

STEARIC ACID

Stearic acid is a versatile additive in plastic manufacturing, primarily used as a lubricant and release agent. It improves the processing and performance of plastic products, enhancing their flexibility, durability, and thermal stability. Stearic acid also helps prevent plastics from sticking to molds during production, contributing to smoother, high-quality finished products according to a plastics industry article.

ITEM	UNIT	SPECIFIED RANGE	METHOD
Acid Value	mg KOH/g	207-211	GB/T 9104-2008/6
Saponification Value	mg KOH/g	208-212	GB/T 9104-2008/5
Iodine Value	gI ₂ /00g	≤ 0.5	GB/T 9104-2008/4
Melting Point	°C	53-57	GB/T 617-2006
Colour	Hazen	≤ 60	GB/T 9104-2008/7
Moisture	%	≤ 0.2	GB/T 606-2003
<i>Carbon Chain</i>			
C12+C14	%	≤ 1.5	GB/T 9104-2008/12
C16	%	52-59	
C18	%	40-44	
Other	%	≤ 1	

Packing: 25 KGs HDPE Bags with Inner Lining or according to requirements

Storage: Store in cool and dry place, 25 - 35 °C recommended, avoid moisture.
Shelf Life: 12 months

Application:

- **Lubricant:**

Stearic acid reduces friction between plastic materials and processing equipment, making the manufacturing process smoother and faster according to a guide to stearic acid uses.

- **Release Agent:**

In molding processes, stearic acid prevents plastic parts from sticking to molds, allowing for easy removal and reducing the risk of damage.

PVC Heat Stabilizer:

In PVC production, stearic acid acts as a heat stabilizer, preventing the material from breaking down and releasing harmful hydrochloric acid during processing.

- **Improved Flow:**

Stearic acid enhances the flow of plastic materials during molding, ensuring they fill the mold cavity properly according to an industry article.

- **Enhanced Material Properties:**

It can improve the flexibility, durability, and overall performance of the final plastic product.

- **Thermal Stability:**

Stearic acid improves the plastic's ability to withstand high temperatures during production, preventing degradation.