DIMETHYLACETAMIDE

PRODUCT IDENTIFICATION	
CAS NO.	127-19-5
EINECS NO.	204-826-4
FORMULA	$CH_3CON(CH_3)_2$
MOL WT.	87.12
H.S. CODE	2924.10
TOXICITY	Oral rat LD50: 4300 mg/kg
SYNONYMS	DMAc; Acetic Acid, Dimethylamide; Dimethyl Acetamide; Acetyldimethylamine; Dimethylamid Kyseliny Octove (Czech); N,N-Dimethylacetamid (German); N,N-Dimetilacetamida (Spanish); dimethylacétamide (French);
RAW MATERIALS CLASSIFICATION	

PHYSICAL AND CHEMICAL PROPERTIES	
PHYSICAL STATE	Clear, colorless liquid
MELTING POINT	-20 C
BOILING POINT	164 - 166 C
SPECIFIC GRAVITY	0.94
SOLUBILITY IN WATER	Miscible
pH	
VAPOR DENSITY	3.0
AUTOIGNITION	
NFPA RATINGS	Health: 2; Flammability: 2; Reactivity: 0
REFRACTIVE INDEX	1.4380
FLASH POINT	66 C
STABILITY	Stable under ordinary conditions

APPLICATIONS

N,N-Dimethylacetamide (DMAc) is a clear oily liquid miscible in all proportion with water; melting point -20 C boiling point 165 C at 1013 hPa. It is dissolved in most of organic solvents including alcohols, ethers, ketones, chlorinated and aromatic solvents except aliphatic hydrocarbons. DMAc is produced from acetic acid and dimethylamine. It is the acetic acid amide with two methyl group substituents on the nitrogen atom. The is fo acid analogue is N,N,-dimethylformamide (DMF). DMAc is less toxic than DMF. The good water solubility and excellent solvent power particularly for high molecular weight polymers and resins make DMAc as a commo solvent in man-made fibre and polyurethane production. DMAc is also used as a solvent for production of X- and photo-resist stripping compounds. N,N-Dimethylacetamide is a dipolar aprotic solvent with a high boilin point. DMAc is a good reaction medium and catalyst. It facilitates the S_N2 reaction mechanism. It is a reacto solvent or plasticizer for cosmetic and pharmaceutical intermediates. It is also used as an extraction agent fo gases and oils.

SALES SPECIFICATION	
APPEARANCE	Clear, colorless liquid
PURITY	99.8% min
COLOR, APHA	5 max
ACIDITY (as HCOOH)	100ppm max
MOISTURE	500ppm max

TRANSPORTATION	
PACKING	180kgs in Drum
HAZARD CLASS	

UN NO.

PHYSICAL PROPERTIES OF SOLVENTS

Polarity	Group	Formula
Polar	Water	H-OH
¡è	Carboxylic Acids	R-COOH
¡è	Amides	$R-CONH_2$
¡è	Alcohols	R-OH
¡è	Amines	$R-NH_2$
¡è	Ketones (Aldehydes)	R-CO-R'
¡è	Esters	R-COOR'
¡è	Alkyl Halides	R-X
¡è	Ethers	R-O-R'
¡è	Aromatics	Ar-H
Non-polar	Alkanes	R-H