

SAFETY DATA SHEET

FSHP8015-1

FILE NO.:SPSDS-FSHP8015-1

ISSUE DATE: March 11, 2024

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

1.1. PRODUCT IDENTIFIER

Product name: FSHP8015-1

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINSTRelevant identified uses: 48.Others (Raw material of polyethylene product goods)
Used advised against:**1.3. SUPPLIER INFORMATION**Company: TWO H Chem Ltd.
Address: 234 Chungmin-Ro, Goesan-Eup, Goesan-Gun, Chungcheongbuk-Do, Korea
Emergency phone: 82-43-832-6760
Other calls: 82-70-8255-7369

SECTION 2: HAZARDS IDENTIFICATION

2.1. HAZARD CLASSIFICATION

No data available

2.2. ALLOCATION LABEL ELEMENTSNot available
Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.Hazard pictograms:
Signal word: NONE
Hazard statement: No data available
Precautionary statements: No data available**2.3. OTHER HAZARDS**PRODUCT NFPA Level HEALTH: 1, FIRE: 1, REACTIVE: 0
(※ 0 = Stable, 1 = Low, 2 = Medium, 3 = High, 4 = Very high)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. INGREDIENTS

Components	Common name	CAS No.	%WT
Polyethylene	Polyethylene	9002-88-4	> 99.9

SECTION 4: FIRST AID MEASURES

4.1. GENERAL ADVICE:Following eye contact: Get medical aid immediately.
In case of contact with material, immediately flush eyes with running water for at least 15 minutes.Following skin contact: Launder contaminated clothing and shoes before re-use
Remove and isolate contaminated clothing and shoes.
In case of contact with material, immediately flush skin with running water for at least 15 minutes.
Get medical aid immediately.

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Following inhalation:	Seek immediate medical assistance Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Move to fresh air.
Following ingestion:	Get medical aid immediately If unconscious but breathing, never give anything by mouth.
Advice to physician:	Do not apply drugs of the adrenaline ephedrine group. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. SUITABLE AND UNSUITABLE EXTINGUISHING MEDIA

Suitable extinguishing media:	Large fire; Water spray/fog, regular foam (Suitable extinguishing media) Small fire; Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO ₂ .
Unsuitable extinguishing media:	High pressure water (Unsuitable extinguishing media).

5.2. SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Pyrolytic product:	No data available
Risk of fire and explosion:	Containers may explode when heated. Fire may produce irritating and/or toxic gases May ignited from heat, friction or contamination. Some may burn but none ignite readily.
Other	Some liquids produce vapors that may cause dizziness or suffocation. May cause toxic effects if inhaled.

5.3. SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Dike fire-control water for later disposal; Do not scatter the material.
Fire involving tanks; Always stay away from tanks engulfed in fire.
Fire involving tanks; Cool containers with flooding quantities of water until well after fire is out.
Fire involving tanks; Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
Move containers from fire area if you can do it without risk.
Runoff may cause pollution.
Substance may be transported hot.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. HEALTH CONSIDERATIONS AND PROTECTIVE EQUIPMENT

Do not enter areas which have more than 23.5% oxygen in the atmosphere, without respirator or air supplied mask.
Prevent dust cloud.
Do not touch or walk through spilled material.
Ventilate the contaminated area.
Please note that materials and conditions to be avoided.
Stop leak if you can do it without risk.
ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

6.2. ENVIRONMENTAL PRECAUTIONS

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

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6.3. FOR CLEANING UP

Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.
 With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
 Large spill: Dike far ahead of liquid spill for later disposal.
 Small spill: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
 Small spill: Flush area with flooding quantities of water.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)
 Caution: Dangerous fire hazard when exposed to heat, or flame, sparks.
 Avoid any skin and eye contact when insert undiluted solution. Wash. thoroughly after handling.
 Use adequate machine for prevention when package handling.
 Do not spray. Can be evaporate quickly if sprayed.
 Check oxygen content before entering area.
 Do not spray. This material does not easily evaporated. But can be reach toxic concentration quickly in air if sprayed.

