



KEMAMIDE[®] Fatty Amides

PRODUCT INFORMATION

KEMAMIDE W-20 (N,N'-Ethylenebisoleamide)

Product Description

Kemamide W-20 fatty bisamide is a synthetic wax that has excellent color and color stability.

Performance Properties

Stability: Kemamide W-20 is a stable, high-melting compound. Its melting point is significantly higher than that of a comparable primary monoamide.

Compatibility: The polarity of its two central amide groups and non-polarity of the two fatty chains make this product an excellent surface active agent, which is incompatible with virtually all solvents and most polymer systems. When incorporated into polymers, Kemamide W-20 will migrate to the surface, coating it with a monomolecular layer. Its incompatibility is the basis for several other properties and many of the product's commercial applications.

Lubricity: The unsaturation in this product's fatty chains imparts excellent slip properties to surfaces upon which it collects. Because of this, Kemamide W-20 is a good blending agent and dispersant.

Corrosion Resistance: A coating of Kemamide W-20 will improve a surface's resistance to salt, heat, moisture and most solvents.

Antistatic Properties: Kemamide W-20 will lower the static charge generation in plastic film by reducing friction at the surface.

Typical Properties

Acid Value.....	10 max.
Color, Gardner (1963)	6 max.
Total Amine Value	10 max.
Melting Point	114-120°C (237-248°F)

Other Properties

Flash Point, COC, °C (°F)	296 (565)
Fire Point, COC, °C (°F)	315 (599)
Physical Form.....	Prill and Pellet
Decomposition Temperature (DTA), °C (°F)*.....	340 (644)

*Some decomposition begins at about 225°C (437°F)

Applications

Molded Plastics	Adhesive Tape
Cellophane	Dental Waxes
Paper Coatings	Wire Drawing
Hot-Melt Adhesives	Lacquers and Coatings

FDA Status

Kemamide W-20 is approved for use by the Food and Drug Administration in several regulated applications. These use clearances are listed in the following sections of Title 21 of the Code of Federal Regulations (21 CFR):

Resinous and polymeric coatings	175.300
Resinous and polymeric coatings for polyolefin films.....	175.320
In components of paper and paperboard in contact with aqueous and fatty foods.....	176.170
In components of paper and paperboard in contact with dry food	176.180
Cellophane.....	177.1200
Hydroxyethylcellulose, film, water-insoluble	177.1400
Release agents (in PVC films that contact food).....	178.3860

These are general use clearances. For information on specific and/or indirect applications clearances, contact Chemtura's Technical Business Support Group or Regulatory Compliance Group.

Safety and Handling

The Kemamide fatty amide compounds are not regulated by the Department of Transportation. They are non-corrosive and nonflammable; however, they are available in powder form and, like all powders, should be handled in such a way as to prevent eye irritation and possible dust explosions.

Wear normal safety equipment such as chemical safety goggles and rubber gloves when handling Kemamide compounds. In case of accidental eye contact, immediately flush with large amounts of water for at least 15 minutes and call a physician. If the material is swallowed, call a physician. Wash hands after handling.

Although Kemamide fatty amide products are not classified as flammable, they will burn if ignited. Once ignited, as with any fat-based material, the fire should be extinguished with foam, dry chemicals, carbon dioxide, or fog. DO NOT use a stream of water; fatty materials will float, causing the fire to spread. If spillage or leakage should occur, allow liquids to solidify and remove with a shovel. Liquids that will not solidify can be absorbed with a suitable absorbent. Waste disposal should be handled in accordance with federal, state, and local regulations.

The Kemamide fatty amide compounds, although chemically stable, should be kept away from strong oxidizing agents. They should not remain at temperatures greater than 175-185°C (347-365°F) for extended periods of time.

Please consult the Material Safety Data Sheet for additional information on handling and storage.