

We care
for the future
**Healthcare,
Earthcare**

SK chemicals

ECOZEN
www.skecozen.com



SK chemicals

SKY GREEN SKY PET

HEADQUARTERS

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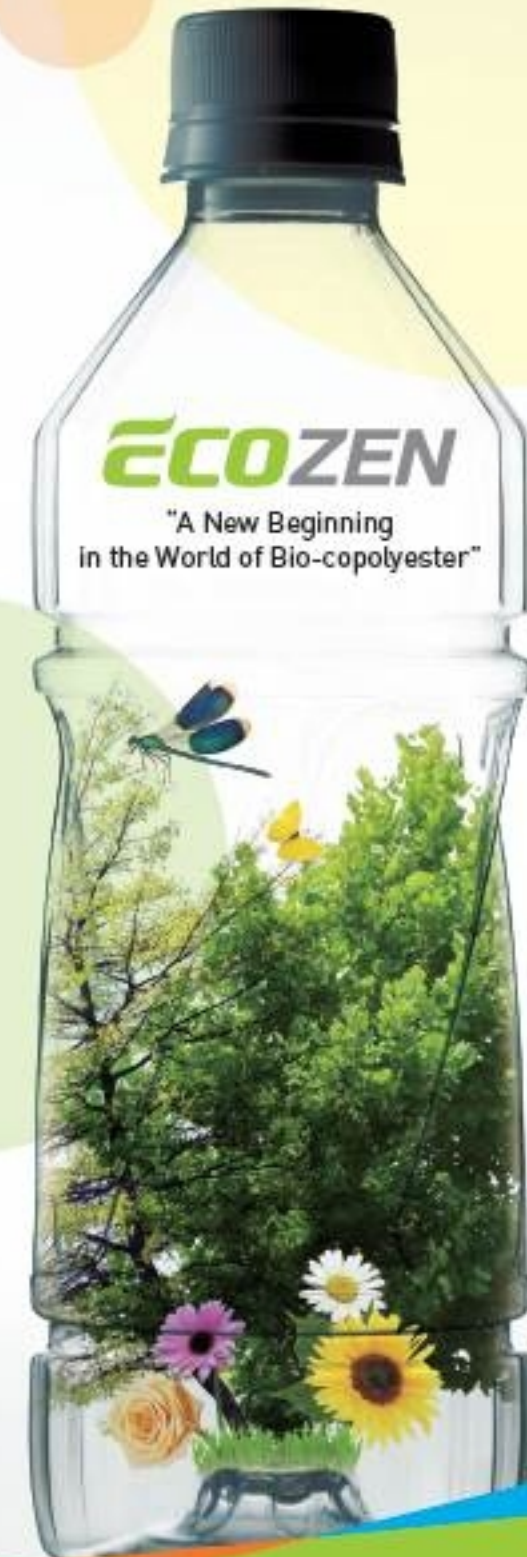
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(English)

Etymology of **ECOZEN**[®]

ECO
[Eco-Friendly]

+ **ZEN**
[Zenith]

ECOZEN

"ECOZEN[®] reaches the zenith of Eco-friendly elements"
"The best value of ECOZEN[®] is its Eco-friendliness."

ECOZEN[®] enables the "Health Care, Earth Care" mission of SK Chemicals.

ECOZEN
Bio-copolyester

- High HDT Copolyester (80°C - 110°C)
- Excellent Chemical Resistance

ECOZEN Introduction



Environmental

- Renewable Material - Uses Biomass
- Recyclable
- Reduces CO₂
- No BPA & No Phthalate
- Non-toxic - Suitable for Food Contact
- Energy Efficient - Low Processing Temperature

Functional

- Excellent Physical Properties
- Good Chemical Resistance
- Easy to Process
- Outstanding Printability
- Good Adhesion



Bio-based Copolyester

Physical

- Excellent Impact Strength
- High Flexural Strength

Optical

- High Transparency
- High Gloss

Processing

- Low Processing Temperatures
- Reduced Cycle Time
- Less Residual Stress

Many Grades of ECOZEN

•ECOZEN®	YH	Hair & Make up
	YF	Food & Beverage
	YA	Electronics
	YM	Medical & Child care
	BS	General Use



The Bio-based Ingredient of ECOZEN

From Natural Sources



Bio-based Material

Bio-technological Process



Chemical Polymerisation (+ Other Raw Materials, Additives...)