Keep under 20°C. This material evaporate slowly at 20°C and reach toxic concentration.
 Do not spray. Can be reach toxic concentration quickly in air if sprayed.
 CAUTION: Can be reach toxic concentration quickly in air if released.
 CAUTION: Vapors displace air and can cause asphyxiation in confined spaces if released material.
 High concentration of this gas will create an oxygen-deficient atmosphere, creating the risk of asphyxiation. Check oxygen content before entering area.
 CAUTION: This material does not contain oxygen and may cause asphyxia if released in a confined area.
 CAUTION: High temperature.
 Handling refer to engineering control/personal protection section.
 Wash. thoroughly after handling.
 Please note that materials and conditions to be avoided.

7.2. CONDITIONS FOR SAFE STORAGE (INCLUDING ANY INCOMPATIBILITIES)

Drum Handling: Must work at safe place., Loading more than 3 stack is prohibited.
 Choose a place that can be protected from strong oxidizers and acid.
 Store in a cool/low-temperature, well-ventilated (dry) place (away from heat and ignition sources)
 Store containers: AVOID the place where can be damage and contamination.
 Please note that materials and conditions to be avoided.
 Store in a dry place. Store in a closed container.
 Store in a closed container.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CHEMICAL EXPOSURE LIMITS, BIOLOGICAL EXPOSURE STANDARD

Components	Occupational exposure limits	ACGIH	Biological standard
Polyethylene	TWA: Not applicable STEL: Not applicable	TWA: Not applicable STEL: Not applicable	Not applicable

8.2. APPROPRIATE ENGINEERING CONTROLS

Make sure you have the right exhaust and ventilation in the workplace.
 Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

8.3. PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection
 - If there is a direct contact or exposure, wear a certified appropriate respiratory protection.

Eye protection
 - Provide emergency showers and eyewash.
 - Wear an appropriate security diameter.

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Hand protection

- Wear safety gloves for chemicals.

Body protection

- Wear a protective gloves/protective clothes/security diameter/security surface/earplugs.
- Wear suitable protective clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Naturally white powder
ODOR:	No data available
PHYSICAL STATE:	Solid (powder)
pH:	No data available
BOILING POINT:	No data available
MELTING POINT:	126- 138°C
VAPOR PRESSURE (mmHg):	No data available
VAPOR DENSITY (AIR = 1):	No data available
EVAPORATION RATE:	No data available
FLAMMABILITY (SOLID, GAS):	No data available
UPPER / LOWER EXPLOSIVE LIMITS:	No data available
SOLUBILITY IN WATER:	Insoluble
SPECIFIC GRAVITY (H ₂ O = 1):	0.941– 0.965
AUTO IGNITION TEMPERATURE:	> 350°C
DEGRADATION TEMPERATURE:	No data available
VISCOSITY:	No data available
MOLECULAR WEIGHT:	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. STABILITY AND HAZARDOUS REACTIVITY

Some liquids produce vapors that may cause dizziness or suffocation.
May cause toxic effects if inhaled.
Fire may produce irritating and/or toxic gases.
Some may burn but none ignite readily.
Containers may explode when heated.
Stable under normal temperatures and pressures.

10.2. CONDITIONS TO AVOID

Ignition source(heat, spark, flame, etc.).

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10.3. INCOMPATIBLES MATERIAL

Combustibles.
Irritating and/or toxic gas.

