

FN400

Division LDP401

1. IDENTIFICATION**A. Product name:**

FN400

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

- General use: Materials of wide use plastic
- Restriction on use: Not available

C. Information of manufacturer, supplier: **Company:**

SK GlobalChemical Co., Ltd

 Address:

Head office) 99, Seorin-dong, Jongno-gu, Seoul, Korea9, Factory) 110, Gosa-dong, Nam-gu, Ulsan, Korea, Laboratory)140-1, Wonchon-dong, Yuseong-gu, Daejeon, Korea

 Emergency Telephone No:

+82-42-609-8340

2. HAZARD IDENTIFICATION**A. Classification:**

None : None

B. Label element, including precautionary statements: **Symbols:** **Signal word(s):** **Hazard statement(s):**

-

 Precautionary statement(s):

- Prevention
- Response
- Storage

© Disposal

C. Other hazards which do not result in classification;

NFPA Code : Health (0), Flammability (0), Reactivity (0)

D. Classification of the substance or mixture

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical identity	Common name,synonym	CAS number	Percentages(%)
Linear Low Density Polyethylene	Linear Low Density Polyethylene	25087-34-7	> =99
Additives	Additives	-	<1

The Others

4. FIRST AID MEASURES

A. Eye contact:

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15minutes and call a doctor/physician.

B. Skin contact:

- Flush skin with plenty of wter for at least 15 minutes while removing contaminated clothing and shoes.
- Laundering enough contaminated clothing before reuse.

C. Inhalation:

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.

D. Ingestion:

- About whether I should induce vomiting Take the advice of a doctor.
- Rinse your mouth with water immediately.

E. Most important symptoms/effect, acute and delayed:

- Not available

F. Indication of immediate medical attention and special treatment needed, if necessary:

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.

5. FIRE-FIGHTING MEASURES

A. Suitable extinguishing media:

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray
- Avoid use of water jet for extinguishing

B. Specific hazards arising from the chemical:

- Not available

C. Special protective equipment and precautions for firefighters:

- Move containers from fire area, if you can do without the risk.
- Keep unauthorized personnel out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Notify your local firestation and inform the location of the fire and characteristics hazard.
- Using a unattended and water devices in case of large fire and leave alone to burn if you do not imperative.
- Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES**A. Personal precautions, protective equipment and emergency procedures:**

- Ventilate closed spaces before entering.
- Move container to safe area from the leak area.
- Remove all sources of ignition.
- Handling the damaged containers or spilled material after wearing protective equipment.

B. Environmental precautions:

- Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.

C. Methods and materials for containment and cleaning up:

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notification to central government, local government. When emissions at least of the standard amount
- Dispose of waste in accordance with local regulation.
- Appropriate container for disposal of spilled material collected.
- Small liquid state spills: Appropriate container for disposal of spilled material

collected.

- For disposal of spilled material in appropriate containers collected and clear surface.

7. HANDLING AND STORAGE

A. Precautions for safe handling:

- Avoid direct physical contact.
- Comply with all applicable laws and regulations for handling
- Do not handle until all safety precautions have been read and understood.
- Operators should wear antistatic footwear and clothing.

B. Conditions for safe storage. including incompatibilities:

- Save in cool, dry and well ventilated place.
- Do not use damaged containers.
- Save applicable laws and regulations.
- Please pay attention to incompatibilities materials and conditions to avoid.
- Keep sealed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limits in the air of the workplace, biological limit values:

- ACGIH TLV
- Not available
- OSHA PEL
- Not available

B. Appropriate engineering controls:

- A system of local and/or general exhaust is recommended to keep employee exposures above the Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The use of local exhaust ventilation is recommended to control emissions near the source.

C. Individual protection measures:

Respiratory protection:

- Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.
- Respiratory protection is ranked in order from minimum to maximum.
- Consider warning properties before use.
- Dust, mist, fume-purifying respiratory protection

- Any air-purifying respirator with a corpuscle filter of high efficiency
- Any respiratory protection with a electromotion fan(for dust, mist, fume-purifying)
- Self-contained breathing apparatus with a corpuscle filter of high efficiency
- For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

○ **Eye protection:**

- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
- Provide an emergency eye wash station and quick drench shower in the immediate work area.

○ **Hand protection:**

- Wear appropriate glove.

