

ZIKO Ltd.

플라스틱 첨가제 솔루션



귀하의 요구에 맞춰 혁신적이고 맞춤형 솔루션을 제공합니다.



SELECTION GUIDE

플라스틱용 첨가제 라인업

주요 제품

분류	품명	용도												
		PA	PBT	PET	PC	PP	PE	ABS	SBC	SBS	SBR	PLA	PBAT	PHA
열안정제	ZIKANOX-549DF					◎	◎	◎	◎	◎	◎			
	ZIKANOX-395DF							◎		◎	◎			
가수분해 억제제	ZIKA-AH362	◎	◎	◎	◎							◎	◎	◎
	ZIKA-AHP213	◎	◎	◎	◎							◎	◎	◎
자외선안정제	ZIKA-NP3	◎												
청광흡수제	ZIKA-BR1A			◎	◎									

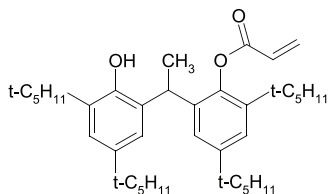
기타 제품

구분	품명	CAS No.	녹는점(°C)	용도
산화방지제	ZIKA-1098	23128-74-7	156~161	Nylon, PUR
	ZIKA-2246	119-47-1	123~127	Rubber, Latex, Polyolefins, ABS
	ZIKA-245	36443-68-2	79~81	PS(HIPS), ABS, MBS, POM, PA, PVC
	ZIKA-300	96-69-5	160~164	PE, PP, ABS, PVC, EPDM, PB
	ZIKA-CPL	68610-51-5	105	Rubber, Hot Melt
	ZIKA-BBM	85-60-9	211	Epoxy resin, PC, PVC
	ZIKA-PEPQ	119345-01-6	93~99	PE, PP, ABS, PS, Engineering Plastics
	ZIKA-4S	29598-76-3	> 46	Polyolefin, PP, PE & ABS, PC
	DLTDP	123-28-4	40~42	ABS, PVC, PP, PE
	DSTDTP	693-36-7	65~67	ABS, PVC, PP, PE
UV흡수제	DTDTDP	10595-72-9	-	ABS, PVC & Polyolefin
	ZIKA-531	1843-05-6	47~49	PVC
	ZIKA-P	2440-22-4	126~130	ABS, PVC, PMMA, TPE, Adhesive
	ZIKA-234	70321-86-7	139~143	PC, PBT, PET, Adhesive
	ZIKA-312	23949-66-8	124~127	TPU, PVC, Polyester
	ZIKA-360	103597-45-1	197~199	Polyacrylic resin, PA, Polyalkylene terephthalates
	ZIKA-5411	3147-75-9	106~108	PVC, PC, TPE
	ZIKA-1577	147315-50-2	147~151	PA, PC, PBT, PET, PMMA
	ZIKA-1644	2725-22-6	88~91	PA, PC, POM, ABS, PMMA etc
	ZIKA-384-2	127519-17-9	-	Automotive, coil, wood coatings
HALS	ZIKA-B-CAP	6337-43-5	137~139	PC, PET, ENPLA
	ZIKA-622	65447-77-0	50~70	POM, PA, TPU, TPE, Ahesive, Sealant
	ZIKA-765	41556-26-7, 82919-37-7	-	PU, PVB, PVC, PP
	ZIKA-770	52829-07-9	81~85	PA, PP, TPO, EPDM, PS, ABS, SAN, ASA
	ZIKA-944	71878-19-8	136~140	PE, PP, TPE
	ZIKA-119	106990-43-6	146~150	ABS, PA, PET, PBT, PE, PP, POM, TPU
가공조제물질	ZIKA-SEED	42774-15-2	270~275	PA
	KM-80	25014-31-7	250~255	ABS, PVC, TPU, Rubber
	PETS-3	28188-24-1	-	Polyamide
가교제	PETS-4	115-83-3	60~66	PC, PA, PEt, PBT, TPE, PVC 등
	1,3-PBO	34052-90-9	147~151	polyamide, polyester etc
핵제	NU-500P	93379-37-4	235~255	투명 PE, PP
	ZIKA-NU01	-	121	Polyester(PET, PBT, TPEE) etc
	TMB-5	-	> 340	PP
	MPM-2000	-	> 160	PP
Aldehyde Scavenger	ZIKA-ATA	-	111~113	
	ZIKA-EU-SC01	-	120	

