Safety Data Sheet (SDS)

According to Regulation (EC) No. 2020/878

SECTION 1: Identification of the substance/mixture and of the company /undertaking

1.1. Product identifier

Product name: Y-125

REACH Registration No.: Not available

UFI Code: Not available

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

1) Relevant identified uses: Raw materials and intermediates
2) Uses advised against: Prohibition of use other than recommended use
3) Reason why uses advised against: Not available

1.3. Details of the supplier of the safety data sheet

1.3.1 Manufacturer

○ Manufacturer name: HD Hyundai Chemical
○ Street address/P.O. Box: 181, Pyeongsin 2-ro, Daesan-eup, Seosan-si, Chungcheongnam-do, Republic of Korea
○ Country ID/Postcode/Place: 31902
○ Telephone number (if possible, indicate telefax): +82-41-924-1015
○ E-mail address of competent person responsible for the SDS: Not available
○ National contact: +82-41-924-1015
○ Homepage: https://www.hd-hyundaichemical.co.kr

1.3.2 Supplier

○ Supplier name: Lotte Chemical
○ Street address/P.O. Box: 300, Olympic-ro, Songpa-gu, Seoul, Republic of Korea
○ Country ID/Postcode/Place: 05551
○ Telephone number (if possible, indicate telefax): +82-2-829-4114
○ E-mail address of competent person responsible for the SDS: Not available
○ National contact: +82-2-829-4114
○ Homepage: www.lottechem.com

1.4. Emergency telephone number:

○ Opening hours: 09:00~18:00, Monday-Friday (except public holidays)
○ Other comments (e.g. language(s) of the phone service): +82-41-924-1015

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP):

1) Physical-chemical Hazards: Not classified
2) Health Hazards: Not classified
3) Environmental Hazards: Not classified

2.1.2 Additional information: For full text of Hazard- and EU Hazard statements: see SECTION 16

2.2. Label elements

2.2.1 Labelling according to Regulation (EC) No 1272/2008 [CLP]:

1) Hazard pictograms: Not applicable

2) Signal Word: Not applicable

3) Hazard Statements: Not applicable

4) Precautionary Statements

■ Prevention: Not applicable

■ Response: Not applicable

■ Storage: Not applicable

■ Disposal: Not applicable

5) Supplemental Hazard information (EU): Not applicable

2.3. Other hazards:

- According to Annex XIII, the substance does not meet PBT or vPvB criteria.
- According to Regulation (EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.

SECTION 3: Composition/information on ingredients

3.1 Substances: Mixtures

3.2 Mixtures:

* Substances in ingredients not listed are not classified as hazardous or dangerous

Substance Name	CAS No. EC No.	Classification according to Regulation (EC) No 1278/2008 (CLP)	SCL / M-factor / ATE	% [Weight]
Polypropylene	9003-07-0 618-352-4	Not Classified	ATE (oral): N/A ATE (dermal): N/A ATE (inhalation, Dust/Mist): N/A	95~100

SECTION 4: First aid measures

4.1. Description of first aid measures

4.1.1 General information:

- No specific first aid measures are required.
- If symptoms occur following exposure, seek medical advice.

4.1.2. Following inhalation:

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

4.1.3. Following skin contact:

- In case of contact with substance, immediately flush skin with running water for at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash clothes and shoes thoroughly before reuse.
- Get medical attention immediately.

4.1.4. Following eye contact:

- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes.
- Get medical attention immediately.

4.1.5. Following ingestion:

- Do not give anything by mouth to an unconscious person.
- Get medical attention immediately.

4.1.6. Self-protection of the first aider

- First aiders should ensure adequate personal protection.
- No special protective measures are required.

4.2. Most important symptoms and effects, both acute and delayed

4.2.1. Over-exposure signs/symptoms:

- Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. Further symptoms are possible Indication of any immediate medical attention and special treatment needed.

4.2.2. Potential acute health effects: Not available

4.3. Indication of any immediate medical attention and special treatment needed

4.3.1. Notes for the doctor:

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

4.3.2. Special treatment: No specific treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1. Suitable extinguishing media:

Small fires: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO_2 (suitable extinguishing agents)

Large fires: Water spray/fog, regular foam (suitable extinguishing agents)

5.1.2. Unsuitable extinguishing media: High-pressure water jet (unsuitable extinguishing agent)

5.2. Special hazards arising from the substance or mixture

- May ignite from heat, friction or contamination.
- Containers may explode when heated.
- Some may burn but do not ignite easily.
- Fire may produce irritating and/or toxic gases.
- Inhalation of material may be harmful.
- Some liquids may produce vapors that can cause dizziness and suffocation.

