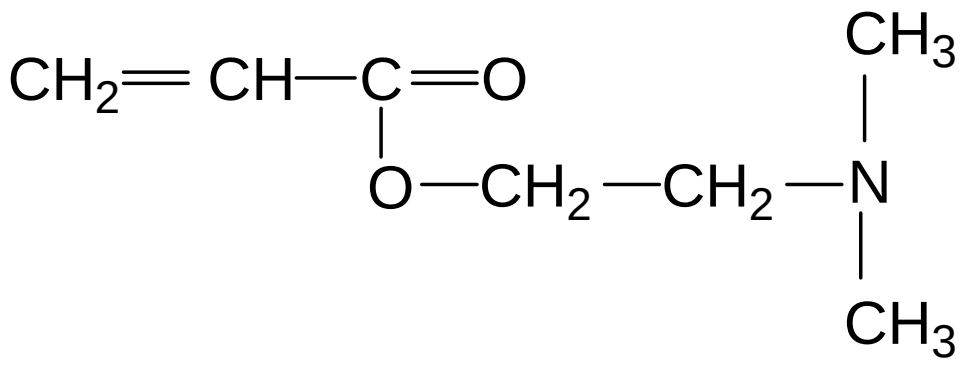
DIMETHYLAMINOETHYL ACRYLATE (ADAME)

Cas number : 2439-35-2

EINECS number : 219-460-0

CHEMICAL FORMULA



Molecular weight : 143

OTHER NAME

N,N dimethyl,N-(2 acryloxyethyl amine)
2-propenoic acid, 2-(dimethylamino)ethyl ester

SPECIFICATIONS (Ref. N001FS001)

	SPECIFICATION	METHOD
Appearance	Clear liquid	N1133
Colour (APHA)	100 maximum	N1115
Purity by gas-phase chromatography	99 % minimum	N1176
Water content	2000 ppm maximum	N1114
Inhibitor content (MEHQ)	750 to 850 ppm	N1168
Polymer test	Negative	N1186

HANDLING AND SAFETY ADVISES

We advise you to read carefully the safety data sheet.

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DIMETHYLAMINOETHYL ACRYLATE

MAIN PHYSICAL CHARACTERISTICS

Molecular weight		143
Boiling point	at 1013 mbar	167°C
Freezing point		- 80°C
Specific gravity	at 20°C	0.943
	at 25°C	0.938
Refractive index, n_D	at 20°C	1.438
	at 25°C	1.435
Viscosity	at 20°C	1.29 mPa.s
	at 25°C	1.19 mPa.s
Solubility		
water in ADAME	at 20°C	infinite (hydrolysis)
ADAME in water	at 20°C	infinite (hydrolysis)
Specific heat in liquid state		1.96 KJ/kg.°C
Latent heat of vaporisation		310 KJ/kg
Heat of polymerisation		519 KJ/kg
Flash point	in open cup	67°C
	in closed cup	62°C
Lower explosion limit in volume		1.3 %
Vapour pressure	at 20°C	0.68 mbar
	at 60°C	13 mbar
Auto-ignition temperature		209°C

CHEMICAL PROPERTIES

- Addition reactions to the double bond
- Ability to polymerise and copolymerise.
- Cationic nature, because of the presence of an amine radical, which can be enhanced by quaternisation of the tertiary amine.

PACKAGING AND STORAGE

DIMETHYL AMINO ETHYL ACRYLATE is delivered :

- in 25000 and 32000 litres insulated stainless steel road tankcars
- in 200 litres steel drums with polyethylene inserts, loaded at 180 kg

The standard inhibition is 800 ppm Monomethyl Ether of Hydroquinone (MEHQ).

With this inhibitor, the product should be stored at a temperature of no more than 25°C and away from light.

It must also be stored under air atmosphere, as the presence of oxygen is essential to activate the stabiliser.

The colour increases with the temperature and to keep a water white colour we recommend to store ADAME at a temperature below 5°C.

Under these conditions, the product is commercially guaranteed for one month after delivery.

USES

ADAME is used in the composition of many industrial products, including hydrosoluble agents for dispersants, thickeners and flocculating agents.

ACRYLIC MONOMERS BU/122021001/V3/07.16

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