열안정제

ZIKANOX-549DF

제품 구조 및 메커니즘



Chemical Name

: 2-[1-(2-hydroxy-3,5-di-tert-pentylphenyl)ethyl]-4,6-di-tert-pentylphenyl acrylate

CAS number : 123968-25-2

EC No. : 413-850-6

MITI No : (4)-1725

Equivalent product : Sumilizer GS

제품 사양

성상	백색 과립
녹는점	117.5 ~ 119.5°C
순도 (by HPLC)	≥ 99%
건조감량 (105°C, 1Hr)	Max. 0.5%

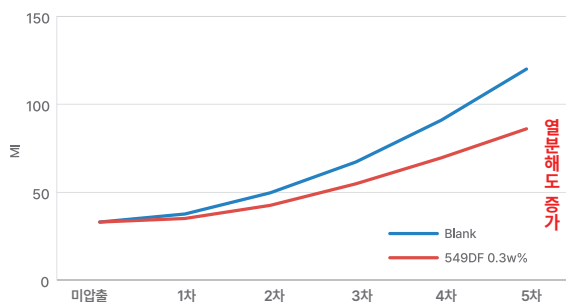
제품 용도

- SBC, ABS, PS, SBS, SIS, PMMA, 폴리올레핀 (PP, PP Fiber, HDPE) 등

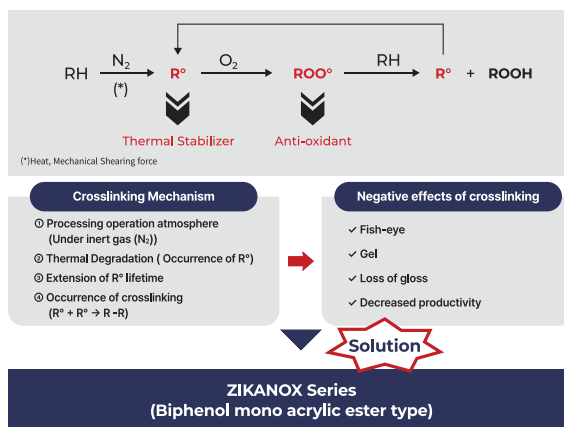
제품 특징

- Biphenol monoacrylic ester 계 열안정제
- 고온 폴리머 공정에 대한 우수한 내열성
- Gel/Fish-eye 형성 최소화
- FDA 규정 요구 사항 준수 [21 CFR 177.1640], [21 CFR 178.2010]

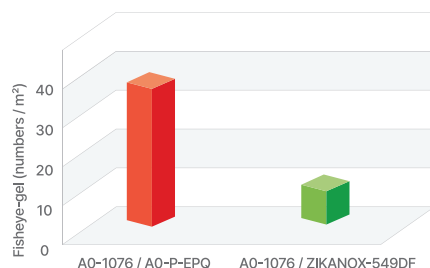
● PP 반복 압출 시험



- PP Resin : PolyMirae Moplen EP640R(블록코폴리머)
- Screw type : Twin - 30mm (L/D = 40:1)
- MI 측정 : 2.16kg, g/10min(at 230°C)