FDA Food Contact Notification No. 1075



- FOOD CONTAINER •BABY FOOD CONTAINER
- WATER BOTTLE •SPORTS BOTTLE •FOOD BOWL
- JUICE BOTTLE •MIXER



Safety Bio-copolyester : Non-phthalate, Non-BPA
U.S.A. FDA Certification / KBMP Bio Plastic Certification

FOOD & BEVERAGE

ECOZEN YF
050/100/300/400



- BPA / Phthalate free
- Chemical Resistance
- Heat Resistance
- Anti-contaminant
- Transparency
- Strength
- Light Weight
- Glass Colour



FDA Food Contact Notification No. 1075



- JAR •COSMETIC BOTTLE •PERFUME BOTTLE •CAP
- SKIN CARE BOTTLE •HAIR CARE PRODUCT



High-end Product Applied
U.S.A. FDA Certification / KBMP Bio Plastic Certification

HAIR & MAKE UP

ECOZEN YH
050/100/300/400

- Enable Variety Colour Pattern
- Chemical Resistance
- Transparency
- Heat Resistance
- Anti-contaminant
- Glass Colour





ELECTRONICS

ECOZEN YA
050/100/300/400

•Washing Machine(Safety door) •Cellular Phone(Body & protection case) •Refrigerator(Ice bank) •Laptop Computer •TV Neck & Housing

Helpful to EPEAT Certification (by Bio-copolyester)
Excellent Chemically Resistant,
Transparent and Safe Bio-copolyester
Good Impact Strength, High Gloss, RoHS



•Physical Properties
•Good Transparency
•Chemical Resistance
•Heat Resistance
•Strength
•Hardness
•Transparency
•BPA/ Phthalate Free
•Anti-contaminant
•Low Process Temperature
•Impact Strength
•Gloss



•Superior Clarity – Before and After Sterilization
•Higher Heat Resistance
•Excellent Puncture Resistance and Impact Toughness



•Medical Packaging •Pharma-ceutical Packaging
•Medical Device •Infant product(Baby Container, Teat, Teething Tots)

Safe Material
•Bio-copolyester Keeps Seniors and Children Safe from Harmful Substances
•High Heat Resistance and Excellent Chemical Resistance Properties Enable Sterilization

MEDICAL & CHILD CARE

ECOZEN YM
050/100/300/400



GENERAL USE

ECOZEN BS
050/100/300/400

- Outdoor Sign
- Condenser shrink tube
- Optical Film
- Thin/Heavy Gauge Sheet
- Decoration or Interior Sheet for furniture, home appliances & etc.
- Credit Card
- Packaging(Ice Cup, Lunch Box Cover etc.)

Non Glue Lamination (Ultra Sonic Used) :
Paper, PET, PVC, etc.
High Glossy, Enable Variety Color Pattern



- Heat Resistance
- Gloss
- Fire Resistance
- Impact Strength
- Thermoforming
- Chemical Resistance
- Flexibility
- Transparency
- Excellent Optical Properties
- Good Hardness



•Shower Head

- High Temperature Resistance
- Chemical Resistance
- Stress-cracking Resistance



•Ball packaging

- Glass Colour
- Transparency
- Flexural Modulus
- Dimensional Stability



•Protection Case for Cellular Phone
→ For Film Insert Injection

- Heat Resistance
- Transparency
- High Gloss
- Anti-cracking
- Chemical Resistance
- Excellent Impact Strength



•Eyewear - Frame, Lens

- Good Processability
- Chemical Resistance
- Stress Resistance
- Enable Variety Colour



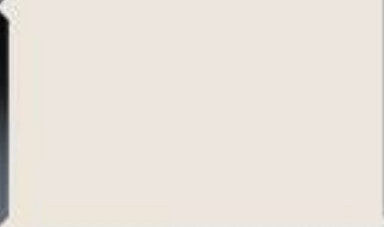
•Packaging

- High Transparency
- Heat Resistance
- Low Temperature Impact Strength
- ECO-friendly



•Extruded Profiles

- High Melt-Strength
- Heat Resistance
- Chemical Resistance
- Impact Strength
- RoHS
- ECO-friendly
- For Semi-conductor, Construction Material



•Base Resin

- To Alloy with Other Resins - Improvement of Properties