POLYETHYLENE mPE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
SDS Reference number: PETH-010
Issue date: 20/05/2026 Supersedes version of: 05/05/2024 Version: 12.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	POLYETHYLENE mPE
CAS-No.	:	25213-02-9
Type of product	:	Polymers
Product group	:	-
Other means of identification	:	25213-02-9 ; mPE Lumicene

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

1.2.1. Relevant identified uses

Main use category	:	Industrial use
Use of the substance/mixture	:	For more detailled information, see technical data sheet (https://polymers.totalenergies.com/)

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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Branche Raffinage & Chimie
2 Place Jean Millier
92078 PARIS LA DEFENSE
FRANCE
T +33 (0)1.41.35.40.00
rc.fer-sds@totalenergies.com, www.totalenergies.com

1.4. Emergency telephone number

Emergency number	:	Emergency call Carechem 24 International : • for English speaking countries: +44 (0) 1235 239 670 • for Europe (in local languages): + 33 1 49 00 00 49 • for Africa and Middle East: + 44 (0) 1235 239 671 • for China: 400 120 6011 • for Asia Pacific (Hong-Kong, China; Singapore; Taiwan, China; Philippines; India; Vietnam; Sri Lanka; Japan; Korea; Malaysia; Indonesia; Thailand) : + 65 3158 1074

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

No labelling applicable

2.3. Other hazards

Other hazards which do not result in classification : Fine dust may cause irritation of respiratory system and mucous. Contact with hot material - prevent serious burns. If heated to more than 130°C, the product may form vapours or fumes which may cause irritation of respiratory tract and cause coughing and sensation of shortness of breath. Handling this product may result in electrostatic accumulation. Use proper grounding procedures. Dust may form explosive mixture in air. Combustible Dust.

PBT/vPvB Not classified
Based on available data, the classification criteria are not met

ED HH / ED ENV Not classified
Based on available data, the classification criteria are not met

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Polyethylene	CAS-No.: 25213-02-9	< 100	Not classified
Antioxidants and stabilisers	-	< 0,8	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Exposure to spray, fumes and vapours produced by heated or burned product: Move to fresh air. Call a doctor.

First-aid measures after skin contact : Exposure to splashing of hot product: Treat the affected part with cold water (by spraying or immersion). Do not remove clothing adhering to the skin. In case of severe burns, seek hospital treatment.

First-aid measures after eye contact : In case of irritation caused by fine dust: wash with copious volumes of water, until the irritation disappears. Obtain medical attention if irritation persists.

First-aid measures after ingestion : Ingestion during handling is not likely. Do not induce vomiting. Rinse mouth out with water.

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

Symptoms/effects : Refer to section 11 for more details on effects.

Symptoms/effects after inhalation : Dust from this product may cause respiratory irritation.

Symptoms/effects after skin contact : Contact with hot material - prevent serious burns.

Symptoms/effects after eye contact : Dust from this product may cause eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : For small fire: Carbon dioxide. Dry powder. Water. For large fire: Foam.

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible.
Hazardous decomposition products in case of fire : Carbon oxides (CO, CO2). Aldehydes. ketones. Acetone. Acetaldehyde. Formaldehyde. Hydrocarbons.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : Notify fire brigade and environmental authorities. Evacuate unnecessary personnel. Use water spray to cool exposed surfaces.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Do not attempt to take action without suitable protective equipment. Gloves. Safety glasses.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : If spilled, may cause the floor to be slippery. Sweep up or vacuum up the product. Keep recovered product for subsequent disposal. Do not allow to enter drains or water courses. On water, recover/skim from surface and pour out in disposal container.
Other information : Dispose of contaminated material at an authorized site. Notify authorities if product enters sewers or public waters.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures : Do not eat, drink or smoke when using this product. Keep away from food and drink.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations. Provide local exhaust or general room ventilation. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
Storage conditions : Store at ambient temperature and at atmospheric pressure in original packaging (plastic or cardboard boxes) or in silo made of appropriate material (aluminium, stainless steel, ...). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Proper grounding procedures to avoid static electricity should be followed. Keep container tightly closed in a cool, well-ventilated place.
Special rules on packaging : Three pallets must never be stacked. under normal storage conditions, and following good working practices, two pallets may be stacked on flooring in sound condition. however, when the pictorial "Do not stack" is affixed to the pallet, the pallet must never be placed either on top of or below another pallet.
N.B. :here the term pallet includes both the pallet and its load. when pallets are stored in racks, it should be checked whether the pallet is fit for stacking in the concerned racks.
Packaging materials : Polyethylene. Paper bag. Carton. Stainless steel.

7.3. Specific end use(s)

Industrial uses.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

POLYETHYLENE mPE (25213-02-9)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	10 mg/m³ inhalable dust particles 3 mg/m³ respirable dust particles

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

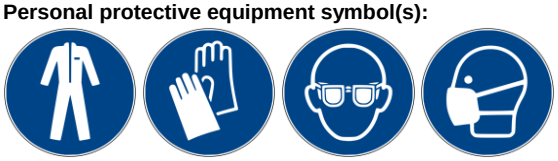
8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. If handling results in dust generation or high temperatures, local exhaust ventilation should be provided to insure that exposure to dust or decomposition products does not exceed the exposure recommended levels. Safety shower. Eye fountain.

8.2.2. Personal protection equipment

Personal protective equipment:
Dustproof clothing. Gloves. Safety glasses. Dust formation: dust mask.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing. Safety foot-wear

Hand protection:
Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:
Dust/aerosol mask with filter type P1

8.2.2.4. Thermal hazards

Thermal hazard protection:
Insulated gloves.