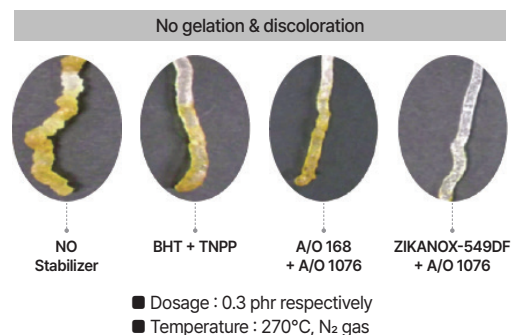


● Performance for SBC



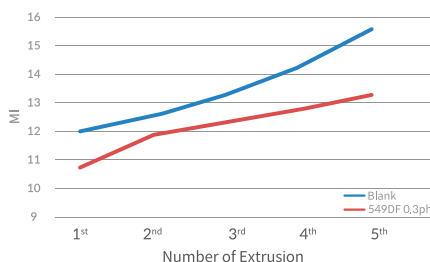
- Dosage : A/O-1076 / A/O-P-EPQ / ZIKANOX-549DF 0.15 phr respectively
- Processing condition : 204°C, N2 gas
- Sampling : 40m for 1hr

● Performance for SBS



- Dosage : 0.3 phr respectively
- Temperature : 270°C, N2 gas

● TPU 반복 압출 시험



- MI measurement condition : 2.16kg, g/mol(at 210°C)

[주] Test Condition

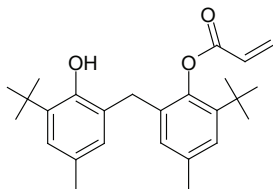
- TPU Resin : Ester Polyol (AA/BG) Type Aromatic TPU with Hardness Shore 88A
- Screw type : Φ25 Twin Extruder with Barrel 10EA
- Extrusion Temperature

-	F	C1	C2	C3	C4	C5	C6	C7	C8	Die
Temp.(°C)	185	190	190	195	195	200	200	195	200	200

열안정제

ZIKANOX-395DF

제품 구조



Chemical Name : 2-tert-Butyl-6-(3-tert-butyl-2-hydroxy-5-methylbenzyl)-4-methylphenyl acrylate

CAS number : 61167-58-6

EC No. : 262-634-6

MITI No. : (4)-1471

Equivalent product : Sumilizer GM

제품 사양

성상	백색 과립
녹는점	130 ~ 138°C
순도 (by HPLC)	≥ 99%
건조감량 (105°C, 1Hr)	Max. 0.5%

제품 특징

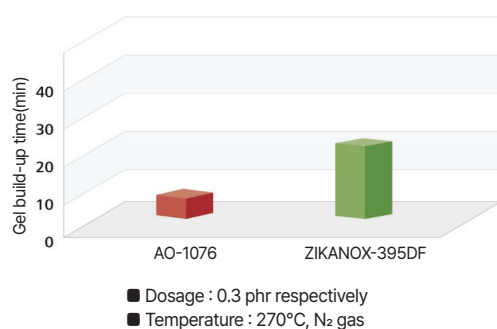
- 무산소 조건하 고온 폴리머 가공 중 우수한 내열성 발휘
- Gel/fish-eye 형성 최소화

제품 용도

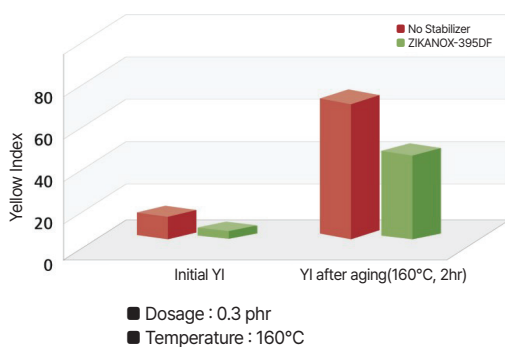
- SBS, SBR, ABS, BR, SIS, TPE 등



● Performance for SBR



● Performance for SSBR



● Performance for SBS

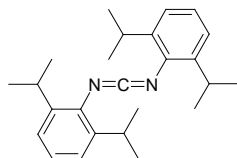
Color stability test



가수분해억제제

ZIKA-AH362

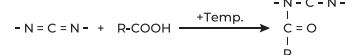
제품 구조 및 메커니즘



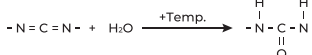
화학명: 비스(2,6-디이소프로필페닐) 카르보디이미

ZIKA-AH362 is carbodiimide acid - and water - scavenger that transforms both acid and water into urea structures

i) with carbon acids :



ii) with water :



