

MATERIAL SAFETY DATASHEET (MSDS)

ADVANCENE™ Polyethylene Series

SECTION 1: IDENTIFICATION

- 1.1. Product identifier:** ETHYDCO's Polyethylene (ADVANCENE™)
- 1.2. Intended Use:** Raw material for plastic industry
- 1.3. Manufacturer:** Egyptian Ethylene and Derivatives Company (ETHYDCO)
- 1.4. Emergency Number:** +201122228323
- 1.5. Website Address:** www.ethydco-eg.com
- 1.6. Company Identification:**
- **Company Name:** Egyptian Ethylene and Derivatives Company (ETHYDCO)
 - **Address:** KM 36 Alexandria/Cairo Desert Road, El-Amreya, El-Nahda Territory, Alexandria, Egypt.
 - **Telephone:** (+203) 4631200 / 4631201 / 4631202

SECTION 2: HAZARDS IDENTIFICATION

- 2.1. Classification according to Regulation (EC) No 1272/2008 (CLP):** Not classified
- 2.2. Health:** The product is not classified as hazardous preparation. However, inhalation of dust may cause respiratory tract irritation. Prolonged exposure to high concentrations of decomposition products may cause headaches or respiratory tract irritation.
- Fire:** The product burns but is not classified as flammable.
- Environment:** The product is not considered dangerous for the environment.
- 2.3. Other Hazards:** No data available.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

- 3.1. Substances:** The product is a polyethylene co-polymer and/or homo-polymer:

Product	CAS No.
ADAVANCENE PE (co-polymer with 1-butene)	25087-34-7
ADAVANCENE PE (co-polymer with 1-hexene)	25213-02-9
ADAVANCENE PE (homo-polymer)	9002-88-4

The product contains no substance classified as hazardous, in concentrations, which should be considered according to EC directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

Eye contact:	Immediately flush the eyes with water, continue rinsing for at least 10 minutes. Seek medical attention if irritation occurs.
Inhalation:	Remove affected people to fresh air and keep at rest in a comfortable position for breathing. Get medical attention.
Skin contact:	• Immediately rinse contaminated skin thoroughly with water. • Remove contaminated clothing and shoes. • For burns caused by hot or molten material: Cool the affected area as quickly as possible with water. Do not attempt to remove molten material adhering to the skin. Seek immediate medical attention for safe removal of the material and appropriate burn treatment.
Ingestion:	• Wash out mouth with water. • If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. • Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed: No data available.

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

- **Notes to physician:** Provide treatment based on the observed symptoms, immediately consult a poison control specialist or qualified medical professional in cases involving the ingestion or inhalation of large quantities of the substance.
- **Specific treatments:** No specific treatment.

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media: Water in spread jet, dry chemicals, foam or carbon dioxide.

5.2. Special exposure hazards: Principal toxicant in the smoke is carbon monoxide.

5.3. Advice for Firefighters: Use protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

- **For non-emergency personnel:** Personnel shall not undertake any actions that may pose a personal safety risk or for which they have not received adequate training. The affected area must be evacuated, and access restricted to unauthorized or inadequately protected individuals. Contact with the spilled substance must be avoided, and personnel shall not walk through the contaminated area. Suitable personal protective equipment (PPE) must be worn when responding to the incident.
- **For emergency responders:** If specialized protective clothing is necessary for spill response, refer to Section 8 for information regarding appropriate and unsuitable protective materials. Additionally, consult the guidance provided under the subsection "For Non-Emergency Personnel."

6.2. Environmental precautions: Prevent the spread of spilled material and any associated runoff,

and avoid its release into soil, waterways, drains, or sewer systems. Notify the relevant authorities immediately if the substance causes or may cause environmental contamination.

6.3. Methods and material for containment and cleaning up:

- **Small spill:** Remove containers from the affected area. Collect the spilled material using suitable sweeping method and transfer it to a designated, properly labeled waste container. Ensure that the collected material is disposed in accordance with applicable regulations.
- **Large spill:** Relocate containers away from the spill area. Prevent the spilled material from entering sewer systems, waterways, basements, or confined spaces. Collect the material using suitable sweeping methods and transfer it into a designated, properly labeled waste container. Arrange for disposal in accordance with applicable regulations.

6.4. Reference to other sections: No data.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe Handling:

- Processing and thermal treatment of the product may release small quantities of volatile hydrocarbons. provide local exhaust ventilation. Avoid inhalation of dust and thermal decomposition fumes. Dust generated by the product may present an explosion hazard; therefore, all equipment must be properly grounded to prevent the accumulation of static electricity.
- Thermal burn hazard - Contact with hot material may cause thermal burns; therefore, appropriate personal protective equipment (PPE) must be worn during handling.

7.2. Occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

7.3. Conditions for safe storage: Store the product in accordance with applicable local regulations. Keep it in its original bags or pallet, protected from direct sunlight, in a cool, dry, and well-ventilated area.

7.4. Specific end use(s): plastic industry.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters:

- **Appropriate engineering controls:** special precautions: If significant vapors or fumes are generated during the thermal processing of the product, workplace air monitoring is recommended to detect potential thermal degradation by-products which may be released at elevated temperatures. Appropriate ventilation systems and other engineering controls must be implemented to minimize occupational exposure.
- **Environmental exposure controls:** Emissions from ventilation systems and process equipment shall be monitored and evaluated to ensure compliance with applicable environmental protection regulations. Where necessary, appropriate control measures, such as fume scrubbers or filtration systems shall be implemented to reduce emissions to permissible levels.

