



PRODUCTS





Context

PVC Plasticizers

- **Sunfleks** DOTP
- **Optafleks** DOA
- **Optafleks** TOTM
- **Optafleks** Polymeric 50
- **Med-X** DOP
- **Inafleks** DINP
- **Versafleks** DOP

PVC Compounds

- **Plastay Compounds** Soft / Rigid

PVC Stabilizers

- **Assafe** Calcium-Zinc Based
- **Asmix** Lead Based



PVC Plasticizers

Sunfleks DOTP	Optafleks DOA	Optafleks TOTM	Optafleks Polymeric 50	Med-X Med DEHP	Inafleks DINP	Versafleks DOP
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General Purpose Non-Phthalate Plasticizer

Sunfleks DOTP

Product Features

- **Sunfleks** is a versatile, efficient **Non-Phthalate**, General Purpose Plasticizer produced at our state of art facility, operated by **highly skilled staff**.
- **Sunfleks** is produced according to our own technology, with every process parameter monitored throughout of the production cycle, to arrive at a product providing **superior performance in all end applications**.

Applications



Specification

Property	Test Method	Value
Physical State	-	Liquid
Appearance	-	Transparent
Density (20°C, g/cm³)	ASTM D 1045	0,979-0,985
Ester Content (%)	GC-Home Method	≥ 99,5
Refractive Index (20°C)	ASTM D 1045	1,4830-1,4890
Viscosity (20°C, cP)	ASTM D 1045	80-95
Flash Point (Open Cup, °C)	ASTM D 92	≥210
Water Content (%)	ASTM D 1364-02	≤0,05
Boiling Point (°C)	-	383
Freezing Point (°C)	-	-48
Water Solubility (20°C g/L)	-	≤0,05
Acidity (mg KOH/g)	ASTM D 1045	≤0,10
Color (Pt-Co)	ASTM D 1209	≤20

Chemical Nature: Bis(2-Ethylhexyl) Terephthalate

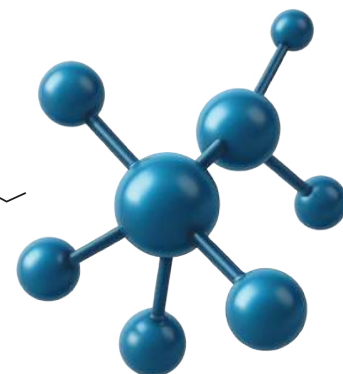
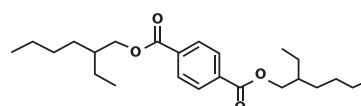
Abbreviation: DOTP / DEHT

CAS No: 6422-86-2

Molecular Weight: 391

Formula: C₂₄H₃₈O₄

Molecular Structure:



Certificates

Sunfleks complies with both **REACH** and **FDA** regulations.

The product is registered under the **REACH Regulation (EC) No. 1907/2006** through our Only Representative, RGS, for Bis(2-ethylhexyl) terephthalate, with a tonnage **band of 1000+ tonnes/year**.

Sunfleks meets the requirements of the **U.S. FDA Food Additive and GRAS** regulations.



Speciality Purpose Plasticizer

Optafleks DOA

Product Features

- Optafleks DOA is an efficient **non-phthalate**, Specialty Purpose Plasticizer produced at our state of art facility which is operated by **highly skilled staff**.
- Optafleks DOA is produced according to our own technology, with every process parameter monitored throughout of the production cycle, to arrive at a product providing superior performance in all end applications.

Applications



Food Packaging



Toys



Medical



Garden Equipment



Flexible Pipes



Coated Fabrics



Films



Cables



Automotive



Household



Paints & Coatings

Specification

Property	Test Method	Value
Physical State	-	Liquid
Appearance	-	Transparent
Density (20°C, g/cm ³)	ASTM D 1045	0,924-0,928
Ester Content (%)	GC-Home Method	≥ 99,5
Refractive Index (20°C)	ASTM D 1045	1,4440-1,4480
Viscosity (20°C, cP)	ASTM D 1045	12-20
Flash Point (Open Cup, °C)	ASTM D 92	≥ 190
Water Content (%)	ASTM D 1364-02	≤ 0,05
Boiling Point	-	415
Water Solubility (20°C g/L)	-	≤ 0,01
Acidity (mg KOH/g)	ASTM D 1045	≤ 0,07
Color (Pt-Co)	ASTM D 1209	≤ 30