제품 특징

Sterically hindered aromatic carbodiimide type 가수분해억제제

아미드 및 에스테르 계 플라스틱을 가수분해 및 산분해로부터 보호

제품 사양

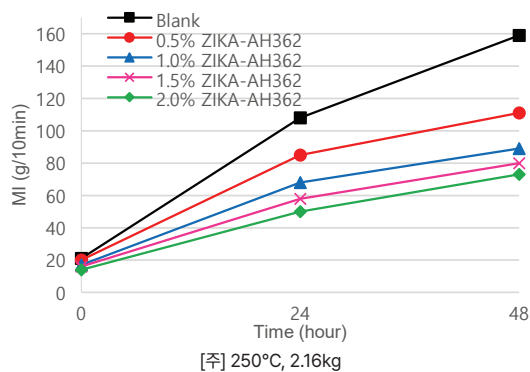
성상	백색 내지 회백색의 결정성 분말
순도 (by HPLC)	≥ 99%
밀도	0.95 g/cm ³
녹는 점	49 ~ 51°C

제품 용도

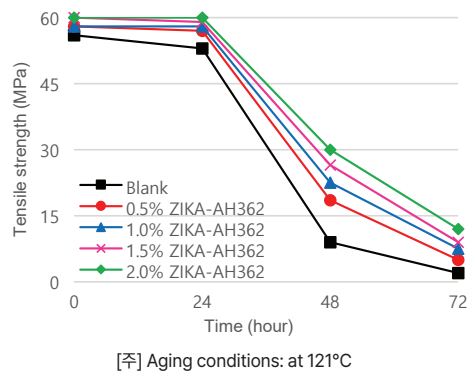
- PA, PBT, PET 등 엔지니어링플라스틱
- PLA, PBAT, PHA 등 생분해플라스틱