○ **Body protection:**

- Wear appropriate clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance (physical state, colour etc):

- Appearance: Solid
- Color: White

B. Odour:

odorless

C. Odour threshold:

Not available

D. pH:

Not available

E. Melting point/freezing point:

110-130°C, 90-110°C

F. Initial boiling point and boiling range:

Not available

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. Vapour pressure:

Not available

L. Solubility(ies):

Solubility in Xylene, Toluene, Trichloroethylene, mineral oil

M. Vapour density:

Not available

N. Specific gravity:

0.915-0.930

O. Partition coefficient: n-octanol/water:

Not available

P. Auto-ignition temperature:

350°C

Q. Decomposition temperature:

Not available

R. Viscosity:

upper than 100 PaS at 190°C, 100 1/s

10. STABILITY AND REACTIVITY**A. Chemical stability:**

- This material is stable under recommended storage and handling conditions.

B. Possibility of hazardous reactivity:

- Hazardous Polymerization will not occur.

C. Conditions to avoid:

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces

D. Incompatible materials:

- Not available

E. Hazardous decomposition products:

- May emit flammable vapour if involved in fire.

11. TOXICOLOGICAL INFORMATION**A. Information on the likely routes of exposures:** **Inhalation exposure:**

- Not available

 Ingestion exposure:

- Not available

 Skin exposure:

- Not available

 Eye exposure:

- Not available

B. Delayed and immediate effects and also chronic effects from short and long term exposure: **Acute toxicity:**

- Not available

 Skin corrosion/irritation:

- Not available

 Serious eye damage/irritation:

- Not available

 Respiratory sensitization:

- Not available

 Skin sensitization:

- Not available

 Carcinogenicity:

* IARC

- Not available

* OSHA

- Not available

* ACGIH

- Not available

* NTP

- Not available
- * EU CLP
- Not available

Germ cell mutagenicity:

- Not available

Reproductive toxicity:

- Not available

Specific target organ systemic toxicity-single exposure:

- Not available

Specific target organ systemic toxicity-repeated exposure:

- Not available

Aspiration hazard:

- Not available

C. Numerical measures of toxicity(such as acute toxicity estimate):

-

12. ECOLOGICAL INFORMATION

A. Aquatic, terrestrial organisms toxicity:

- Fish
 - Not available
- Crustaceans
 - Not available
- Algae
 - Not available

B. Persistence and degradability:

- Persistence
 - Not available
- Degradability
 - Not available

C. Bioaccumulative potential:

- Bioaccumulative potential

- Not available
- Biodegradation
- Not available

D. Mobility in soil:

- Not available

E. Other adverse effects:

- Not available

13. DISPOSAL CONSIDERATIONS**A. Disposal methods:**

- Since more than two kinds of designaed waste is mixed, it is difficult to treat sepatatly, then can be reduction or stabilization by incineration or similar process.
- If water separation is possible, pre-process with Water separation process.
- Dispose by incineration.

B. Disposal considerations(Specify disposal container and methods):

- The user of this product must disposal by oneself or entrust to waste disposer or person who other's waste recycle and dispose, person who establish and operate waste disposal facilities.
- Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION**A. UN Number:**

- Not available

B. UN Proper Shipping Name:

- Not available

C. Transport hazard class(es):

- Not available

D. Packing group, if applicable:

- Not available

E. Environmental hazards:

- Not applicable

F. Special precautions for user:

- Local transport follows in accordance with Dangerous goods Safety Management

Law.

- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.

- EmS FIRE SCHEDULE : Not available

15. REGULATORY INFORMATION

A. Safety, health and environmental regulations specific for the product in question:

POPs Management

Law

- Not applicable

Information of EU

Classification

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Classification

- Not applicable

* Risk

Phrases

- Not applicable

* Safety

Phrase

- Not applicable

U.S. Federal regulations

* OSHA PROCESS SAFETY (29CFR1910.119)

- Not applicable

* CERCLA Section 103 (40CFR302.4)

- Not applicable

* EPCRA Section 302 (40CFR355.30)

- Not applicable

* EPCRA Section 304 (40CFR355.40)

- Not applicable

* EPCRA Section 313
(40CFR372.65)

- Not applicable
- Rotterdam Convention listed ingredients
- Not applicable
- Stockholm Convention listed ingredients
- Not applicable

16. OTHER INFORMATION

A. References and sources for data:

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.
- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

B. Originated date:

- 2015-06-11

C. Revision number and date:

- 2 times, 2015-11-02