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	Translucent. White.
Appearance	:	Synthetic polymer microparticles. The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.
Odour	:	Odourless.
Odour threshold	:	Not available
Melting point	:	90 – 160 °C
Freezing point	:	Not available
Initial boiling point and boiling range	:	Not available
Flammability	:	Not available
Explosive limits	:	Not applicable
Lower explosion limit	:	0,015 kg/m³ (< 63 µm)
Upper explosion limit	:	Not applicable
Flash point	:	≈ 340 °C
Auto-ignition temperature	:	> 350 °C
Decomposition temperature	:	Not available
pH	:	Not applicable
pH solution	:	Not available
Viscosity, kinematic	:	Not applicable
Solubility	:	Water: Insoluble
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	910 – 990 kg/m³
Relative density	:	Not available
Relative vapour density at 20°C	:	Not applicable
Particle size	:	Not available
Particle size distribution	:	Not available
Particle shape	:	Not available
Particle aspect ratio	:	Not available
Particle aggregation state	:	Not available
Particle agglomeration state	:	Not available
Particle specific surface area	:	Not available
Particle dustiness	:	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content	:	< 0,3 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Electrostatic charges may be generated during handling. Take precautionary measures against static discharge during blending and transfer operations.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Dust may form explosive mixture in air.

10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Avoid temperature above 320°C.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents. Halogens.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified
Skin corrosion/irritation	:	Not classified pH: Not applicable
Additional information	:	Heated product causes burns Thermal decomposition products are produced at elevated temperatures and these may be irritating
Serious eye damage/irritation	:	Not classified pH: Not applicable
Additional information	:	Fine dust may cause irritation to ocular mucous Thermal decomposition products are produced at elevated temperatures and these may be irritating Heated product causes burns
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
Additional information	:	Dust may cause irritation of respiratory system. If heated to more than 130°C, the product may form vapours or fumes which may cause irritation of respiratory tract and cause coughing and sensation of shortness of breath
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

POLYETHYLENE mPE (25213-02-9)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : ED HH Not classified,Based on available data, the classification criteria are not met

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Do not allow product to spread into the environment. Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

12.2. Persistence and degradability

POLYETHYLENE mPE (25213-02-9)	
Persistence and degradability	Product persists. Not readily biodegradable.
BOD (% of ThOD)	Below detection limit

12.3. Bioaccumulative potential

POLYETHYLENE mPE (25213-02-9)	
Bioaccumulative potential	Low bioaccumulation potential.

12.4. Mobility in soil

POLYETHYLENE mPE (25213-02-9)	
Ecology - soil	low mobility.

12.5. Results of PBT and vPvB assessment

POLYETHYLENE mPE (25213-02-9)
PBT/vPvB Not classified
Based on available data, the classification criteria are not met

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : ED ENV Not classified,Based on available data, the classification criteria are not met

12.7. Other adverse effects

Other adverse effects : PMT/vPvM Not classified,Based on available data, the classification criteria are not met

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of in accordance with relevant local regulations. Do not discharge the product into the environment. Recycle the material as far as possible.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

ADR	IMDG	IATA	ADN	RID
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing Group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine Pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport
No data available

Transport by sea (IMDG)
No data available

Air transport (IATA)
No data available

Inland waterway transport
No data available

Rail transport
No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

Other information, restriction and prohibition regulations : This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]. The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council. This SPM benefits from derogation paragraph 4, point (a) mentioned in annex of Commission regulation (EU) 2023/2055: synthetic polymer microparticles for use at industrial sites . During use and disposal, appropriate measures must be taken in accordance with Entry 78, paragraphs 7 and 8, of Annex XVII of REACH to prevent the release of synthetic polymer microparticles into the environment. Concentration of synthetic polymer microparticles of the polymeric substance: > 90%. Generic identity of the polymer. Polymers of ethylene.

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	**Applicable on**
78.	POLYETHYLENE mPE

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

15.1.2. National regulations

These registration entries are for polymers only. For additives, please refer to TOTALENERGIES who will provide the necessary certification
Not listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Complies the United States TSCA (Toxic Substances Control Act) inventory
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS)
Listed on the China Inventory of Existing Chemical Substances (IECSC)
Listed on the Canadian DSL (Domestic Substances List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on or are exempt from listing on the Taiwan TCSI (Taiwan Chemical Substances Inventory)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Germany

Air Quality Control (TA Luft)					
Category	Class	Applicable on	Local name	Max. mass flow	Max. mass concentration

15.2. Chemical safety assessment

The substance is not classified for human health hazards or for environment effects and it is not PBT or vPvB so that no exposure assessment or risk characterisation is required. For tasks where the intervention of workers is required, the substance must be handled in accordance with good industrial hygiene and safety procedures.

SECTION 16: Other information

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
2.3			
11.2.			
12.5			
12.6			
12.7			

Abbreviations and acronyms:	
CAS-No.	Chemical Abstracts Service number
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
IATA	International Air Transport Association
SDS	Safety Data Sheet
IMDG	International Maritime Dangerous Goods

Abbreviations and acronyms:	
EC-No.	European Community number
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
OEL	Occupational Exposure Limit
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Safety Data Sheet (SDS), EU, R

This information applies to the PRODUCT AS SUCH and conforming to specifications of TOTALENERGIES.
In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear.
The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. However the revision of some data is in progress.
Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes.
The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive.
It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product.
It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product. (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.