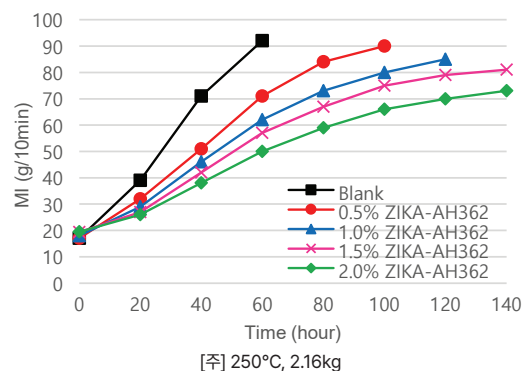
● Performance for PBT



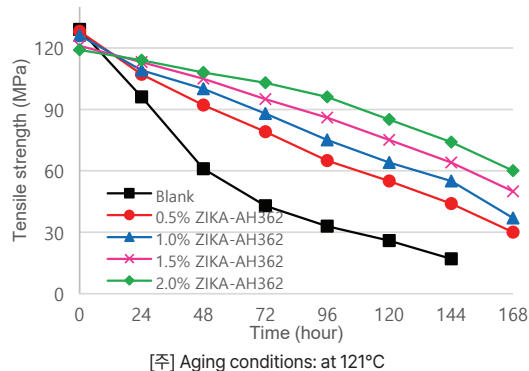
● Performance for PBT



● Performance for PBT+GF50%



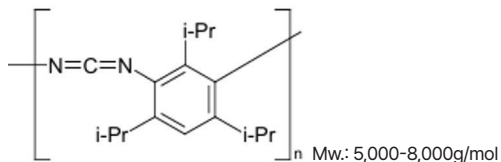
● Performance for PBT+GF50%



가수분해억제제

ZIKA-AHP213

제품 구조 및 메커니즘



화학적 분 폴리카르보디이미드계

제품 사양

성상	백색 내지 회백색 결정성 분말
순도(by HPLC)	≥ 99%
녹는점	55 ~ 65°C
카르보디이미드 함량	≥ 10.0%

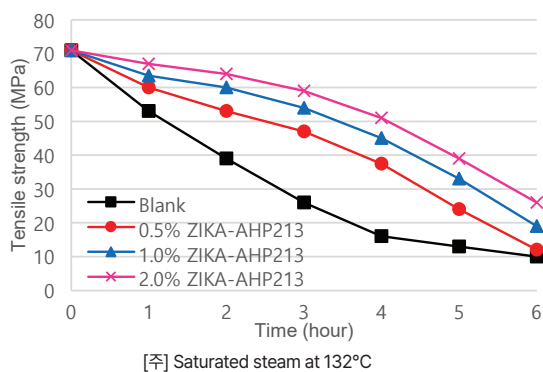
제품 특징

- 플라스틱의 가수분해로 인한 기계적 물성 저하를 효과적으로 억제
- 카르복실기와 가교결합을 통해 절단된 분자를 복구하여 제품의 수명 연장
(활성화된 말단 카르복실기를 닫아 가수분해 억제)