Chemical Nature: Bis(2-ethylhexyl) Adipate

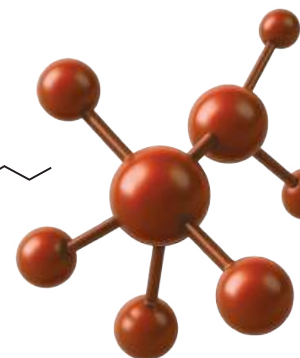
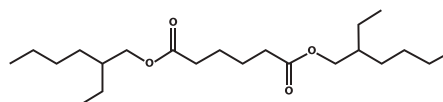
Abbreviation: DOA / DEHA

CAS No: 103-23-1

Molecular Weight: 370,56

Formula: C₂₂H₄₂O₄

Molecular Structure:



Certificates

Optafleks DOA complies with both **REACH** and **FDA** regulations.

The product is registered under the **REACH Regulation (EC) No. 1907/2006** through our Only Representative, RGS, for Bis (2-ethylhexyl) adipate, with a tonnage **band of 1000+ tonnes/year**.

Optafleks DOA meets the requirements of the **U.S. FDA Food Additive and GRAS** regulations.



Speciality Purpose Plasticizer

Optafleks^{TOTM}

Product Features

- **Optafleks TOTM** is a Non-Phthalate, Specialty Purpose Plasticizer produced at our state of art facility which is operated by highly skilled staff.
- **Optafleks TOTM** is produced according to our own technology, with every process parameter monitored throughout of the production cycle, to arrive at a product providing superior performance in all end applications.

Applications



Cables



Automotive



Medical



Coated Fabrics



Household



Flexible Pipes

Specification

Property	Test Method	Value
Physical State	-	Liquid
Appearance	-	Transparent
Density (20°C, g/cm ³)	ASTM D 1045	0,983-0,989
Ester Content (%)	GC-Home Method	≥ 99,5
Refractive Index (20°C)	ASTM D 1045	1,4800-1,4860
Viscosity (20°C, cP)	ASTM D 1045	320-340
Flash Point (Open Cup, °C)	ASTM D 92	≥ 240
Water Content (%)	ASTM D 1364-02	≤ 0,05
Freezing Point (°C)	-	-32
Acidity (mg KOH/g)	ASTM D 1045	≤ 0,10
Color (Pt-Co)	ASTM D 1209	≤ 30

Chemical Nature: Tris(2-ethylhexyl) trimellitate

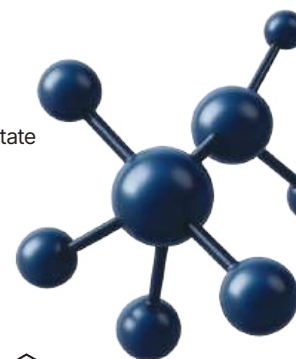
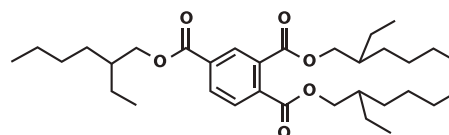
Abbreviation: TOTM / TEHTM

CAS No: 3319-31-1

Molecular Weight: 546

Formula: C₃₃H₅₄O₆

Molecular Structure:



Certificates

Optafleks TOTM is compliant with **FDA regulations**.

The product is registered under the **REACH registration under Regulation (EC) No. 1907/2006**, for Tris(2-ethylhexyl) trimellitate, with a tonnage **band of 1000+ tonnes/year**.

Optafleks TOTM meets the requirements of the **U.S. FDA Food Additive and GRAS regulations**.



Speciality Purpose Plasticizer

Optafleks

Polymeric 50

Product Features

- **Optafleks Polymeric 50**, is a Specialty Purpose Plasticizer developed by Plastay's R&D team.
- **Optafleks Polymeric 50** is produced according to our own technology.

