

FILE NO.: PFPGHSMSDS-PFP3508

ISSUE DATE: October 06, 2023

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1.PRODUCT IDENTIFIER

Productname: PFP3508

Synonyms: Polypropylenehomopolymer

Chemical name: Polypropylenehomopolymer (powder)

Aliphatic compounds, Hydrocarbons, Polymer Chemical family:

1.2.RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE

Polymer, Raw material Recommended use:

Restrictions on use: Not available

1.3. MANUFACTURER OR SUPPLIER'S DETAIL

Company: TWO H Chem Ltd.

234 Chungmin-Ro, Goesan-Eup, Goesan-Gun, Chungcheongbuk-Do, Korea Address:

Emergency phone: 82-43-832-6760 Other calls: 82-70-8255-7369

SECTION 2: HAZARDS IDENTIFICATION

2.1. GHS CLASSIFICATION

Not available

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.2. GHS LABEL ELEMENT

Not available

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Pictogram and symbol: Not applicable Signal word: Not applicable Not applicable **Hazard statement:**

Precautionary statements

-Prevention: Not applicable -Response: Not applicable Not applicable -Storage: -Disposal: Not applicable

2.3. OTHER HAZARD INFORMATION NOT INCLUDED IN HAZARD CLASSIFICATION

NFPA RATING SYSTEM HEALTH: 0, FIRE: 0, REACTIVE: 0

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. INGREDIENTS

Chemical name	Common name	CAS No.	%WT
Polypropylene	PP	9003-07-0	99.9 ~ 100

SECTION 4: FIRST AID MEASURES

4.1. GENERAL ADVICE: No hazards which require special first aid measures.

Skin contact: Take off contaminated clothing and shoes immediately.

Wash off with soap and plenty of water.



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Eye contact: Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

Inhalation: Move to fresh air in case of accidental inhalation of dust or fumes from overheating

or combustion.

If symptoms persist, call a physician.

Ingestion: Clean mouth with water and drink afterwards plenty of water.

Do not give milk or alcoholic beverages.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS. BOTH ACUTE AND DELAYER:

None known.

4.3. PROTECTION OF FIRST-AIDERS: Not available

SECTION 5: FIRE-FIGHTING MEASURES

5.1. SUITABLE AND UNSUITABLE EXTINGUISHING MEDIA

Suitable extinguishing media: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO₂.

Unsuitable extinguishing media: High pressure water streams.

5.2. SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

May be ignited by heat, sparks of flames. Containers may explode when heated.

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

Fire will produce irritating and/or toxic gases.

If inhaled, may be harmful.

5.3. SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS

Dike fire-control water for later disposal; Do not scatter the material.

Move containers from fire area if you can do it without risk.

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.

Fire involving tanks; Always stay away from tanks engulfed in fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Eliminate all ignition sources.

Stop leak if you can do it without risk.

Please note that materials and conditions to avoid.

Ventilate the area.

Do not touch or walk through spilled material.

Prevent dust cloud.

6.2. ENVIRONMENTAL PRECAUTIONS AND PROTECTIVE PROCEDURES

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

6.3. THE METHODS OF PURIFICATION AND REMOVAL

Small spill: Flush area with flooding quantities of water. And take up with sand or other

non-combustible absorbent material and place into containers for later disposal.

Large spill: Dike far ahead of liquid spill for later disposal.

With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.



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SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Be careful to dust generation or friction work.

Please note that materials and conditions to avoid.

Wash thoroughly after handling.

Please work with reference to engineering controls and personal protective equipment.

Be careful to high temperature.

The handling of powder in both loading and unloading operations as well as fabrication may causedust to be formed, and necessary precautions for personal protection (see Section 8) should beused. As with all finely divided materials, precautions should be taken to avoid inhalation and eyecontact. Transfer from storage with a minimum of dusting. Polymer dust particles in the atmosphere are combustible and present a potential explosion hazard. Prevent dustaccumulations and dust clouds. Dust layers can be ignited by spontaneous combustion or other ignition sources. Keep away from heat, sparks, flame and all other ignition sources.

Keep container closed. Clean up dust accumulations. For proper safety of personnel and property, the container should be emptied in compliance with NFPA 654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries." Exercise caution when dispensing the contents of this product's container in or around combustible environments (for example, where flammable solvents are being used).

In such cases, the possible occurrence of sparks could ignite vapors and cause a fire or explosion. Evaluate the need forgrounding of equipment and container. Electrical equipment should be grounded and conform to applicable electrical code.

7.2. CONDITIONS FOR SAFE STORAGE

Store in a closed container.

Store in cool and dry place.

Store away from excessive heat and away from strong oxidizing agents.

Keep container closed to prevent contamination.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. OCCUPANTIONAL EXPOSURE LIMITS

KOREAN REGULATION: Not available

US (NIOSH / OSHA / ACGIH):

- NIOSH: Not available
- OSHA: Not available
- ACGIH: Not available
EU REGULATION: Not available
OTHERS: Not available

8.2. APPROPRIATE ENGINEERING CONTROLS

Provide local exhaust ventilation or other engineering controls to keep concentration of airborne under threshold limit value.