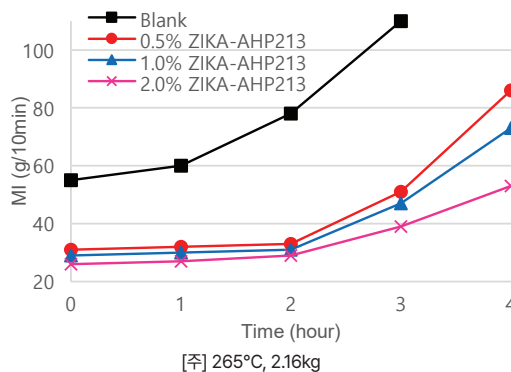
제품 용도

- PA, PBT, PET 등 엔지니어링플라스틱
- PLA, PBAT, PHA 등 생분해플라스틱

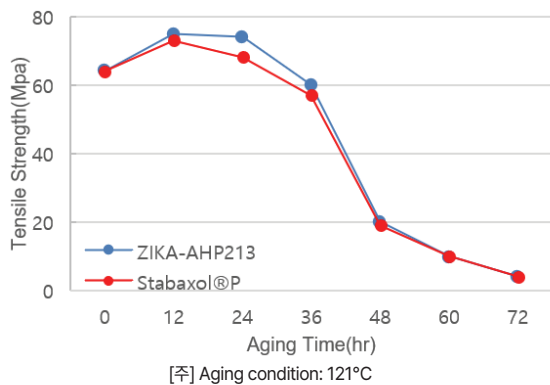
● Performance for PA66



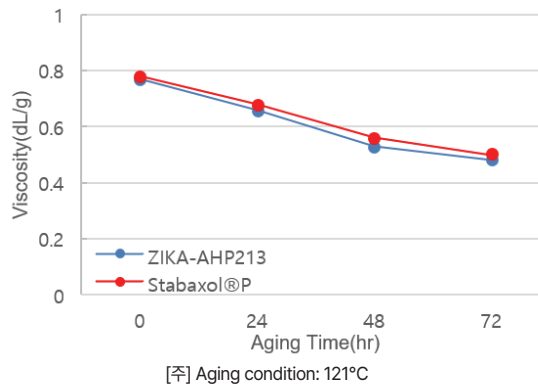
● Performance for PA66



● Performance for PET



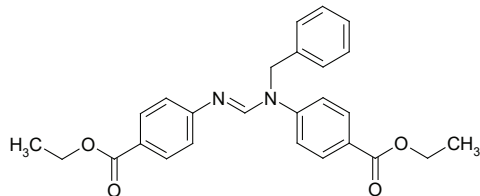
● Performance for PET



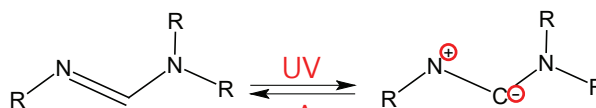
자외선흡수제

ZIKA-NP3

제품 구조 및 메커니즘



화학명 : N,N'-bis(4-ethoxycarbonylphenyl) N-benzylformamidine
CAS번호 : 586400-06-8



Heat dispatched as Vibrational energy

제품 사양

성상	백색 분말
순도	≥ 98%
녹는점	119 ~ 123 °C
pH	6 ~ 8
건조감량 (130°C/30min)	Max. 0.5%

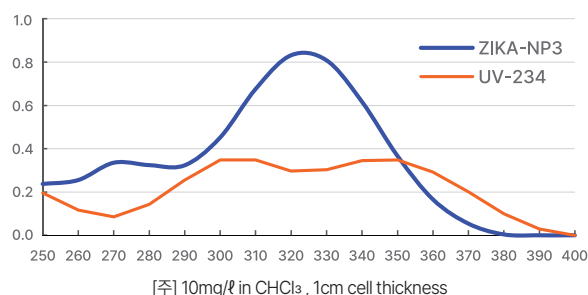
제품 특징

- $\epsilon(\ell/\text{mol} \cdot \text{cm})=35,905$ ($\lambda_{\text{max}} = \text{at } 324\text{nm}$)
- 고온 열안정성 우수
- 다양한 플라스틱과 상용성 우수
- 유해물질 (NMA, BTX, 중금속 등 미함유)

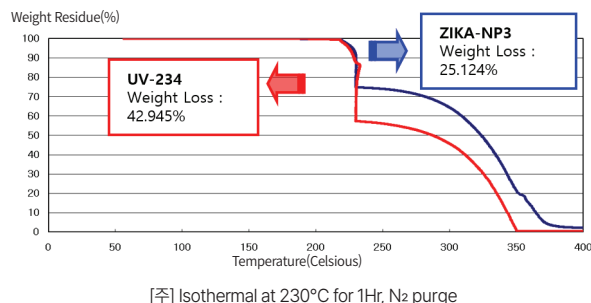
제품 용도

- 엔지니어링플라스틱 (PA, PBT, PET, PC, ABS 등)
- 폴리우레탄 (TPU, 합성피혁 등)

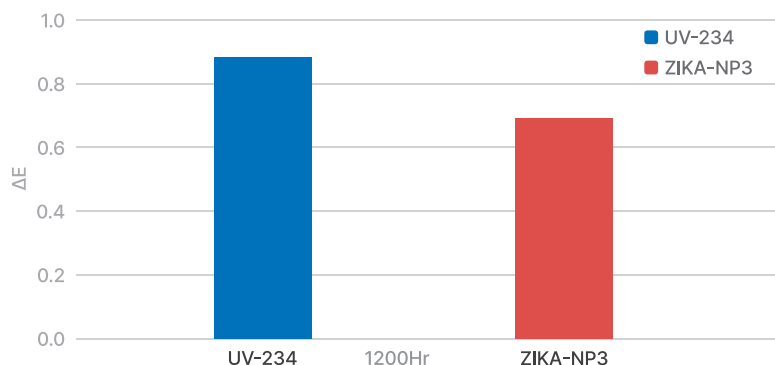
● UV Absorbance



● Thermal stability (by TGA)



● 경쟁사 제품 대비 성능 비교



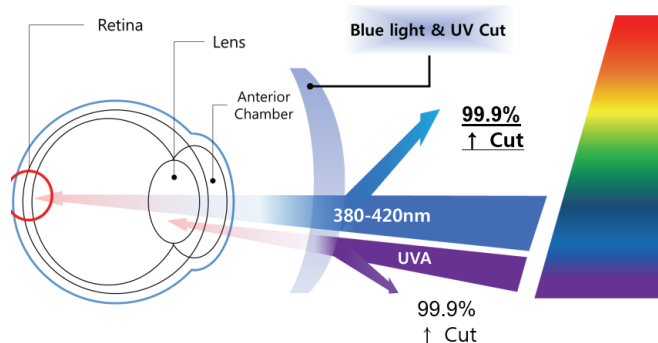
[주] Xenon-arc (XW-type) Weather-o-meter / Black panel temp. = 63±3degC /
Relative humidity = 50±5% / Spray cycle = 18min/120min / Exposure time = 1,200hours

