

## CATEMOL® 360

(INCI: Dilinoleamidopropyl Dimethylamine)

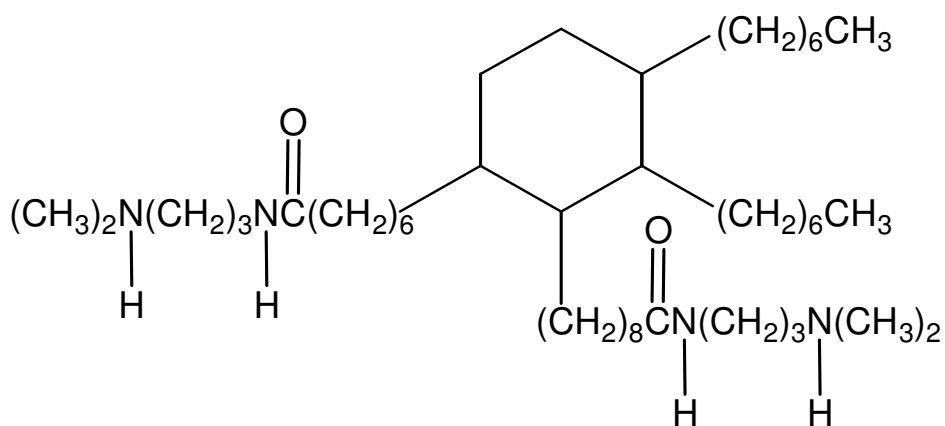
**CATEMOL® 360**, the reaction product of dilinoleic acid and dimethylaminopropylamine, is molecularly more than half vegetable derived with the remainder synthetic. It is a viscous, clear, difunctional amido-amine.

**CATEMOL® 360** is cationic, having two tertiary amino groups, one at either end of the molecule. The molecule can obviously be reacted to form a diquaternary or a difunctional salt, in situ, with a variety of organic acids. This property gives the formulator extreme flexibility in developing a conditioning solution; vegetable derived acids such as lauric or isostearic acids deserve consideration. In such systems, **CATEMOL® 360** will deposit on hair to improve manageability.

The use of **CATEMOL® 360** in hair conditioners is strongly indicated.

These properties indicate the use of **CATEMOL® 360** in rinse off and leave in conditioners, water in oil emulsions, and as a quaternary intermediate.

**CATEMOL® 360** can be characterized by the following chemical structure:



Trade Name	<b>CATEMOL® 360</b>
INCI	Dilinoleamidopropyl Dimethylamine
CAS #	138337-31-2

### SPECIFICATIONS

Appearance @ 25°C	Clear
Color, Gardner	6 maximum
Acid Value, mg KOH/gram	7 maximum
Amine Value	50 – 160
Foreign Matter	Free of

### SOLUBILITY

Castor Oil	m
Ethanol	m
Volatile Silicone	i
Mineral Oil	i
Propylene Glycol	m
Isopropyl Myristate	m
Water	i

m = Miscible (soluble in all proportions)

i = Insoluble

### SAFETY

Toxicity results are tabulated below:

EYE	NON-IRRITATING
SKIN	NON-IRRITATING

06/25/02  
11/05/04  
Rev. 08/16/05