

# SAFETY DATA SHEET

SDS-EUEN-2016

Date Updated : 13. Jan. 2016

Version : 1.3/EN

Regulation : In accordance with Regulation (EU) 453/2010 (REACH), Annex II

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

Name of substance : ECOZEN YF401

Synonyms : Copolyester

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : Plastics

Uses advised against : Not available

### 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier : SK Chemicals Co., Ltd

Street address/P.O. Box : 310 Pangyo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea / 13494

Telephone number (if possible, indicate telefax) : +82-2-2008-2253(+82-2-2008-2259)

e-mail address of competent person responsible for the SDS : nse@sk.com

National contact : Not available

### 1.4 Emergency Telephone

Emergency Telephone number : +82-2-2008-2008

Opening hours : Not available

Other comments (e.g. language(s) of the phone service) : Not available

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

is not classified according to Regulation (EC) No 1272/2008 [CLP] and Directive 67/548/EEC.

### 2.2 Label elements

Hazard pictograms : Not applicable

Signal word : Not applicable

Hazard statement : Not applicable

Additional precautionary statements : Not applicable

### 2.3 Other hazards

According to Annex XIII, the substance does not meet PBT or vPvB criteria.

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Component	Additional identification	Conc. / %	Classification
copolyester	proprietary	≥99	See section.2
Additives	mixture	≤1	

## SECTION 4 : FIRST-AID MEASURES

### 4.1 Description of first aid measures

After eye contact :

- Get medical attention if eye symptoms occurred.

- In case of contact with molten substance, immediately flush eyes with water for at least 15 minutes. Get medical attention immediately.

**After skin contact :**

- Remove contaminated clothing and shoes.
- Get medical attention if skin symptoms occurred.
- If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.
- Wash contaminated clothing and shoes before reuse.

**After inhalation :**

- Specific medical treatment is urgent.
- Move victim to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.

**After ingestion :**

- Get medical attention if swallowed amount of substance.

#### **4.2 Most important symptoms and effects, both acute and delayed**

**Acute effects**

Not classified

**Delayed effects**

Not classified

#### **4.3 Indication of immediate medical attention and special treatment needed**

- Call emergency medical service. Get medical advice/attention if you needed.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- If burned by contact with molten material, cool quickly as possible with water, and then go to see a physician for treatment of burn.

## **SECTION 5 : FIRE-FIGHTING MEASURES**

### **5.1 Extinguishing media**

- Suitable extinguishing media: CO<sub>2</sub>, water, sand
- Unsuitable extinguishing media: High pressure water streams

### **5.2 Special hazards arising from the substance or mixture**

- Thermal decomposition products: Not available
- Hazardous combustion products: CO<sub>2</sub>, CO
- Unusual fire and explosion hazards: No explosion hazards

### **5.3 Advice for firefighters**

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural fire fighters' protective clothing will only provide limited protection.

## **SECTION 6 : ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

- Stop leak if you can do it without risk.
- Isolate exposed area.
- Keep unauthorized personnel away.
- Use certificated protective equipment.
- Ventilate the leaked area.

### **6.2 Environmental precautions**

- Prevent entry into waterways, sewers, basements or confined areas.

### **6.3 Methods and material for containment and cleaning up**

- Do not touch or walk through spilled material.

### **6.4 Reference to other sections**

- See also sections 8 and 13 of the Safety Data Sheet.

## **SECTION 7 : HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

- Avoid contact with molten material.
- Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures.

#### 7.2 Conditions for safe storage, including any incompatibilities

- Keep container closed.
- Store container in a well dry/cool place.
- Keep away from waterways and sewers.
- Keep away from any source of ignition.

#### 7.3 Specific end use(s)

Not available

## SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Occupational Exposure limits

- Korea regulation** : Not available
- ACGIH regulation** : Not available
- Biological exposure index** : Not available
- OSHA regulation** : Not available
- NIOSH regulation** : Not available
- EU regulation** : Not available

#### Occupational exposure controls :

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls :

- Provide local exhaust ventilation system or other engineering controls to keep the airborne below their respective threshold limit value.
- Check legal suitability of exposure level.

#### 8.2.2 Individual protection measures, such as personal protective equipment :

##### Respiratory protection :

- Wear NIOSH or European Standard EN 149 approved full or half face piece (with goggles) respiratory protective equipment when necessary.

##### Eye/face protection :

- An eye wash unit and safety shower station should be available nearby work place.
- Wear safety glasses to protect eyes from scattering toxic substance.

##### Skin protection

###### (i) Hand protection :

- When material is heated, wear gloves to protect against thermal burns.

###### (ii) Other :

- When material is heated, wear gloves to protect against thermal burns.

#### 8.2.3 Environmental exposure controls

Not available

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Description** : Solid

**Color** : Colorless

**Odor** : Slight odor

**Odor threshold** : Not available

**pH** : Not available

**Melting point/freezing point** : Not available

**Initial boiling point and boiling range** : Not available

**Flash point** : Not available

**Evaporation rate** : Not available

**Flammability (solid, gas)** : Not available

**Upper/lower flammability or explosive limits** : Not available

**Vapor pressure** : Negligible (20 °C)

**Solubility (ies)** : Negligible

**Vapor density** : Not available

**Relative density** : 1.25 g/ml (25 °C)  
**Specific gravity** : > 1  
**Partition coefficient: n-octanol/water** : Not available  
**Auto ignition temperature** : 454 °C (ASTM E659)  
**Decomposition temperature** : Not available  
**Viscosity** : Not available  
**Explosive properties** : Not available  
**Oxidizing properties** : Not available  
**Molecular weight** : Not available

## 9.2 Other information

Not available

## SECTION 10 : STABILITY AND REACTIVITY

### 10.1 Reactivity

- Some of these materials may burn, but none ignite readily.

