

# SAFETY DATA SHEET

## 1. Identification of the substance or mixture and of the supplier

**A. GHS product identifier :** ECOZEN® YF401

**B. Recommended use of the chemical and restrictions on use**

**Recommended use :** Plastics

**Restrictions on use :** Use for recommended use only

**C. Supplier**

**Company name :** SK Chemicals Co., Ltd

**Address :** 686 Sampyeong dong, Bundang-gu, Seongnam m-si, Gyeong ggi-do 463-400, Korea

**Emergency phone number :** +82-2-2008-2231

**Respondent :** Byung-gyu Kim

**Fax :** +82-2-2008-2259

## 2. Hazards identification

**A. GHS classification of the substance/mixture**

Not classified

**B. GHS label elements, including precautionary statements**

**Pictogram and symbol :** Not applicable

**Signal word :** Not applicable

**Hazard statements :** Not applicable

**Precautionary statements**

**Precaution :** Not applicable

**Treatment :** Not applicable

**Storage :** Not applicable

**Disposal :** Not applicable

**C. Other hazard information not included in hazard classification (NFPA)**

**Health :** Not available

**Flammability :** Not available

**Reactivity :** Not available

## 3. Composition/information on ingredients

Chemical Name	Common Name (Synonyms)	Additional identification	Content (%)
copolyester	Not available	proprietary	99≤
Additives	Confidential	Confidential	≤1

## 4. First aid measures

**A. Eye contact**

- Seek medical attention if eye symptoms occur.

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

**B. Skin contact**

- Remove and isolate contaminated clothing and shoes.
- Seek medical attention if skin symptoms occur.
- 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.

**C. Inhalation** : Not available**D. Ingestion**

- Get medical attention if substance is ingested.

**E. Indication of immediate medical attention and notes for physician**

- 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 as quickly as possible with water, and then see a physician for treatment.

## 5. Fire fighting measures

**A. Suitable (and unsuitable) extinguishing media**

- Suitable extinguishing media: CO<sub>2</sub>, water, sand

**B. Specific hazards arising from the chemical**

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

**C. Special protective equipment and precautions for fire-fighters**

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

## 6. Accidental release measures

**A. Personal precautions, protective equipment and emergency procedures**

- Stop leak if it can be done without risk.
- Isolate exposed area.
- Exclude unauthorised personnel.
- Use certified protective equipment.
- Ventilate the leaked area.
- Do not touch or walk through spilled material.

**B. Environmental precautions and protective procedures**

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

### C. The methods of purification and removal

- Use sweeping brush or vacuum cleaner.

## 7. Handling and storage

### A. Precautions for safe handling

- Avoid contact with molten material.
- Use general dilution ventilation and /or local exhaust ventilation to control airborne exposures.
- Prevention of Fire and Explosion: Not available.

### B. Conditions for safe storage

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

## 8. Exposure controls/personal protection

### A. Occupational Exposure limits

**Korea regulation** : Not applicable

**ACGIH regulation** : Not applicable

**Biological exposure index** : Not applicable

**OSHA regulation** : Not applicable

**NIOSH regulation** : Not applicable

**EU regulation** : Not applicable

**Other** : Not applicable

### B. Appropriate engineering controls

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

### C. Personal protective equipment

#### Respiratory Protection:

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

#### Eye protection

- An eye wash unit and safety shower station should be available nearby work place.
- Wear safety glasses to protect eyes when working with molten material..

#### Hand protection

- It is a good industrial hygiene practice to minimize skin contact.
- When material is heated, wear gloves to protect against thermal burns

**Body protection**

- It is a good industrial hygiene practice to minimize skin contact. When material is heated, Wear gloves to protect against thermal burns.