Applications



Specification

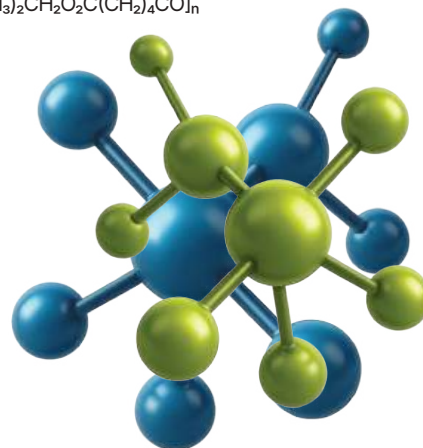
Property	Test Method	Value
Physical State	-	Viscous Liquid
Appearance	-	Yellowish Liquid (no mechanical impurities)
Density (20°C, g/cm ³)	ASTM D 1045	1,05-1,11
Ester Content (%)	GC-Home Method	≥ 95
Refractive Index (20°C)	ASTM D 1045	1,4630-1,4650
Viscosity (20°C, cP)	ASTM D 1045	≥ 1600
Flash Point (°C)	ASTM D 93	≥ 158
Acidity (mg KOH/g)	ASTM D 1045	≤ 2,0

Chemical Nature: Neopentyl Glycol Adipate

Abbreviation: NPG

Molecular Weight: Average Mn ~ 5000-6000

Formula: $-OCH_2C(CH_3)_2CH_2O_2C(CH_2)_4CO-$



Certificates

According to **REACH Regulation (EC) No. 1907/2006** **Optafleks Polymeric 50** does not require registration.



Speciality Purpose Plasticizer

Med-X

Medical Grade DEHP

Product Features

- **Med-X** is designed to fulfill the stringest requirements for medical products.
- **Med-X** production process is carefully controlled down to every parameter to arrive at a product providing superior quality.

Specification

Property	Test Method	Value
Physical State	-	Liquid
Appearance	-	Transparent
Density (20°C, g/cm ³)	ASTM D 1045	0,980-0,984
Ester Content (%)	GC-Home Method	≥ 99,5
2-Ethyl Hexanol Content (ppm)	GC-Home Method	<10
Refractive Index (20°C)	ASTM D 1045	1,4825-1,4865
Viscosity (20°C,cP)	ASTM D 1045	76-84
Flash Point (Open Cup, °C)	ASTM D 92	≥ 205
Water Content (%)	ASTM D 1364-02	≤ 0,03
Water Solubility (20°C g/L)	-	≤ 0,003
Acidity (mg KOH/g)	ASTM D 1045	≤ 0,04
Color (Pt-Co)	ASTM D 1209	≤ 20

Chemical Nature: Bis(2-Ethylhexyl) Phthalate

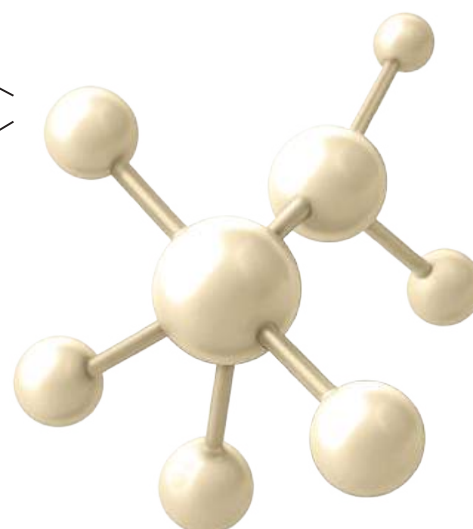
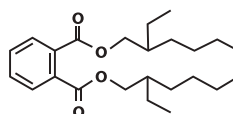
Abbreviation: DOP / DEHP (Medical Grade)

CAS No: 117-81-7

Molecular Weight: 390,56

Formula: C₂₄H₃₈O₄

Molecular Structure:



Certificates

Med-X complies with **REACH**.

The product is registered under the **REACH Regulation (EC) No. 1907/2006** through our Only Representative, RGS, for Bis(2-ethylhexyl) phthalate, with a tonnage **band of 1000+ tonnes/year**.



