1. Chemical Product and Company Identification

Product Name	RAMAPET
Product Identification Number(s)	L1, N1, N2, S1, R1, R180, N2R, A1, BF3067, R1 RPET8, FuTuRe PET R1-25
Manufacturer/Supplier	Indorama Ventures Corlu PET Sanayi A.S. Karamehmet Mah. Avrupa Serbest Bolgesi 3. Sok. No: 2, Ergene, Tekirdag, Turkiye
Chemical Name	Polyethylene Terephthalate (Copolyester)
Synonym(s)	PET
Product Use	Packaging
Molecular Formula	$(C_{10}H_8O_4)n$
Molecular Weight	Not applicable

For emergency health, safety, environmental, and transportation information telephone +90 282 691 11 00

2. Compositional Information on Ingredients

RAMAPET PET resins are copolymers made from terephthalic acid (PTA), isophthalic acid (IPA) and mono-ethylene glycol (MEG) complies with the requirements of the European Legislation (EU) No 174/2015 and all its amendments for plastics used in contact with food. They are produced under good manufacturing practices in compliance with EU Regulation 2023/2006 and is intended for use to manufacture articles in compliance with the general requirements (in Article 3) of Regulation (EC) 1935/2004.

Weight %	Component	CAS Registry No	Symbol	Risk
100%	Copolyester	25038-59-9		

3. Hazards Identification

3.1 Classification of the substance or mixture

Polyethylene terephthalate (PET) is a polymer is not classified as hazardous according to Regulation (EC) 1272/2008 (CLP).

3.2 Label elements

Labeling not required according to Regulation (EC) No 1272/2008 (CLP).

3.3 Other hazards

PET is not categorized as persistent, bio-accumulative or toxic (PBT) according to Regulation (EC) No. 1907/2006, Annex XIII.

PET is not very persistent or very bio-accumulative (vPvB) according to Regulation (EC) No. 1907/2006, Annex XIII.

Molten material will result in thermal burns.

4. First-Aid Measures

Inhalation: *If symptomatic move to fresh air. Get medical attention if symptoms persist.*

Eyes: *If molten material contacts the eye(s), immediately flush with plenty of water for at least 15 minutes. Get medical attention immediately.*

Skin: *If burned by molten polymer, cool as quickly as possible. Do not peel the material from the skin. Get medical attention.*
Ingestion: *Seek medical advice.*
Note to Physician(s): *Burns should be treated as thermal burns. The material will come off as healing occurs; therefore, immediate removal from the skin is not necessary.*

5. Fire Fighting Measures

Extinguishing Media: *Water spray, carbon dioxide, dry chemicals*
Special Fire Fighting Procedures: *Wear self-contained breathing apparatus and protective clothing.*
Hazardous Combustion Products: *Carbon dioxide, carbon monoxide.*
Unusual Fire and Explosion Hazards: *Powdered material may form explosive dust-air mixtures.*

6. Accidental Release Measures

Sweep or scoop up and remove.

7. Handling and Storage

Personal Precaution Measures: *Avoid contact with molten material.*
Prevention of Fire and Explosion: *Keep from contact with oxidizing materials. Minimize dust generation and accumulation. In the United States of America, refer to NFPA@Pamphlet No.654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical and Plastics Industry."*
Storage: *Keep container closed.*

8. Exposure Controls/Personal Protection

Country specific exposure limits have not been established or are not applicable unless listed below.

Ventilation: *Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances; such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying mists, mechanical generation of dust, drying of solids, etc.*
Respiratory Protection: *If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA standard 63 FR 1152, January 8, 1998. Respirator type: Dust.*
Eye Protection: *Wear a face shield when working with molten material.*
Skin Protection: *When material is heated, wear gloves to protect against thermal burns.*
Recommended Decontamination Facilities: *Eye bath, washing facilities.*

9. Physical and Chemical Properties

Physical Form: *Solid (pellet)*
Color: *Varies with formulation*
Odor: *Odorless*
Specific Gravity: *>1 (estimated)*
Solubility in Water: *Negligible*

PET Dust Ignition Sensitivity & Explosion Severity:

MIE (Minimum Ignition Energy)	100 – 200 mJ
MIT (Minimum Ignition Temperature)	490 °C
Explosion Indices (P_{max} & KST, including ST classification)	P_{max} = 6.2 bar @ 750 g/m^3 $(dP/dt)_{max}$ = 241 bar/s @ 4000g/m3 Kst value = 65 bar.m/s ST class = 1
Minimum Explosive Concentration (MEC)	250 g/m^3

10. Stability and Reactivity

Stability: *Not fully evaluated. Materials containing similar structural groups are normally stable.*

Incompatibility: *Material reacts with strong oxidizing agents.*

Hazardous Polymerization: *Will not occur.*

11. Toxicological Information

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

12. Ecological Information

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.
This material has not been tested for environmental effects.

13. Disposal Considerations

Discharge, treatment or disposal may be subject to national, state or local laws. Incinerate.

14. Transportation Information

Important Note: *Shipping descriptions may vary based on mode of transport, quantities, package size and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*

IATA (International Transport Association): *Not restricted under IATA regulations*

ADR/RID: *Class not regulated*

SEA-IMDG (International Maritime Dangerous Goods): *Class not regulated*

Air-ICAO (International Civil Aviation Organization): *Class not regulated*

15. Regulatory Information

This product has been reviewed and is classified and labeled as follows in full accord with EU directive 67/548 and all other current applicable amending Directives, including, but not limited to 91/155/EC, 1999/45/EC, 2001/58/EC and 2001/59/EC. Not classified as hazardous, handle in accordance with good industrial hygiene and safety practice.

Carcinogenicity Classification (components present at 0.1% or more): None, unless listed below.

TSCA (US Toxic Substances Control Act): All components of this product are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

EINECS (European Inventory of Existing Commercial Chemical Substances):	All components of this product are listed on EINECS. Any polymer present in this product has regulatory clearance under Directives of the European Union.
Water Hazards Class:	PET is a Non Water Hazards Substance according to VwVwS 10.08.2010.

16. Other Information

This product has been reviewed and is classified and labeled as follows in full accord with EU directive 67/548 and all other current applicable amending Directives, including, but not limited to 91/155/EC, 1999/45/EC, 2001/58/EC and 2001/59/EC.

Not classified as hazardous, handle in accordance with good industrial hygiene and safety practice.

Date of last revision: 10.03.2021

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assume proper use and disposal of these materials, the safety and health of employees and customers and protection of the environment.