8.2. Personal protection:

- **Hygiene measures:** Thoroughly wash hands and face after handling the product, before

eating or using restroom facilities, and at the end of each work time. Contaminated clothing shall be removed using appropriate procedures and washed thoroughly before reusing. Ensure that emergency eyewash stations and safety showers are readily accessible and located near the work area.

- **Eye and Face Protection:** Safety eyewear conforming to an approved standard shall be used when indicated by the risk assessment to prevent exposure to mist, gases, or dust. Where potential exposure exists, safety glasses with side shields and a face shield shall be worn.
- **Hand Protection:** Chemical-resistant, impermeable gloves meeting applicable standards shall be worn whenever required by the risk assessment. When handling hot materials, gloves providing both thermal and chemical protection should be used.
- **Body Protection:** Protective clothing shall be selected according to the nature of the task and the associated risks, and its suitability shall be assessed by a qualified specialist before handling the product.
- **Other Skin Protection:** Additional skin protection should be selected based on work activities and associated hazards. The suitability of the selected protective measures should be evaluated by a qualified specialist before handling the product.
- **Respiratory Protection:** Respiratory protective equipment (Respirator) shall be selected based on the identified hazards and anticipated exposure levels and shall comply with the relevant standards or certification requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

Appearance:	Solid, natural color	Odor:	Odorless
Melting point / range:	110 – 140 °C	Ignition temperature:	>300 °C
Density:	0.9 - 1.0 g/cm ³	Solubility:	Insoluble in water
Bulk density:	500 - 600 kg/m ³	Flammability:	Can be set on fire

9.2. Other information: no data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Non-Reactive

10.2. Chemical stability: Stable under normal ambient temperature and pressure, with no chemical reactivity.

10.3. Possibility of hazardous reactions: None.

10.4. Conditions to avoid: Avoid prolonged exposure of the product to higher temperatures.

10.5. Incompatible materials: Strong oxidizers.

10.6. Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

The product is not classified as dangerous preparation according to EU Directive 1999/45/EC.

11.1. Acute toxicity:

- Inhalation: No data available.
- Dermal: No data available.
- Oral: No data available.

11.2. Irritation/Corrosion

- Skin: No data available.
- Eyes: No data available.

11.3. Respiratory: No data available.

11.4. Respiratory or skin sensitization

- Skin: No data available.
- Respiratory: No data available.

11.5. Mutagenicity: No data available.

11.6. Carcinogenicity: No data available.

11.7. Reproductive toxicity: No data available.

11.8. Specific target organ toxicity (single exposure): No data available.

11.9. Specific target organ toxicity (repeated exposure): No data available.

11.10. Aspiration hazard: No data available.

11.11. Other information:

- Contains: Additives that are incorporated in the polymer are not expected to pose any health hazard.
- Product: Elevated temperatures may form vapors, mists or fumes which may be irritating to the eyes and respiratory tract.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

- Acute toxicity: Not expected to be harmful to aquatic organisms.
- Chronic toxicity: Not expected to be harmful to aquatic organisms.

12.2. Persistence and degradability:

- Biodegradability: Expected to be persistent.
- Hydrolysis: Not expected to be significant.
- Photolysis: Not expected to be significant.
- Atmospheric Oxidation: Not expected to be significant.

12.3. Bioaccumulative potential: Potential to bioaccumulate is low.

12.4. Mobility in soil: Material - Low solubility and floats and are expected to migrate from water to the land.

12.5. Other Information: The product is not considered dangerous for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

- Avoid or minimize waste generation wherever possible.
- Dispose of this product, its solutions, and any byproducts in accordance with applicable environmental protection and waste disposal laws, including regional and local authority requirements.
- Do not discharge untreated waste into sewers unless it fully complies with all requirements of the relevant authorities.
- Recycle waste packaging whenever feasible; consider incineration or landfill only when recycling is not practical.
- Prevent spilled material and runoff from entering soil, waterways, drains, or sewers.
- Empty containers should be transported using a registered waste carrier for local recycling or waste disposal.

SECTION 14: TRANSPORT INFORMATION

- **Land (RID / ADR):** Not regulated.
- **Sea (IMO / IMDG):** Not regulated.
- **Air (ICAO-IATA):** Not regulated.
- **UN number or ID number:** No data available.
- **UN proper shipping name:** No data available.
- **Transport hazard class(es):** No data available.
- **Packing group:** No data available.
- **Environmental hazards:** No data available.
- **Special precautions for users:** The product shall be transported in tightly closed, upright, and securely containers. Personnel involved in transportation must be informed of the appropriate procedures to follow in the event of an accident or accidental spillage.
- **Maritime transport in bulk according to IMO instruments:** No data available.

SECTION 15: REGULATORY INFORMATION

ADVANCENE polyethylene products comply with Article 8 of Regulation (EC) No. 1907/2006 (REACH).

15.1. Further regulatory information and product datasheets can be requested via:

marketing-team@ethydco-eq.com.

15.2. International Inventories:

- **TSCA (USA):** Listed
- **DSL (Canada):** Listed
- **ENCS (Japan):** Listed
- **IECSC (China):** Listed
- **KECL (Korea):** Listed
- **AICS (Australia):** Listed
- **NZIoC (New Zealand):** Listed

SECTION 16: OTHER INFORMATION

Issued according to Regulation (EC) No. 2020 / 878 amending Annex II to regulation No 1907/2006 (REACH), and its corrigenda.

HMIS Rating:

Health: 0

Flammability: 1

Reactivity: 0

Disclaimer

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It is the customer's responsibility to inspect and test our products to satisfy them as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe, and legal use, processing, and handling of our products.

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