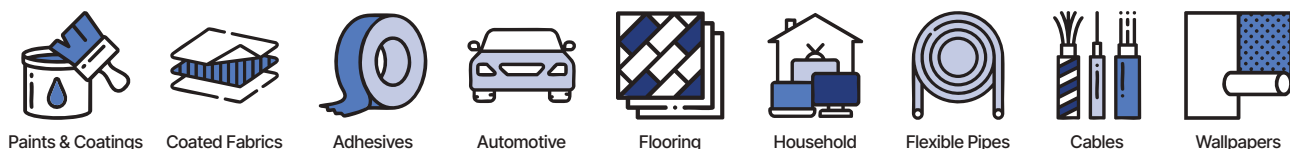
General Purpose Plasticizer

Inafleks^{DINP}

Product Features

- **Inafleks** is a high molecular weight phthalate, General Purpose Plasticizer manufactured using batch production mode.
- **Inafleks** is produced according to our own technology, with every process parameter monitored throughout of the production cycle, to arrive at high quality product for end segments.
- We use leading raw material suppliers to ensure consistency of product properties at all time.

Applications



Specification

Property	Test Method	Value
Physical State	-	Liquid
Appearance	-	Transparent
Density (20°C, g/cm ³)	ASTM D 1045	0,969-0,979
Ester Content (%)	GC-Home Method	≥ 99,5
Refractive Index (20°C)	ASTM D 1045	1,4810-1,4890
Viscosity (20°C, cP)	ASTM D 1045	70-100
Flash Point (Open Cup, °C)	ASTM D 92	≥ 205
Water Content (%)	ASTM D 1364-02	≤ 0,05
Water Solubility (20°C g/L)	-	≤ 0,00004
Acidity (mg KOH/g)	ASTM D 1045	≤ 0,07
Color (Pt-Co)	ASTM D 1209v	≤ 30

Chemical Nature: Bis(Isononyl) Phthalate

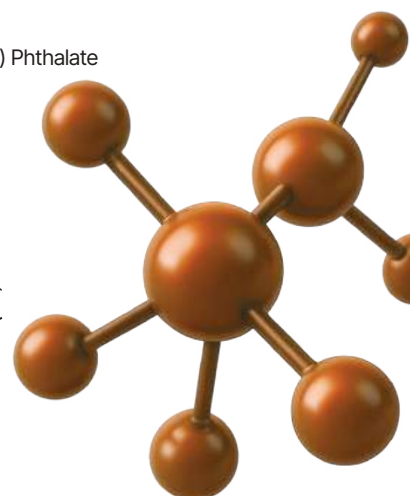
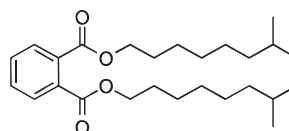
Abbreviation: DINP

CAS No: 28553-12-0

Molecular Weight: 418,61

Formula: C₂₆H₄₂O₄

Molecular Structure:



Certificates

Inafleks complies with **REACH**.

The product is registered under the **REACH Regulation (EC) No. 1907/2006** through our Only Representative, RGS, for Bis(Isononyl) Phthalate, with a tonnage **band of 1000+ tonnes/year**.



For detailed information



General Purpose Plasticizer

Versafleks DOP

Product Features

- **Versafleks**, is a low molecular weight phthalate, General Purpose Plasticizer manufactured using batch production mode.
- **Versafleks** is produced according to our own technology, with every process parameter monitored throughout of the production cycle, to arrive at high quality product for end segments.
- We use leading raw material suppliers to ensure consistency of product properties at all time.