5.3. Advice for firefighters

- Move containers from fire area if you can do it without risk.
- Substance may be transported hot.
- Leakage may cause contamination.
- 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 plenty of water until well after fire is out.
- Fire involving Tanks: Withdraw immediately in case of high-pitched sound from pressure relief 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

6.1.1 For non-emergency personnel:

1) Protective equipment: Wear appropriate protective clothing.

2) Emergency procedures:

- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Please note that materials and conditions to be avoided.
- Ventilate the contaminated area.
- Do not touch or walk through spilled material.
- Prevent dust cloud.

6.1.2 For emergency responders:

- Wear an appropriate NIOSH/MSHA approved respirator if vapour is generated.
- Wear appropriate respirator when ventilation is inadequate.

6.2. Environmental precautions:

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

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:

- In case of small leak, wash the contaminated area with plenty of water.

6.3.2 For cleaning up

- Small Spill: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
- Large Spill: Dike far ahead of liquid spill for later disposal.
- Use a clean shovel to scoop the spill into a clean, dry container, close loosely and move the container away from the spill area.
- In case of powder leakage, cover with a plastic sheet to prevent spread and keep in dry condition.

6.3.3 Other information:

- Dispose of via a licensed waste disposal contractor.

6.4. Reference to other sections:

- Section 8 (Protective equipment), Section 13 (Disposal instructions)

SECTION 7: Handling and storage

7.1. Precautions for safe handling

7.1.1. Protective measures:

- Please note that materials and conditions to be avoided.
- Work with reference to engineering controls and personal protective equipment.
- CAUTION: High temperature.
- Use closed systems and local exhaust ventilation during handling, processing, and storage to minimize the release of synthetic polymer microparticles (SPM) into air and wastewater.

7.1.2. Measures to prevent fire: Not available

7.1.3. Measures to prevent aerosol and dust generation: Not available

7.1.4. Measures to protect the environment: Avoid release to the environment.

7.1.5. Advice on general occupational hygiene:

- Good ventilation of the workplace is required.
- Do not eat, drink and smoke in work areas.
- Wash hands after use.
- Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibility:

7.2.1. Technical measures and storage conditions:

- Store in a closed container.
- Store in a cool, dry place.

- Please note that materials and conditions to be avoided.

7.2.2. Packaging materials: Not available

7.2.3. Requirements for storage rooms and vessels: Not available

7.2.4. Further information on storage conditions:

- Containers should be stored tightly sealed in a dry place.
- Store in a closed container to prevent contamination.
- Store at room temperature

7.3. Specific end use(s)

7.3.1 Recommendations: Not available

7.3.2 Industrial sector specific solutions: Not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure limits:

Chemical Name	ACGIH	Biological limit values	Exposure limits at intended use
Polypropylene	Not applicable	Not applicable	Not applicable

8.1.2 DNELs/PNECs

DNELs								
	Workers				Consumers			
Route of exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	-	-	-	-	-	-	-	-
Inhalation	-	-	-	-	-	-	-	-
Dermal	-	-	-	-	-	-	-	--

PNECs	
Environmental protection target	-
Fresh water	-
Freshwater sediments	-
Marine water	-
Marine sediments	-
Food chain	-

Microorganisms in sewage treatment	-
Soil (agricultural)	-
Air	-

8.2. Exposure controls

8.2.1 Appropriate engineering controls

8.2.1.1 Substance/mixture related measures to prevent exposure during identified uses:
No official Occupational Exposure Limit has yet been established.

8.2.1.2 Structural measures to prevent exposure: No specific measures

8.2.1.3 Organisational measures to prevent exposure: No specific measures

8.2.1.4 Technical measures to prevent exposure:

- Handle in accordance with good industrial hygiene and safety practice.
- Facilities for storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- Do not allow dust to become airborne.
- Provide general and local exhaust ventilation to keep vapor exposure below recommended limits.
- To prevent or minimize the release of synthetic polymer microparticles (SPM) into the environment, use closed systems and local exhaust ventilation during all handling, processing, and storage activities.

8.2.2 Personal protection equipment

8.2.2.1 Eye and face protection:

- Wear breathable goggles to protect your eyes against particulate matter that may irritate your eyes or cause other health problems.
- Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

8.2.2.2 Skin protection

1) Hand protection:

- Wear protective gloves of appropriate material considering the physical and chemical properties of the chemical.

2) Other skin protection:

- Wear protective clothing of appropriate material considering the physical and chemical properties of the chemical.

8.2.2.3 Respiratory protection:

- Use certified respiratory protection suitable for the physical and chemical properties of the particulate matter to which you are exposed.

- In case exposed to particulate material, the respiratory protective equipment as follow are recommended. ;facepiece filtering respirator or air-purifying respirator, high-efficiency particulate air(HEPA) filter media or respirator equipped with powered fan, filter media of use (dust, mist, fume)
- In lack of oxygen (< 19.6%), wear the supplied-air respirator or self-contained oxygen breathing apparatus.