10.4. HAZARDOUS DECOMPOSITION PRODUCT

No data available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. EXPOSURES ROUTE INFORMATION

Inhalation	
- After inhalation:	No data
Skin contact	
- Following skin contact:	No data
Eye contact	
- After eye contact:	No data
Ingestion	
- After ingestion:	No data

11.2. HEALTH HAZARD INFORMATION

Acute toxicity		
- Acute toxicity(Oral) PRODUCT:		Not classified
Polyethylene:		LD50> 8000 mg/kg experimental species: Rat
- Acute toxicity(Dermal) PRODUCT:		Not classified
Polyethylene:		No data available
- Acute toxicity(Inhalation:Gases) PRODUCT:		Not classified
Polyethylene:		No data available
- Acute toxicity(Inhalation:Vapours) PRODUCT:		Not classified
Polyethylene:		No data available
- Acute toxicity(Inhalation:Dust/mist) PRODUCT:		Not classified
Polyethylene:		LC50 75.5 mg/L 30min experimental species: Rat
Skin corrosion/irritation PRODUCT:		Not classified
Polyethylene:		No data available
Serious eye damage/eye irritation PRODUCT:		Not classified
Polyethylene:		No data available
Respiratory sensitization PRODUCT:		Not classified
Polyethylene:		No data available
Skin sensitization PRODUCT:		Not classified
Polyethylene:		No data available
Carcinogenicity PRODUCT:		Not classified
Polyethylene:		2.44 (IARC), Source: IARC
Germ cell mutagenicity PRODUCT:		Not classified
Polyethylene:		No data available
Reproductive toxicity PRODUCT:		Not classified
Polyethylene:		No data available
Specific target organ toxicity single exposure PRODUCT:		Not classified
Polyethylene:		No data available
Specific target organ toxicity repeated exposure PRODUCT:		Not classified
Polyethylene:		No data available

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Aspiration hazard PRODUCT:
Polyethylene:Not classified
No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1. AQUATIC TOXICITYFish>PRODUCT:
Polyethylene:Not classified
No data availableCrustacea>PRODUCT:
Polyethylene:Not classified
No data availableAquatic algae>PRODUCT:
Polyethylene:Not classified
No data available**12.2. PERSISTENCE AND DEGRADABILITY**n-octanol water partition coefficient>PRODUCT:
Polyethylene:Not classified
No data availableDegradation>PRODUCT:
Polyethylene:Not classified
No data availableBiodegradation>PRODUCT:
Polyethylene:Not classified
No data available**12.3. BIOACCUMULATIVE POTENTIAL>PRODUCT:**
Polyethylene:Not classified
No data available**12.4. MOBILITY IN SOIL>PRODUCT:**
Polyethylene:Not classified
No data available**12.5. OTHER ADVERSE EFFECTS>PRODUCT:**
Polyethylene:Not classified
No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. DISPOSAL METHOD

Every commercial waste producer shall either treat wastes generated from his/her place of business by him/herself or commission the treatment of such wastes to a person who has license for a waste treatment business under Article 26(3), a person who recycles of such wastes under Article 44(2), a person who has installed and operates a waste disposal facility under Article 4 or 5, a person who has completed the registration of a business of discharging wastes into the sea under Article 18 of the Marine Environment Management Act.

13.2. PRECAUTIONS (INCLUDING DISPOSAL OF CONTAMINATED CONTAINER OF PACKAGE)

Discuss it according to waste regulation.
Do not allow spill material to enter sewers, storm water drains, soil, etc.
Empty containers may explode and residues can be ignited when pressured, cut, weld, heated.
Empty containers may rupture when pressured.
Empty containers recycled under environmental laws.
Use a certified waste disposal company.
Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)

SECTION 14: TRANSPORT INFORMATION

UN number:
Proper shipping name:
Class or division:
Packing group:
Marine pollutant:Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

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Special safety response for transportation or transportation measure

Emergency measures in case of fire:	Not applicable
Emergency measures in the effluent :	Not applicable
- ADR	
Tunnel restriction code:	Not applicable
	Not applicable
- IMDG	
Marine pollutant:	Not applicable
- Air transport(IATA)	
UN number:	Not applicable
Proper shipping name:	Not applicable
Class or division:	Not applicable
Packing group:	Not applicable