Applications



Coated Fabrics



Flexible Pipes



Cables



Flooring



Adhesives



Household

Specification

Property	Test Method	Value
Physical State	-	Liquid
Appearance	-	Transparent
Density (20°C, g/cm ³)	ASTM D 1045	0,980-0,984
Ester Content (%)	GC-Home Method	≥ 99,5
Refractive Index (20°C)	ASTM D 1045	1,4825-1,4865
Viscosity (20°C, cP)	ASTM D 1045	76-84
Flash Point (Open Cup, °C)	ASTM D 92	≥ 205
Water Content (%)	ASTM D 1364-02	≤ 0,05
Water Solubility (20°C g/L)	-	≤ 0,003
Acidity (mg KOH/g)	ASTM D 1045	≤ 0,07
Color (Pt-Co)	ASTM D 1209	≤ 30

Chemical Nature: Bis(2-Ethylhexyl) Phthalate

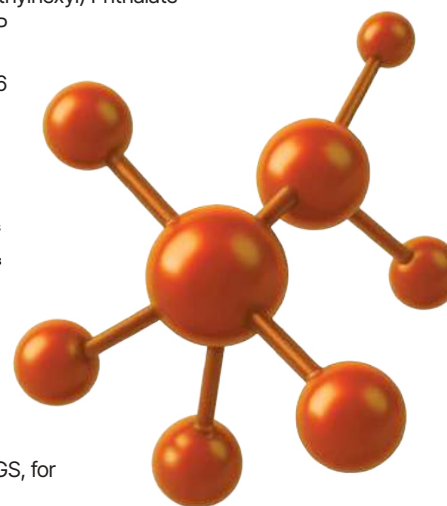
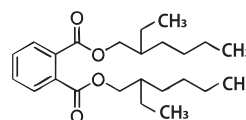
Abbreviation: DOP / DEHP

CAS No: 117-81-7

Molecular Weight: 390,56

Formula: C₂₄H₃₈O₄

Molecular Structure:



Certificates

Versafleks complies with **REACH**.

The product is registered under the **REACH Regulation (EC) No. 1907/2006** through our Only Representative, RGS, for Bis (2-ethylhexyl) phthalate, with a tonnage **band of 1000+ tonnes/year**.



Plastay Compounds



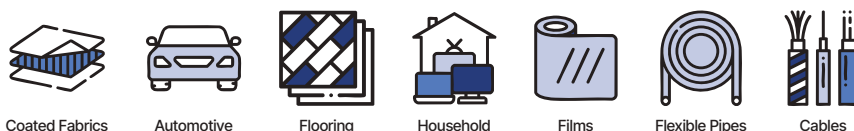
Plastay Compounds

Soft-Rigid

■ Product Features

- **Plastay Compounds** cover both soft and rigid PVC compounds, as well as specialty solutions with enhanced performance properties, including low-temperature flexibility, high flexibility, UV resistance, and flame-retardant features.
- At Plastay we employ modern mixing and granulation technologies to ensure homogeneous dispersion, excellent processability, and consistent quality in every batch.

■ Applications

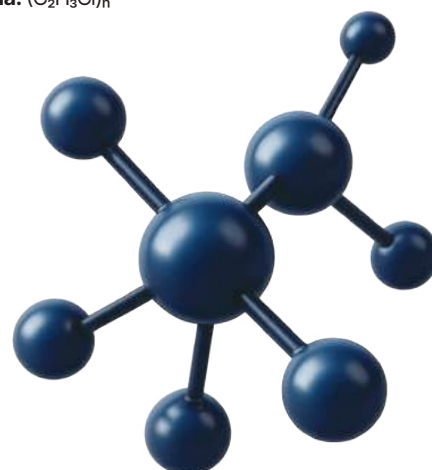


■ Specification

Property	Test Method	Value
Density (g/cm ³)	ASTM D 792	1,14 - 1,92
Hardness (Shore A)	ASTM D 2240	45 - 98
Tensile Strength (N/mm ²)	ASTM D 638	1,5 - 23
Elongation (%)	ASTM D 638	50 - 500
Mass Loss by Heating (7 days, 80±2°C, mg/cm ²)	EN 3745-505	<2,0
Cold Flex (°C)	ISO 458	-25

Product Composition: PVC, phthalate free plasticizer (for soft compounds), and other additives.

Formula: $(C_2H_3Cl)_n$





PVC Stabilizers





Calcium-Zinc Based Stabilizer

Assafe

■ Product Features

- **Assafe** stabilizers are widely used as non-toxic, environmentally friendly additives to improve the heat and light stability of PVC products. They effectively prevent thermal degradation during processing, ensuring enhanced color retention, mechanical properties, and prolonged product life.
- Compatible with both rigid and flexible PVC formulations, Ca-Zn stabilizers are commonly applied in medical, food packaging, and other applications where lead-free solutions are required. They provide excellent processing stability while supporting sustainable and safe PVC production.