### 10.2 Chemical stability

- Stable under normal temperatures and pressures.

### 10.3 Possibility of hazardous reactions

- Containers may explode when heated.  
 - Fire may produce irritating and/or toxic gases.  
 - Some liquids produce vapors that may cause dizziness or suffocation.  
 - Inhalation of material may be harmful.

### 10.4 Conditions to avoid

- Avoid contact with incompatible materials.  
 - Avoid release to the environment.

### 10.5 Incompatible materials

- Combustibles

### 10.6 Hazardous decomposition products

- Irritating and/or toxic gases

## SECTION 11 : TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

(a) Acute toxicity;

Oral Not available

Dermal Not available

Inhalation Not available

(b) Skin Corrosion/ Irritation; Molten material will produce thermal burns

(c) Serious Eye Damage/ Irritation; Molten material will produce thermal burns

(d) Respiratory sensitization; Not available

(e) Skin Sensitization; Not available

(f) Carcinogenicity; KOREA-ISHL, IARC, NTP, OSHA, ACGIH, EU Regulation 1272/2008:  
Not listed

(g) Mutagenicity; Not available

(h) Reproductive toxicity; Not available

(i) Specific target organ toxicity (single exposure); Not available

(j) Specific target organ toxicity (repeat exposure); Not available

(k) Aspiration Hazard; Not available

## SECTION 12 : ECOLOGICAL INFORMATION

### 12.1 Toxicity

Acute toxicity Not available

Chronic toxicity	Not available
12.2 Persistence and Degradability	Persistence : Not available Degradability : Not available
12.3 Bioaccumulative potential	Bioaccumulation : Not available Biodegradation : Not available
12.4 Mobility in soil	Not available
12.5 Results of PBT and vPvB assessment	Not available
12.6 Other adverse effects	Not available

## SECTION 13 : DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Waste from residues

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

#### Container

Consider the required attentions in accordance with waste treatment management regulation.

## SECTION 14 : TRANSPORT INFORMATION

14.1 UN Number : Not applicable

14.2 UN Proper shipping name : Not applicable

14.3 Transport Hazard class : Not applicable

14.4 Packing group : Not applicable

14.5 Environmental hazards : Not applicable

14.6 Special precautions for user

in case of fire : Not applicable

in case of leakage : Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not Available

## SECTION 15 : REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture

#### EU Regulatory Information

##### EU classification :

Annex I of Directive 67/548/EEC :

Classification : Not regulated

Risk phrases : Not regulated

Safety phrases : Not regulated

##### EU CLP 2008 :

Classification : Not regulated

Hazard statement codes : Not regulated

Precautionary statement codes : Not regulated

EU SVHC list : Not regulated

EU Authorisation List : Not regulated

EU Restriction list : Not regulated

#### Foreign Regulatory Information

##### External information :

U.S.A management information (OSHA Regulation) : Not regulated

U.S.A management information (CERCLA Regulation) : Not regulated

U.S.A management information (EPCRA 302 Regulation) : Not regulated

U.S.A management information (EPCRA 304 Regulation) : Not regulated

U.S.A management information (EPCRA 313 Regulation) : Not regulated

Korea management information : Not regulated

Substance of Roterdame Protocol : Not regulated

Substance of Stockholme Protocol : Not regulated

Substance of Montreal Protocol : Not regulated

**15.2 Chemical safety assessment :** No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16 : OTHER INFORMATION

**Product safety data sheet for prepared in accordance with Regulation (EU) 453/2010 (REACH), Annex II**

### 16.1 Indication of changes

**Date Updated :** 13. Jan. 2016

**Version :** 1.3/EN

### 16.2 Abbreviations and acronyms

**ACGIH** = American Conference of Government Industrial Hygienists

**CLP** = Classification Labelling Packaging Regulation ; Regulation (EC) No 1272/2008

**CAS No.** = Chemical Abstracts Service number

**DMEL** = Derived Minimal Effect Levels

**DNEL** = Derived No Effect Level

**EC Number** = EINECS and ELINCS Number (see also EINECS and ELINCS)

**EU** = European Union

**IARC** = International Agency for Research on Cancer

**ISHL** = Industrial Safety & Health Law

**NIOSH** = National Institute for Occupational Safety & Health

**NTP** = National Toxicology Program

**OSHA** = European Agency for Safety and Health at work

**PBT** = Persistent, Bioaccumulative and Toxic substance

**PNEC(s)** = Predicted No Effect Concentration(s)

**REACH** = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 453/2010

**STP** = Sewage Treatment Plant

**SVHC** = Substances of Very High Concern

**vPvB** = Very Persistent and Very Bioaccumulative

**UN** = United Nations

**MARPOL** = International Convention for the Prevention of Pollution from Ships (IMO)

**IBC** = Intermediate Bulk Container

**CERCLA** = Comprehensive Environmental Response, Compensation & Liability Act (US)

**EPCRA** = Emergency Planning and Community Right-to-Know Act (US)

**EINECS** = European Inventory of Existing Commercial chemical Substances

**ELINCS** = European List of Notified Chemical Substances

### 16.3 Key literature reference and sources for data :

### 16.4 Classification and procedure used to derive the classification for mixtures according to Regulation(EC) 1272/2008(CLP):

Classification according to Regulation (EC) 1272/2008

Classification procedure

### 16.5 Relevant R-phrases and/or H-statements (number and full text) :

Not available

### 16.6 Training advice :

- Do not handle until all safety precautions have been read and understood.

### 16.7 Further information :

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation, as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.