8.2.2.4 Thermal hazards: Not available

8.2.3 Environmental exposure controls

8.2.3.1 Substance/mixture related measures to prevent exposure:

- Avoid discharge into the environment.
- According to local regulations, Federal and official regulations.

8.2.3.2 Instruction measures to prevent exposure: No specific measures

8.2.3.3 Organisational measures to prevent exposure: No specific measures

8.2.3.4 Technical measures to prevent exposure: No specific measures

- Ensure that any equipment or tools used for handling the SPM are cleaned in a manner that prevents the particles from entering the wastewater system.
- Contain any accidental spills immediately using dry cleanup methods (e.g., vacuuming with HEPA filters or sweeping) to avoid the discharge of particles into drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

A. Physical state: Solid (Ref: HSDB)

B. Color: Translucent white (Ref: HSDB)

C. Odour: Odorless (Ref: HSDB)

D. Melting point/Freezing point: 157℃ (Ref: Chemical book)

E. Initial boiling point and boiling range: 443.14℃ (Ref: Chemical book)

F. Flammability: Not available

G. Upper/lower flammability or explosive limits: Not available

H. Flash point: Not available

I. Auto-ignition temperature: Not available

J. Decomposition temperature: Not available

K. pH: Not available

L. Kinematic viscosity(㎟/s): Not available

M. Solubility(ies): Insoluble in water (Ref: CAMEO)

N. Partition Coefficient(n-Octanol/Water): log Kow= 17.21 (Estimated) (Ref: EPI SUITE)

O. Vapor pressure: Not available

P. Density/Relative density: 0.9g/mL at 25℃ (Ref: Chemical book)

Q. Relative Vapor density: Not available

R. Particle characteristics: Not available

S. Molecular weight: 354.6

9.2. Other information

9.2.1. Information with regard to physical hazard classes: Not available

9.2.2. Other safety characteristics: Not available

SECTION 10: Stability and reactivity

10.1. Reactivity:

- Containers may explode when heated.
- Some may burn but do not ignite easily.

10.2. Chemical stability:

- Stable at normal temperature and pressure.

10.3. Possibility of hazardous reactions:

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

10.4. Conditions to avoid:

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

10.5. Incompatible materials:

- Combustible material
- Irritating and/or toxic gas.

10.6. Hazardous decomposition products: Not available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Acute toxicity

- Oral: Not available
- Dermal: Not available
- Inhalation (Dust/Mist): Not available

11.1.2 Skin corrosion/irritation: Not available

11.1.3 Serious eye damage/irritation: Not available

11.1.4 Respiratory or skin sensitization:

Respiratory sensitization: Not available

Skin sensitization: Not available

11.1.5 Germ cell mutagenicity: Not available

- *In vitro* - Not available
- *In vivo* - Not available

11.1.6 Carcinogenicity: IACR - Group 3, ACGIH, OSHA, NTP, EU CLP - Not carcinogenicity (Ref: IARC, ACGIH, OSHA, NTP, EU CLP)

11.1.7 Reproductive toxicity: Not available

11.1.8 STOT-single exposure: Not available

11.1.9 STOT-repeated exposure: Not available

11.1.10 Aspiration hazard: Not available

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties: According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

11.2.2 Other information: No other hazards have been identified

ECTION 12: Ecological information

12.1. Toxicity:

Acute (short-term) toxicity: Not available

Chronic (long-term) toxicity: Not available

Fish: Not available

Invertebrates: Not available

Aquatic plants: Not available

12.2. Persistence and degradability:

12.2.1. Abiotic Degradation: Not available

12.2.2. Physical- and photo-chemical elimination: Not available

12.2.3. Biodegradation: Not available

12.3. Bioaccumulative potential:

12.3.1. Partition coefficient n-octanol /water (log Kow): Not available

12.3.2. Bioconcentration factor (BCF): Not available

12.4. Mobility in soil:

12.4.1. Known or predicted distribution to environmental compartments: Not available

12.4.2. Surface tension: Not available

12.4.3. Adsorption/Desorption: Not available

12.5. Results of PBT and vPvB assessment:

- This substance does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Endocrine disrupting properties

- According to Regulation (EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

12.7. Other adverse effects: Ozone layer hazard

- Not applicable

12.8. Additional information:

- Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

13.1.1 Product / Packaging disposal

- Empty containers should be taken to an approved waste handling site for recycling or disposal.

1) Waste codes / waste designations according to LoW:

- Waste classification and EWC code assignment shall be determined by the waste holder based on the actual use and contamination.

13.1.2 Waste treatment-relevant information

- Dispose of in accordance with all applicable local and national regulations.
- Contaminated containers must not be treated as household waste.
- Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate.
- All waste must be treated at a licensed waste management facility in accordance with applicable EU and local waste legislation.

