



TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue:10/10/2015 Revision date:10/10/2015

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Version: 11.2

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

1.1. Product identifier

Product form : Mixture
Product name : TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC
CAS No : 9003-07-0 ; 9010-79-1
Type of product : Polymers
Formula : (C₃H₆)_x ; (C₃H₆)_x - (C₂H₄)_y
Synonyms : 9003-07-0 ; 9010-79-1 ; Lumicene
Product group : -
Other means of identification : TOTAL mPP Lumicene

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : For more detailed information, see technical data sheet

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

REFINING & CHEMICALS BRANCH
TOTAL PETROCHEMICALS & REFINING SA/NV
Rue de l'Industrie 52 Nijverheidsstraat - B-1040 BRUSSELS - BELGIUM
T +32 (0)2.288.91.11
rc.fer-sds@total.com - www.total.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:
+ 86 10 5100 3039
• for Asia Pacific (Hong-Kong, Singapore, Taiwan, Philippines, India, Vietnam, Sri Lanka,
Japan, Korea, Malaysia, Indonesia, Thailand) :
+ 65 3158 1074

| Country | Organisation/Company | Address | Emergency number | Comment |
|---------|--|--|--|---------|
| | National Poisons Emergency number | | 08 45 46 47 | |
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 Dublin | +353 1 809 2166 (public, 8am - 10pm, 7/7) | |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

2.2. Label elements

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

Child-resistant fastening : No
Tactile warning : No

2.3. Other hazards

Adverse physicochemical, human health and environmental effects : To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

10/14/2015

EN (English)

SDS Reference number: PPRO-A09

1/6

TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC

Safety Data Sheet

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Other hazards not contributing to the classification : Fine dust may cause irritation of respiratory system and mucous. Contact with hot material - risk of serious burns. If heated to more than 160°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.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---------------|--------------------------------|------|---|
| Polypropylene | (CAS No) 9003-07-0 / 9010-79-1 | > 98 | Not classified |
| Additive | | < 2 | Not classified |

Full text of H-statements: see section 16

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 : Immediately rinse with water for a prolonged period while holding the eyelids wide open. In case of irritation caused by fine dust: wash with copious volumes of water, until the irritation disappears.

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/injuries : Refer to § 11 for more details on effects.

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. acrylaldehyde; acrolein; prop-2-enal.

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.

TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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.
- Storage conditions : Store at room temperature. Protect from heat and direct sunlight. Store in dry, cool, well-ventilated area. 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.
- Packaging materials : Polyethylene. Paper bag. Stainless steel.

7.3. Specific end use(s)

Recommended to professional users.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC (9003-07-0 ; 9010-79-1) | | |
|---|--------------------------------|--|
| USA - ACGIH | ACGIH TWA (mg/m ³) | 10 mg/m ³ inhalable dust particles 3 mg/m ³ respirable dust particles |

8.2. Exposure 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.
- Personal protective equipment : Dustproof clothing. Gloves. Safety glasses. Dust formation: dust mask.
- Hand protection : Protective gloves. Use insulated gloves when handling this material hot
- Eye protection : Safety glasses
- Skin and body protection : Wear suitable protective clothing. Safety foot-wear
- Respiratory protection : Dust/aerosol mask with filter type P1



- 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
- Appearance : Pellet.
- Colour : Translucent. White.
- Odour : Odourless.
- Odour threshold : No data available
- pH : Not applicable
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : 120 - 170 °C
- Freezing point : No data available

TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC

Safety Data Sheet

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| | |
|---|--|
| Boiling point | : No data available |
| Flash point | : $\approx 350^{\circ}\text{C}$ |
| Auto-ignition temperature | : $> 380^{\circ}\text{C}$ |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20°C | : No data available |
| Relative density | : No data available |
| Density | : 905 kg/m^3 |
| Solubility | : Water: $< 1\text{ mg/l}$ Insoluble |
| Log Pow | : No data available |
| Viscosity, kinematic | : Not applicable |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : 0.02 kg/m^3 ($< 63\text{ }\mu\text{m}$) |

9.2. Other information

| | |
|-------------|-------------|
| 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 300°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 toxicological effects

| | |
|--|---|
| Acute toxicity | : Not classified (Based on available data, the classification criteria are not met) |
| Skin corrosion/irritation | : Not classified (Based on available data, the classification criteria are not met) Heated product causes burns thermal decomposition products are produced at elevated temperatures and these may be irritating pH: Not applicable |
| Serious eye damage/irritation | : Not classified (Based on available data, the classification criteria are not met) 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 pH: Not applicable |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : Not classified dust may cause irritation of respiratory system. If heated to more than 160°C , the product may form vapours or fumes which may cause irritation of respiratory tract and cause coughing and sensation of shortness of breath |

TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

| TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC (9003-07-0 ; 9010-79-1) | |
|---|--|
| Persistence and degradability | Product persists. Not readily biodegradable. |
| BOD (% of ThOD) | Below detection limit |

12.3. Bioaccumulative potential

| TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC (9003-07-0 ; 9010-79-1) | |
|---|--------------------------------|
| Bioaccumulative potential | Low bioaccumulation potential. |

12.4. Mobility in soil

| TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC (9003-07-0 ; 9010-79-1) | |
|---|---------------|
| Ecology - soil | low mobility. |

12.5. Results of PBT and vPvB assessment

| TOTAL POLYPROPYLENE, METALLOCENE, ISOTACTIC (9003-07-0 ; 9010-79-1) | |
|---|--------------|
| Results of PBT assessment | Not required |

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of in accordance with relevant local regulations. Use only registered transporters. Do not discharge the product into the environment.

Additional information : Incinerate with household refuse in a municipal solid waste incinerator plan.

SECTION 14: Transport information

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

| ADR | IMDG | IATA | ADN | RID |
|--|---|------------------------------------|------------------------------------|------------------------------------|
| 14.1. UN Number | | | | |
| Not regulated for transport | | | | |
| 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 |
| 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

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Safety Data Sheet

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- Air transport (IATA)

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : < 0.3 %

15.1.2. National regulations

These registration entries are for polymers only. For additives, please refer to TOTAL 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 on the AICS (Australian Inventory of Chemical Substances)

Listed on KECI (Korean Existing Chemicals 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)

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

Training advice : Training staff on good practice. Manipulations are to be done only by qualified and authorised persons. Use good personal hygiene practices.

Other information : Use good personal hygiene practices.

SDS EU (REACH Annex II)

This information applies to the PRODUCT AS SUCH and conforming to specifications of TOTAL.

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.