복합 자외선안정제

ZIKA-BR1A

제품 사양

성상	노란 형광색 분말	
순도 (by HPLC)	> 98%	
녹는점	146 ~ 148°C	
λ_{max} (nm)	388.0	
용해도	MEK	27.4
	Ethyl acetate	25.7
	EtOH	2.1
	Toluene	32.6



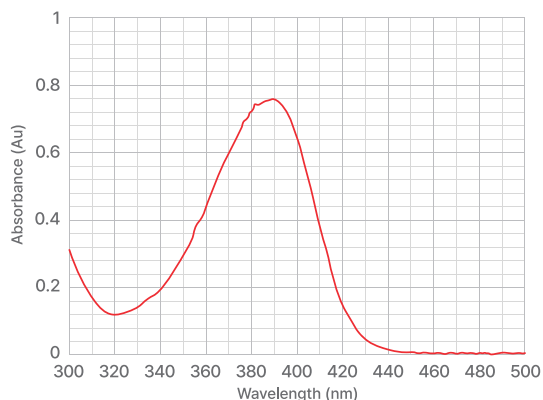
제품 특징

- Blue-ray (청색광) 차단 첨가제로 눈의 피로와 시신경에 영향을 줄 수 있는 청색광 차단
- 디스플레이 시인성에 영향을 주지 않음

제품 용도

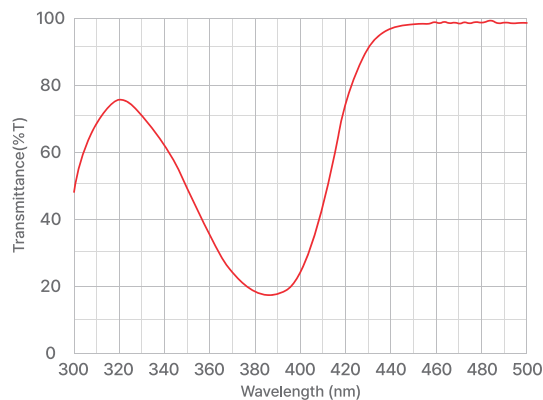
- 하드코팅, OCA, OCR, 필름 등
- 기타 광학용 소재

● UV 흡수도



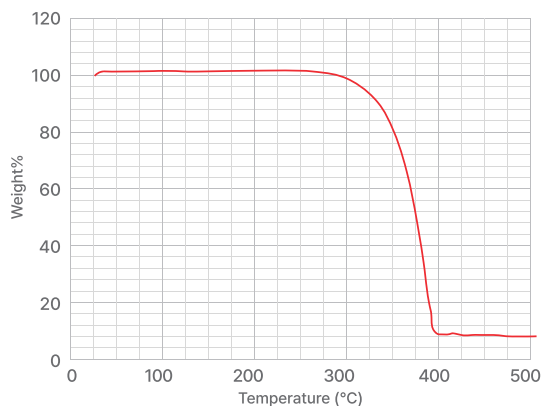
[주] UV-Vis Spectrophotometer,
10ppm / Chloroform, 1cm cell thickness

● 광투과도



[주] UV-Vis Spectrophotometer,
10ppm / Chloroform, 1cm cell thickness

● 내열성(TGA_Air)



[주] TGA, 60ml/min Air flow, 10°C/min heating rate

	온도
1% weight loss	291°C
2% weight loss	299°C
5% weight loss	315°C



본 사

충북 음성군 금왕읍 초금로 688(우편번호 27639)

043-877-3300

사업본부

경기도 안양시 동안구 별말로 126 오비즈타워 3001호(우편번호 14057)

정밀화학영업팀 02-597-3100 Ext.204

화장품원료영업팀 02-597-3100 Ext.302

ziko@ziko.co.kr