## 9. Physical and chemical properties

**A. Appearance**

**Description :** Colorless solid (pellets)

**Color :** Not available

**B. Odor :** Slight odor

**C. Odor threshold :** Not applicable

**D. pH :** Not applicable

**E. Melting point/freezing point :** Not applicable

**F. Initial boiling point and boiling range :** Not applicable

**G. Flash point :** Not available

**H. Evaporation rate :** Not available

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

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

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

**L. Solubility (ies) :** Negligible

**M. Vapor density :** Not available

**N. Specific gravity : > 1 (density: 1.27g/ml (25 °C))**

**O. Partition coefficient: n-octanol/water :** Not available

**P. Auto ignition temperature :** 454 °C (ASTM E659)

**Q. Decomposition temperature :** Not available

**R. Viscosity :** Not available

**S. Molecular weight :** Not available

## 10. Stability and reactivity

**A. Chemical stability :** Stable

**B. Possibility of hazardous reactions:** None Known

**C. Conditions to avoid:** None Known

**D. Incompatible materials:** Not available

**E. Hazardous decomposition products:** Not available

## 11. Toxicological information

**A. Information of health Hazardous**

**Acute toxicity**

**Oral** : None known

**Dermal** : Not available

**Inhalation** : Not available

**Skin corrosion/ irritation** : Molten material will produce thermal burns

**Serious eye damage/ irritation** : Molten material will produce thermal burns

**Respiratory sensitization** : Not available

**Skin sensitization** : Not available

**Carcinogenicity** : Not classified

KOREA-ISHL, IARC, NTP, OSHA, ACGIH, EU Regulation 1272/2008: Not listed

**Mutagenicity** : Not available

**Specific target organ toxicity (single exposure)** : Not available

**Specific target organ toxicity (repeat exposure)** : Not available

**Aspiration Hazard** : Not available

## 12. Ecological information

### A. Ecological toxicity

- **Acute toxicity** : Not available

- **Chronic toxicity** : Not available

**Fish** : Not available

**crustacean** : Not available

**Algae** : Not available

### B. Persistence and degradability

**Persistence** : Not available

**Degradability** : Not available

### C. Bioaccumulative potential

**Bioaccumulation** : Not available

**Biodegradation** : Not available

### D. Mobility in soil

### E. Other hazardous effect

## 13. Disposal considerations

### A. Disposal method

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

### B. Disposal precaution

-Consider the requirements of any applicable waste treatment management regulation.

## 14. Transport information

- A. **UN Number** : Not regulated as a hazardous material.
- B. **UN Proper shipping name** : Not applicable
- C. **Transport Hazard class** : Not applicable
- D. **Packing group** : Not applicable
- E. **Marine pollutant** : Not applicable
- F. **Special precautions**
  - in case of fire : Not applicable
  - in case of leakage : Not applicable

## 15. Regulatory information

### ① US Regulatory 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

### ② Foreign Regulatory Information

#### Korea regulatory Information

- Occupational Safety and Health Regulation** : Not regulated
- Toxic Chemical Control Act** : Non-Toxic Chemicals (97-3-186)
- Dangerous Material Safety Management Regulation** : Not regulated
- Waste Control Act** : Not regulate
- Persistent Organic Pollutants Acts** : Not regulated

#### External information

- EU classification (classification)** : Not regulated
- EU classification (risk phrases)** : Not regulated
- EU classification (safety phrases)** : Not regulated
- EU SVHC list** : Not regulated
- EU Authorisation List** : Not regulated
- EU Restriction list** : **Not regulated**
- Persistent Organic Pollutants Acts** : Not regulated
- Substance of Rotterdam Protocol** : Not regulated
- Substance of Stockholm Protocol** : Not regulated
- Substance of Montreal Protocol** : Not regulated

## 16. Other information

- A. **Information source and references**
- B. **Issuing date** : 01/June/2015

**C. Revision number and date**

**revision number** : 01/June/2016

**date of the latest revision** : 01/June/2016

**D. Others**

Revised Material Safety Data Sheet based on the amendments made on the Ministry of Employment and Labor Public Notice on Standard for Classification Labeling of Chemical Substance and Material Safety Data Sheet.

This SDS is authored in pursuant to the Article 41 of the Occupational Safety and Health Act.

The content is based on the latest information and knowledge that we currently possess.

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