</b>	-11.9	-2	-27	+11	+1.1	-1	-6	+1
<b>RS-700</b>	-12.5	-3	-27	+12	+0.6	+2	-6	+2

[CompositionII] Acrylic Rubber 100, Stearic acid 1.0, Carbon FEF 70, Vulcanizing System(Soap)3.1, Plasticizers 15

ADK CIZER	Normal state 150°C × 20min, 150°C × 15hrs Vulcanization					Heat aging stability 150°C × 70hrs				
	Volatile loss %	T <sub>b</sub> MPa	E <sub>s</sub> %	Hardness	Brittle temperature°C	Volatile loss %	T <sub>b</sub> Change %	E <sub>s</sub> Change %	Hardness change	Brittle temperature°C
<b>RS-107</b>	-3.3	10.5	145	68	-40	-7.4	+10	-14	+8	-34
<b>RS-700</b>	-2.0	10.1	175	66	-38	-3.4	+3	-7	+3	-36
<b>RS-735</b>	-1.1	10.4	180	66	-37	-1.5	+2	-3	+2	-37

ADK CIZER	Heat aging stability 175°C × 70hrs					Oil resistance JIS No.3 Oil 150°C × 70hrs				
	Volatile loss %	T <sub>b</sub> Change %	E <sub>s</sub> Change %	Hardness change	Brittle temperature°C	Volatile loss %	T <sub>b</sub> Change %	E <sub>s</sub> Change %	Hardness change	Brittle temperature°C
<b>RS-107</b>	-8.9	-52	-66	+14	-22	-5.1	+2	+3	+8	-22
<b>RS-700</b>	-6.2	+1	-33	+10	-31	-6.5	+13	+7	+6	-23
<b>RS-735</b>	-2.5	+5	-22	+6	-36	-4.6	+10	+6	+5	-24

## 1 General purpose stabilizers

ADK STAB	Composition	Appearance	Characteristics and Applications
<b>AC-series</b>	Ba-Zn	Liquid	Can be used from transparent to CaCO <sub>3</sub> filled formulations
<b>AP-series</b>	Ba-Zn	Powder	

## 2 Stabilizers for electric wires

ADK STAB	Composition	Appearance	Characteristics and Applications
<b>RUP-14</b> <b>NPS-309T</b>	Ba-Zn	Powder	For wires required excellent migration resistance using polymeric plasticizer

## 3 Stabilizers for automotive upholstery

ADK STAB	Appearance	Characteristics and Applications
<b>CPL-series</b>	Liquid	Improvement of long term heat stability at moderate temperature
<b>CPS-series</b>	Powder	

## 4 Heavy metal free stabilizers

ADK STAB	Composition	Appearance	Characteristics and Applications
<b>RUP-100 series</b>	Ca-Mg-Zn	Powder	For wire and cables, Excellent electrical properties and superior heat stability to Lead stabilizers
<b>RX-series</b>	Ca-Zn	Powder	For rigid PVC by extrusion, Good heat stability as same as Lead stabilizers
<b>SC-series</b>	Ca-Zn	Liquid, Paste	For general purpose, Excellent performance as well as Ba-Zn stabilizers
<b>SP-series</b>	Mg-Zn	Powder	

## 5 Stabilizers for PVC foam

ADK STAB	Composition	Appearance	Characteristics and Applications
<b>OF-series</b>	Ba-Zn	Powder	For general purpose
<b>FL-series</b>	Ba-Zn	Liquid	
<b>BAP-series</b>	—	Liquid	Cell-control agents for foaming



## 6 Stabilizers for dispersion PVC for wall paper

ADK STAB	Composition	Appearance	Characteristics and Applications
<b>FL-series</b>	K-Zn	Liquid	For PVC foam at low expansion for high filler formulations
<b>FL-series</b>	Ba-Zn		Quick expansion and excellent color(Whiteness)

## 7 Stabilizers for dispersion PVC for floorings

ADK STAB	Composition	Appearance	Characteristics and Applications
<b>AC-300 series</b>	Ba-Zn	Liquid	Excellent weatherability and prevent losing transparency in water absorption

## 8 Stabilizers for food approved & medical applications

ADK STAB	Composition	Appearance	Characteristics and Applications
<b>SC-series</b>	Ca-Zn	Liquid	Excellent initial color and transparency for general plastcized formulation
<b>30-series</b>	Ca-Zn	Paste	

## 9 Organo Tin stabilizers

ADK STAB	Composition	Appearance	Characteristics and Applications
<b>465L</b>	Mercaptide	Liquid	Excellent heat stability,initial color and transparency
<b>OT-1</b>	Laurate		For rigid sheet and blow bottles

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



**POLYMER ADDITIVES R&D**





## NOTES

---

Review SAFETY DATA SHEET(SDS) before using ADEKA products.

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

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

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

The information contained in this brochure is given in good faith but no liability is assumed nor is freedom from any industrial properties owned by ADEKA Corporation or others implied.

ADK STAB is not used as a trademark in the USA.

※Please ask our R&D or sales section for more detail.

---

---

### ADEKA CORPORATION

<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: 81-3-4455-2848  
Tel: 81-48-838-2222

### ADEKA GROUP

CHINA	ADEKA (CHINA) CO., LTD.	Rm.1006-1010, 10F METRO PLAZA, No.555 Loushangan 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, 04533, KOREA	Tel: 82-2-726-0600
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: 66-38-959-032
SINGAPORE	ADEKA (ASIA) PTE. LTD.	8 Jurong Town Hall Road, #23-02 The JTC Summit, SINGAPORE 609434	Tel: 65-6776-8809
INDIA	ADEKA INDIA PVT. LTD.	Unit No.206&207, Wing-B, 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 Dhabi1, Plot No.37B4, Abu Dhabi, UAE(P.O. Box 40306)	Tel: 971-2-5508-361
FRANCE	ADEKA PALMAROLE 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
	AM STABILIZERS CORP.	705 Silhavy Road Valparaiso, Indiana 46383, USA	Tel: 1-219-844-3980
BRAZIL	ADEKA BRASIL LTDA.	Rua Cubatao, 86-Conjunto 509/510, Paraiso, Sao Paulo-SP, CEP 04013-000, BRAZIL	Tel: 55-11-3080-2666