■ Applications



Fittings



Pipes



Window Profiles



Automotive



Flooring



Medical



Household



Films



Hoses



Cables



Wallpapers

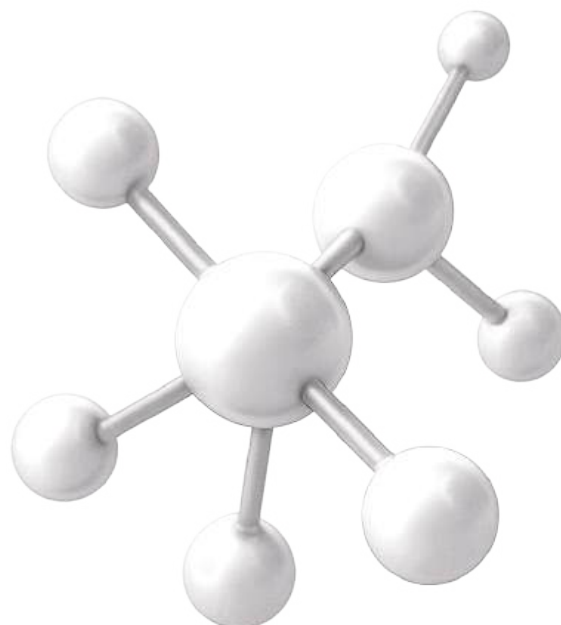
■ Specification

Property	Value
Physical State	Powder / Flakes
Appearance	White Powder / Flakes
Bulk Density	0,300-0,850 g/L
Ash Content	%20-%60

■ Recipe Example

Maximum Service Temperature

Products	70°C	90°C	105°C / 125°C
PVC K70	100	100	100
Plasticizer	52(DOTP)	55(DOTP)	50(DOTP)
Filler	75-85	70-80	15-20
Assafe Stabilizer	3-3,5	4,5-5,5	8-12





Lead Based Stabilizer

Asmix

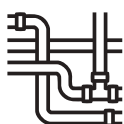
Product Features

- **Asmix** stabilizers are effective additives used to enhance the heat and light resistance of PVC products. They prevent thermal degradation during processing, ensuring improved color stability, mechanical strength, and extended product lifespan.
- These stabilizers are compatible with both rigid and flexible PVC formulations and are widely used in industrial applications such as pipes, profiles, sheets, and cable coatings. Lead-based stabilizers offer ease of processing while maintaining optimal performance of the final product.