13.1.3 Sewage disposal-relevant information:

- Release to the environment or sewage system is prohibited.
- Unused residual material or contaminated waste must not be disposed of in wastewater treatment plants or drains.

13.1.4 Other disposal recommendations:

- Finish cleaning by spreading Water on the contaminated surface and dispose of according to local and regional authority requirements.

SECTION 14: Transport information

14.1. UN number or ID number: Not applicable

14.2. UN proper shipping name: Not applicable

14.3. Transport hazard class(es): Not applicable

14.4. Packing group: Not applicable

14.5. Environmental hazards: Not applicable

14.6. Special precautions for user:

- Emergency measures in case of fire: Not applicable
- Emergency measures in the effluent: Not applicable
- The synthetic polymer microparticles (SPM) in this product are subject to reporting requirements for estimated emissions during transport, including loading and unloading activities.
- Reporting Requirements: Based on contractual agreements, the party responsible for the product during transit must estimate and report transport-related SPM emissions to ECHA annually.

14.7. Maritime transport in bulk according to IMO Instruments: Not available

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1 EU Regulation (EC) No. 1907/2006(REACH)/ Authorisations and/or restrictions on use:

- Authorisations (Annex XIV): Not applicable
- Restrictions on use (Annex XVII): Not applicable

15.1.2 Other EU regulations

- EU Seveso III Directive (2012/18/EU) - Qualifying Quantities of Dangerous Substances: Not applicable
- EU Persistent Organic Pollutants (850/2004): Not applicable
- EU Paints, Varnishes, Vehicle Refinishing Products (2004/42/CE) – VOCs: Not applicable

- EU Industrial Emissions (2010/75/EU) - Integrated Pollution Prevention and Control Directive – List of Polluting Substances: Not applicable
- EU Fluorinated Gases (517/2014) - Global Warming Potential: Not applicable
- EU Substances Depleting the Ozone layer (1005/2009): Not applicable
- EU Export and Import Restrictions (649/2012) - Chemicals and Articles Subject to Export Ban: Not applicable
- Germany VwVwS Annex reference: Non-hazardous to water

15.1.3 Entry 78 of Annex XVII of Regulation (EC) No 1907/2006 (REACH), as introduced by Commission Regulation (EU) 2023/2055.

- This product contains synthetic polymer microparticles (SPM) as defined in Entry 78 of Annex XVII to Regulation (EC) No 1907/2006 (REACH), as introduced by Commission Regulation (EU) 2023/2055.
- This product is placed on the market under the derogation provided in Entry 78(4)(a) (use at industrial sites only).

- Generic polymer identity: Polypropylene
- Concentration of SPM: 95–100 % (w/w)
  (Note: For reporting purposes, downstream users should use the upper bound of the concentration range.)

* In accordance with Entry 78(11), industrial downstream users must estimate and report annually to ECHA any releases of SPM from their industrial use.
* Measures to prevent environmental release of SPM during use and waste management are described in Sections 7, 8, and 13 of this Safety Data Sheet.
* This product contains synthetic polymer microparticles subject to the conditions laid down in Entry 78 of Annex XVII to Regulation (EC) No 1907/2006.

15.2. Chemical safety assessment

- No Chemical Safety Assessment has been carried out for this substance by the Supplier.

SECTION 16: Other information

16.1. Indication of changes / Date of issue

- Date of issue: 23-12-2025
- Indication of changes: Rev. 0

16.2. Abbreviations and acronyms

○ ECHA: European Chemicals Agency

- EU CLP: EU Regulation 1272/2008 on the classification, labelling and packaging of chemicals and mixtures)
- GLP: Good Laboratory Practice
- NFPA: National Fire Protection Association
- EL50: 50% Effect Loading dose
- LC50: Lethal Concentration 50% kill
- LD50: Lethal Dose 50% kill
- LL50: Lethal loading rate 50% kill
- TWA: Time weight Average

16.3. Key literature references and sources for data

- ACGIH
- CAMEO Chemicals NOAA
- ChemIDplus
- ECHA
- ECOSAR
- Emergency response guidebook
- EPI Suite
- HSDB
- HPVIS
- IARC
- ICSC
- INCHEM
- IPCS
- NITE
- OECD SIDS
- PubChem
- Recommendations on the transport of dangerous goods

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

Name	Classification according to Regulation (EC) No. 1272/2008	Classification procedure
Polypropylene	-	-

16.5. other

- This Safety Data Sheet has been prepared in accordance with applicable regulatory requirements, including REACH Regulation (EC) No 1907/2006, CLP Regulation (EC) No 1272/2008, and the United Nations Globally Harmonized System (GHS) for classification and labeling chemicals.
- This information also integrates the mandatory requirements laid down by Entry 78 of Annex XVII to Regulation (EC) No 1907/2006 for synthetic polymer microparticles (SPM).