



KEMAMIDE® Fatty Amides

PRODUCT INFORMATION

KEMAMIDE U (Oleamide)

Product Description

Kemamide U is an unsaturated fatty monoamide derived from oleic acid. It demonstrates exceptional color stability. This product is available in powder and pellet form.

Applications

Most uses of Kemamide U are based on its slip properties and, to a lesser degree, on its anti-block properties. It can be used as a slip agent in polyethylene and polyolefin films; as a release agent in molding and forming plastic; as a dyestuff dispersant for printing inks and surface coatings; as a cosmetic additive, and as a blending agent for paraffin waxes and polyamide resins.

Typical Properties

Acid Value.....	1.0 max.
Iodine Value	72-90
Melting Range	68-78°C (154-172°F)
Color, Gardner (1963)	2 max.
Moisture, %	0.25 max.
Amide Content (by IR), %.....	98 min.

Other Properties

Molecular Weight.....	275
Density @ 130°C, g/ml	0.823
Density @ 160°C, g/ml	0.859
Viscosity @ 130°C, cps	5.5
Heat of Fusion, kcal/mol	6.3
Flash Point, COC, °C	245
Fire Point, COC, °C.....	264

Solubility

Kemamide U is relatively insoluble in water. In oxygenated organic solvents at ambient temperatures, it is soluble at levels up to 10% by weight.

FDA Status

Kemamide U 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):

In adhesives	175.105
In can end cements (resinous and polymeric coatings)	175.300
For use in xylene-formaldehyde resins condensed with 4,4'-isopropylidene-diphenol-epichlorohydrin epoxy resins	175.380
In zinc-silicon dioxide matrix coatings	175.390
In components of paper and paperboard in contact with aqueous and fatty foods	176.170
In closures with sealing gaskets for food containers	177.1210
In ethylene-vinyl acetate copolymers	177.1350
For use in surface lubricants used in manufacturing metallic articles.....	178.3910
In packaging materials for use in the radiation preservation of prepackaged food	179.45
For use as a release agent in manufacturing food packaging materials	181.28

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.