8.3. PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection

- Respiratory: Wear NIOSH or European Standard EN 149 approved full or half face piece(with goggles) respiratory protective equipmentwhen necessary.
- In the case exposure to particulate material, the respiratory protective equipment as follow are recommended.; facepiece filteringrespiratory or air purifying respiratory, high-efficiency particulate air(HEPA) filter media or respirator equipped with powered fan, filter media of use(dust, mist, fume).
- -In lack of oxygen(< 19.5%), wear the supplied-air respirator or self-contained breathing apparatus oxygen.



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Eye protection

- Wear facepiece with goggles to protect.
- An eye wash unit and safety shower station should be available nearby work place.
- Wear breathable safety goggles to protect from particulate material causing eye irritation or other disorder.

Hand protection

- Wear chemical resistant gloves.
- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

Body protection

- Wear appropriate protective chemical resistant clothing.
- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Naturally white powder

ODOR: Not available

PHYSICAL STATE: Solid (powder)

pH: Not applicable

BOILING POINT: Not applicable

MELTING POINT: 140- 170°C

VAPOR PRESSURE (mmHg): Not available

VAPOR DENSITY (AIR = 1): Not available

EVAPORATION RATE: Not applicable

FLAMMABILITY (SOLID, GAS): Not applicable

UPPER / LOWER EXPLOSIVE LIMITS: Not applicable

SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY ($H_2O = 1$): 0.89–0.91

AUTO IGNITION TEMPERATURE: 375 ~ 400°C

DEGRADATION TEMPERATURE: Not available

VISCOSITY: Not available

MOLECULAR WEIGHT: Not available

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY / CHEMICAL STABILITY / POSSIBILITY OF HAZARDOUS REACTIONS

Fire may produce irritating and / or toxic gases. If inhaled, may be harmful.

10.2. CONDITIONS TO AVOID

Heat, sparks or flames.



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10.3. INCOMPATIBLES MATERIAL

Combustibles.

10.4. HAZARDOUS DECOMPOSITION PRODUCT

Irritating and / or toxic gases.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. DELAY BY SHORT TERM AND LONG TERM EXPOSURES, ACUTE AND CHRONIC EFFECT

Acute toxicity

- Oral: Not available
- Dermal: Not available
- Inhalation: Not available

Skin corrosion / Irritation: Not available Serious eye damage / Irritation: Not available Respiratory sensitizer: Not available Skin sensitization: Not available Carcinogenicity: Not classified Germ cell mutagenicity: Not available Reproductive toxicity: Not available Not available Specific target organ toxicity (single exposure): Not available Specific target organ toxicity (repeat exposure): Not available Aspiration hazard:

SECTION 12: ECOLOGICAL INFORMATION

12.1. ECOTOXICITY

Acute toxicity:
Chronic toxicity:
Not available
Fish:
Not available
Crustacea:
Not available
Not available
Not available

12.2. PERSISTENCE AND DEGRADABILITY

Persistence: Not available Degradability: Not available

12.3. BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Not available Not available

12.4. MOBILITY IN SOIL: Not available

12.5. OTHER HAZADOUS EFFECT: Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. DISPOSAL METHOD

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

13.2. DISPOSAL PRECAUTION

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



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SECTION 14: TRANSPORT INFORMATION

14.1. INTERNATIONAL REGULATION

US DOT:

Canadian TDG:

Not regulated as a dangerous good

-UN number:
-UN proper shipping name:
-Transport hazard class:
-Packing group:
-Marine pollutant:

Not applicable
Not applicable
Not applicable
Not applicable

-Special precautions

In case of fire: Not applicable In case of leakage: Not applicable

SECTION 15: REGULATORY INFORMATION

15.1. NATIONAL AND/OR INTERNATIONAL REGULATORY INFORMATION

POPs management law: Not applicable

EU Classification

Classification: Not applicable
Risk phrases: Not applicable
Safety phrases: Not applicable

U.S.A. management information

OSHA regulation (29CFR1910.119):

CERCLA 103 regulation (40CFR302.4):

EPCRA 302 regulation (40CFR355.30):

EPCRA 304 regulation (40CFR355.40):

EPCRA 313 regulation (40CFR372.65):

Not applicable

EPCRA 313 regulation (40CFR372.65):

Not applicable

Rotterdam convention listed ingredients: Not applicable

Stockholm convention listed ingredients:

Not applicable

Montreal convention listed ingredients:

Not applicable

TSCA 12b

No substances are subject to TSCA 12(b) export notification requirements.

State Reporting

This material does not contain listed substance(s) known to the State of California to cancer, birth defects, or other reproductive harm that would require warning under the California Proposition 65 State Drinking Water and Toxic Enforcement Act.

However, TWO H Chem has not tested for the presence of listed chemical substances.

This product contain no known chemicals regulated by New Jersey's Worker and Community Right to Know Act.

No components are subject to the Massachusetts Right to Know Act.

This product contains no known chemicals regulated by Pennsylvania's Right to Know Act.

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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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 polymerand 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	October 06, 2023