

Vazo™ 67

Free Radical Initiator

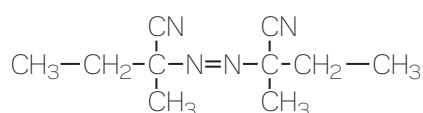
Product Information

2,2'-azobis(2-methylbutanenitrile)

2,2'-azobis(methylbutyronitrile)

CAS Number: 13472-08-7

EC Number: 236-740-8



Vazo™ 67 is a free radical source typically used as a polymerization initiator. It is an azo compound that thermally decomposes to generate free radicals and nitrogen gas.

Though it has similar thermal characteristics to Vazo™ 64 (AIBN), Vazo™ 67 is a drop-in alternative offering safer decomposition products. Additionally, Vazo™ 67 is significantly more soluble in organic solvents than Vazo™ 64.

Vazo™ 67 has a 10-hr half-life in solution at 67 °C (153 °F). Half-life at other temperatures can be estimated by using the formula:

$$\log t_{1/2} = 7492 (1/T) - 19.215 \text{ (in 1,3,5-trimethylbenzene)}$$

where $t_{1/2}$ is the half-life in minutes and T is the temperature in Kelvin.

Physical Properties

Molecular Weight	192.26 g/mol
Appearance	White crystalline solid
Solubility in Toluene	185 g/100 mL at 25 °C (77 °F)
Solubility in Acetone	185 g/100 mL at 25 °C (77 °F)

Specifications

Purity	98.0% min.
Water	0.5 wt% max.
Acetone Insolubles	0.15 wt% max.
Color, APHA	25 max.
Iron	20 ppm max.

Storage and Handling

Azo compounds are relatively unstable and degrade as a function of time and temperature. To minimize loss in quality and ensure safety, the *maximum* safe storage temperature for Vazo™ 67 is 24 °C (75 °F).

Store and handle Vazo™ 67 solids in a dry, refrigerated, well-ventilated space away from direct sunlight, flames, heat, and ignition sources.

Heating can degrade product integrity and cause dangerous decomposition. The self-accelerated decomposition temperature (SADT) for Vazo™ 67 is 45 °C (113 °F).

Handle in ways that minimize dust generation. Dust is a health hazard and potentially explosive, like many solid, organic compounds.

Keep containers tightly closed. Vazo™ 67 has a shelf life of 30 months when continuously stored below 8 °C (46 °F).

Package Size	Outer Package	Inner Package
50 lb	Fiber drum	N/A
25 kg	Fiber drum	PE bag
10 lb	Fiber drum	N/A
100 g	Fiber drum	PE bag

Packaging and transport meet international regulations.

Vazo™ 67 is regulated as a hazardous material by the United States Department of Transportation (Self-Reactive Solid Type D, Temperature Controlled, Hazard Class 4.1, UN No. 3236, Flammable Solid).

Personal Safety

Consult the Safety Data Sheet (SDS) for this material. Avoid contact with skin, eyes, and clothing. Avoid inhalation and ingestion. The SDS is available at Chemours.com and contains further information on the safe storage and handling of Vazo™ free radical initiators.

For additional information or to purchase Vazo™ free radical initiators, please contact your local Chemours representative or visit vazo.chemours.com.

For more information, visit vazo.chemours.com

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