Applications



Fittings



Pipes



Window Profiles



Automotive



Flooring



Household



Hoses



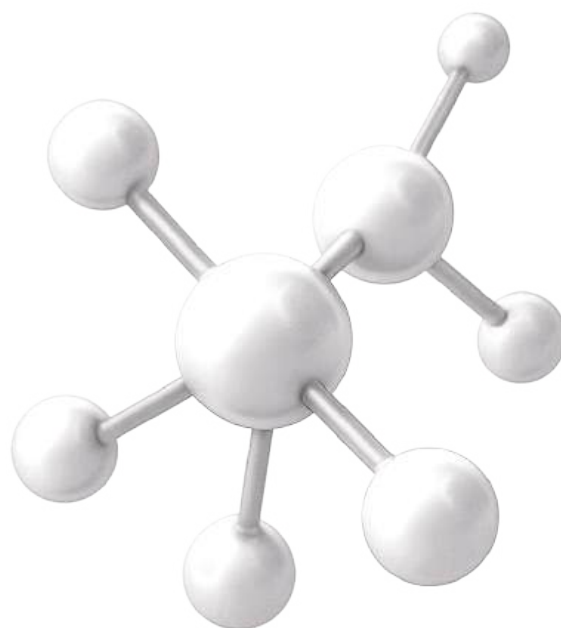
Cables



Wallpapers

Specification

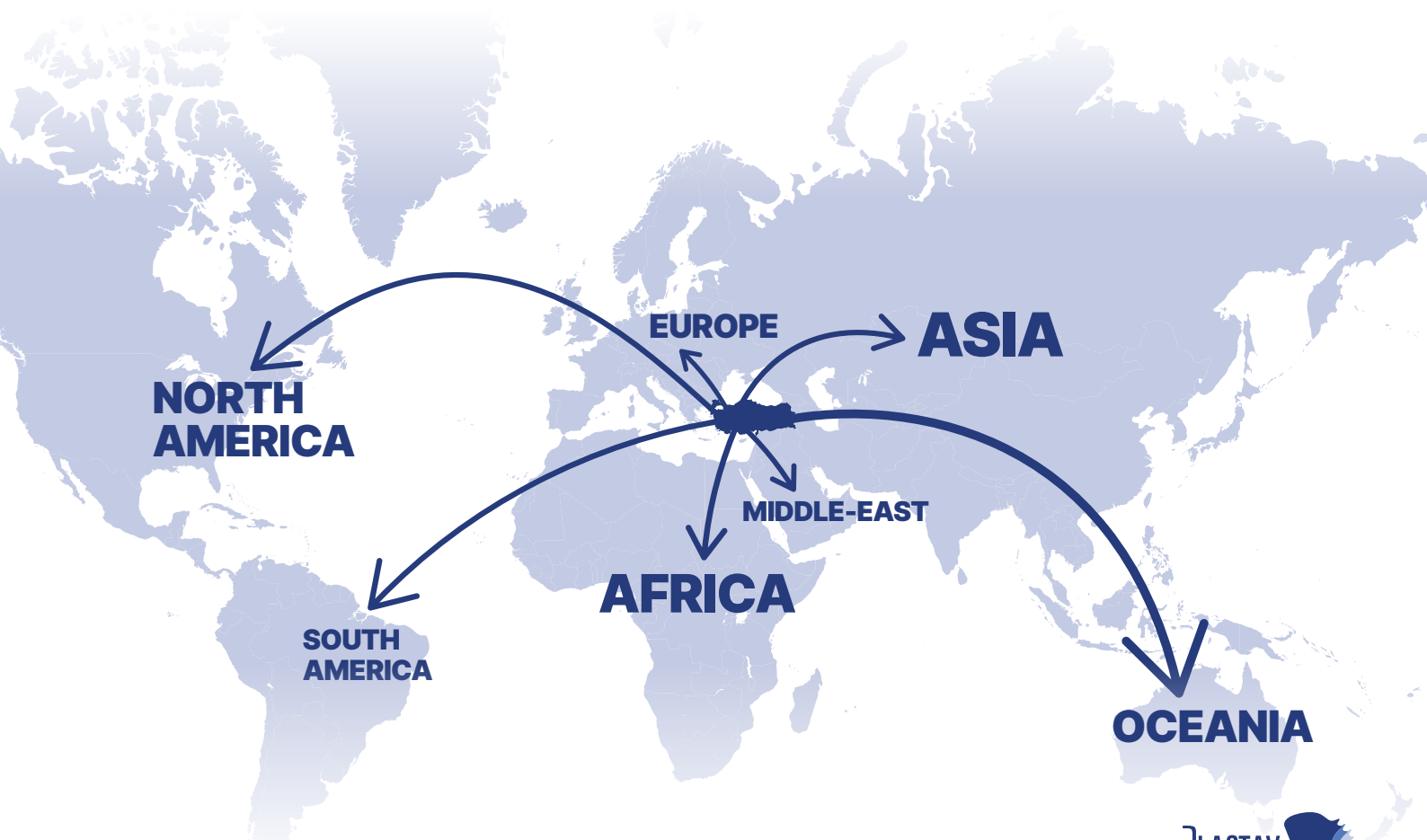
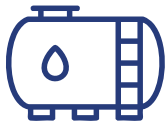
Property	Value
Physical State	Powder / Flakes
Appearance	White Powder / Flakes
Bulk Density	0,300-0,850 g/L
Lead Content	≥ 99,5
Ash Content	1,4830-1,4890





We deliver in:

Isotanks, Flexitanks (flexibags), IBCs, trucks (road tank containers), bulk.





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Notes





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