SECTION 15: REGULATORY INFORMATION

15.1. NATIONAL AND/OR INTERNATIONAL REGULATORY INFORMATION

Global Inventory - USA. Toxic Substances Control Act (TSCA) Chemical Substances Inventory (12 April 2018)
- Polyethylene

ETC regulation - EPCRA (SARA Title III) Section 302 Extremely Hazardous Substance (EHS) (40 CFR 355, Appendix A)
Not applicable

ETC regulation - OSHA Hazard Communication Standard: On One of the Floor Lists of the OSHA HCS (29 CFR 1910. 1200)
Not applicable

ETC regulation - EPCRA (SARA Title III) Section 313 Toxic Chemical Release Inventory (TRI) Reporting for RY 2013
(as amended Sep. 30, 2014)
Not applicable

ETC regulation - CERCLA Hazardous Substances [other than radionuclides] (40 CFR 302.4) (as amended by 75 FR 78918, Dec. 17, 2010)
Not applicable

ETC regulation - RCRA Appendix VII: Hazardous Wastes (40 CFR 261, App. VII, Basis for Listing Hazardous Waste)
Not applicable

ETC regulation - CERCLA. Radionuclides and their Reportable Quantities (40 CFR 302.4, App. B)
Not applicable

ETC regulation - RCRA D List of Characteristic Hazardous Wastes (40 CFR 261.21-24)
Not applicable

ETC regulation - RCRA F List of Hazardous Wastes from Non-Specific Sources (40 CFR 261.31(a)) (as amended by 73 FR 31756, June 4, 2008)
Not applicable

ETC regulation - RCRA K List of Hazardous Wastes from Specific Sources (40 CFR 261.32)
Not applicable

ETC regulation - RCRA P List of Hazardous Wastes (40 CFR 261.33(e) and 40 CFR 302 [CERCLA])
Not applicable

ETC regulation - RCRA U List of Hazardous Wastes (40 CFR 261.33(f) and 40 CFR 302 [CERCLA], as amended 75 FR 78918, Dec 17, 2010)
Not applicable

ETC regulation - DOT Hazardous Materials Table Listings (49 CFR 172.101, as amended through October 31, 2013)
Not applicable

ETC regulation - EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances
Not applicable

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SECTION 16: OTHER INFORMATION

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DISCLAIMER OF RESPONSIBILITY:

TWO H Chem Ltd. does not recommend and will not knowingly provide any of its products, including samples, for use as: Components of, or packaging for, tobacco products; Components of products where the end product is intended for human or animal consumption; In any application that is intended for any internal contact with human body fluids or body tissues; As a critical component in any medical device that supports or sustains human life; In any product that is designed specifically for ingestion or internal use by pregnant women; and in any application designed specifically to promote or interfere with human reproduction.

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REFERENCE

ChemIDPlus
 Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)
 ECHA registration data
 ECOSAR
 EPA
 EPISUITE
 Ecological Structure Activity Relationships(ECOSAR)
 IUCLID
 International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)
 NITE
 NITE,e-ChemPortal;CESAR
 National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>)
 National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>), Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)
 OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>)
 OSHA
 QSAR
 SIDS
 Seton compliance resource center(<http://www.setonresourcecenter.com>)
 TOPKAT
 e-ChemPortal;CESAR

OTHER INFORMATION:

- Note 1
- Always ensure adequate ventilation of the workplace.
 - Local exhaust ventilation of process equipment may be needed.
 - Avoid breathing vapors or fumes.
- Note 2
- Incorrect operation of processing equipment can cause thermal degradation of the polymer and a potential danger through inclusion of bubbles of air or other gases in material subsequently subjected to high temperatures.
- Note 3
- Avoid sources of ignition such as heat or flames.

<Record management>

Revision	Revision categories	Revision content	Revision date
Legislate	Overall	Legislate	March 11, 2024