

LOWINOX[™] 22M46 stabilizer

Phenolic Antioxidant



Description

LOWINOX™ 22M46 stabilizer is a non-discoloring antioxidant based on a sterically hindered alkylated bis-phenol.

Chemical Name

Phenol, 2,2'-methylenebis[6-(1,1-dimethylethyl)-4-methyl-

Synonym

2,2'-Methylenebis(6-t-butyl-4-methylphenol)

CAS-Number:

119-47-1

EINECS-Number:

204-327-1

Formula

LOWINOX[™] 22M46 stabilizer

Typical physical properties of LOWINOX™ 22M46 stabilizer

Appearance	White to off-white powder (milled/unmilled)	
	or granules (gr)	
Melting range [°C]	128 - 132	
Molecular weight [g/mol]	341	
Bulk density [kg/m³]	300 (milled) / 460 (unmilled) / 530 (gr)	

SI Group Inc., 2750 Balltown Road, Schenectady, NY 12309 PH: +1 518.347.4200 www.siigroup.com

Page 1 of 2

The foregoing product brand is a trademark of one or more SI Group, Inc. affiliated companies. SI Group, The Substance Inside and the SI Group logo are Reg. U.S. Pat. & Tm Off. and additional countries, to SI Group, Inc.

The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of SI Group, Inc. and its affiliated companies to ensure the accuracy or reliability of the information. Customers should contact SI Group account representatives for current information. It is the responsibility of the user to comply with all applicable laws and regulations relating to use of the product and to provide for a safe workplace. The user should consider all information contained herein only as a guide, and should take precautions that the user considers necessary or prudent to promote a safe work environment, such as considering all applicable health and safety hazards, developing safe work practice procedures and properly instructing employees, and reviewing the Safety Data Sheet (SDS) and product label for safety information.



Solubility (g/100g solvent) @ 25°C

n-Hexane	7	Methanol	28
Ethyl Acetate	139	Toluene	53
Acetone	>200	Water	<0.1
Chloroform	62	Ethanol	80

Thermogravimetric Analysis (10 mg @ 10 K/minute under N₂)

Weight Loss [%]	5	10	25
Temperature [°C]	178	180	210

Application

LOWINOXTM 22M46 stabilizer is an excellent long term stabilizer for synthetic rubbers and latexes by protecting against the effects of oxygen and heat without influencing processing or vulcanization properties. At the recommended doses, the damaging consequences of over vulcanization can be avoided. At these levels there is no tendency for blooming to occur during vulcanization and on contact with lacquered surfaces it does not cause discoloration or corona formation. In light colored vulcanizates LOWINOXTM 22M46 stabilizer retards the crazing effect caused by exposure to light. Prolonged light exposure of purely white vulcanizates containing LOWINOXTM 22M46 stabilizer will result in the formation of a pink tint which is masked in light colored compounds. LOWINOXTM 22M46 stabilizer also has insignificant volatility with the absence of migration and so is an excellent long term stabilizer for thermoplastics such as polyoxymethylene (POM) and ABS. When used in combination with thio fatty acid esters or organic phosphites LOWINOXTM 22M46 stabilizer forms synergistic systems with visibly increased effectiveness.

Food Contact

For details please contact SI Group Regulatory Affairs.

Handling and Storage

The use of proper protective equipment is recommended. Excess exposure to the product should be avoided. Wash thoroughly after handling. Store the product in a cool, dry, well-ventilated area away from incompatible materials. Unless otherwise stated, the shelf life of the product is 1 year when it is properly stored.

For additional handling and toxicological information consult the SI Group Material Safety Data Sheet

SI Group Inc., 2750 Balltown Road, Schenectady, NY 12309 PH: +1 518.347.4200 www.siigroup.com

Page 2 of 2

The foregoing product brand is a trademark of one or more SI Group, Inc. affiliated companies. SI Group, The Substance Inside and the SI Group logo are Reg. U.S. Pat. & Tm Off. and additional countries, to SI Group, Inc.

The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of SI Group, Inc. and its affiliated companies to ensure the accuracy or reliability of the information. Customers should contact SI Group account representatives for current information. It is the responsibility of the user to comply with all applicable laws and regulations relating to use of the product and to provide for a safe workplace. The user should consider all information contained herein only as a guide, and should take precautions that the user considers necessary or prudent to promote a safe work environment, such as considering all applicable health and safety hazards, developing safe work practice procedures and properly instructing employees, and reviewing the Safety Data Sheet (SDS) and product label for safety information.