



THE ANDHRA PETROCHEMICALS LIMITED
VISAKHAPATNAM

MATERIAL SAFETY DATA SHEET (MSDS)
N-BUTANOL

SECTION - I – MATERIAL IDENTIFICATION AND USE

Material Name	:	N-BUTANOL
Chemical Formula	:	CH ₃ CH ₂ CH ₂ CH ₂ OH
Manufacturer's Name	:	The Andhra Petrochemicals Limited
Street Address	:	P.B.No.1401, Opp: Naval Dockyard
City	:	Visakhapatnam
State	:	Andhra Pradesh
Postal Code	:	530 014
Emergency Tel.Nos	:	0891-2891500/2891495/2891414,411,412
Fax No.	:	0891-2577751
E-Mail	:	info.vskp@andhrapetrochemicals.com
Supplier's Name	:	The Andhra Petrochemicals Limited
Street Address	:	No.202-A, 2 nd floor, My Home Sarovar Plaza Secretariat Road Saifabad
City	:	Hyderabad
State	:	Andhra Pradesh
Postal code	:	500 063
Emergency Tel.Nos	:	040-23420666/23420667
Fax No.	:	040-23420665
E-Mail	:	info.hyd@andhrapetrochemicals.com
Chemical Name	:	N-BUTANOL
Chemical Identity	:	Colour less liquid
Trade Name and synonyms	:	N-Butanol, N-Butyl Alcohol
Product use	:	Solvent in manufacturing of Butyl acetate, melamine, resins, Plasticizers, antibiotics etc.

SECTION – II – COMPOSITION

Purity	:	99.5% min
Colour	:	10
Water	:	0.1% max
Acidity as acetic acid	:	0.01 max
Aldehyde	:	0.1% max
Sulphuric acid colour	:	25 max

SECTION - III – HAZARDOUS INGREDIENTS OF MATERIAL

Hazardous Ingredients	:	Nil
Approximate Concentration (%)	:	Nil
C.A.S.Nos	:	71-36-3
Lethal Dose 50	:	Oral 790mg/kg (Rat)
Lethal Concentration 50	:	Oral 3000 ppm (Mouse)
U.N.No.	:	1120
Haz Chem Code	:	3YE

SECTION - IV – PHYSICAL DATA FOR MATERIAL

Physical State	:	Liquid
Odour and Appearance	:	Strong characteristic Odour Clear Liquid
Odour Threshold (P.P.M.)	:	50
Specific Gravity	:	0.8108 at 20 Deg.C (Water-1)
Vapour Pressure (mm)	:	4.2 mm Hg at 20 Deg.c
Vapour density (Air-1)	:	2.55
Evaporation Rate	:	---
Boiling point	:	117.5 Deg.C
Freezing	:	- 88.3 Deg.C
Solubility in water	:	7.7% W/W at 20 Deg.C
pH	:	---
Density	:	0.807 gr/ml
Coefficient of Water/Oil distribution	:	---

SECTION - V – FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability	:	Yes / No
If yes, under what conditions	:	At its Flash point 29 Deg.c (CC) At its Auto ignition Temp.340 Deg.c
Means of Extention	:	Use CO2 Dry chemical powder, Halon, foam extinguishers
Special Procedures	:	Use Alcohol resistant Foam AGFFF for bulk liquid fire.
Flash Point (CC) and Method	:	29 Deg.C (CC) 36 Deg.C (OC)
Upper Explosion Limit (% by Volume)	:	11.2% V/V
Lower Explosion Limit (% by Volume)	:	1.4% V/V
Auto-ignition Temperature (Deg.C)	:	340
TDG Flammability Classification	:	3
Hazardous Combustion Products	:	Acrid Smoke and Fumes

SECTION - VI – REACTIVITY DATA

Chemical Stability	:	Stable at Normal condition
Incompatibility to other substances	:	Aluminium, chromium tri-oxide, Oxidisers
Reactivity and under what conditions	:	Not reactive
Hazardous Decomposition Products	:	When heated to decompose, it emits Acrid smoke.
Material Name/Identifier	:	DNA

SECTION - VII – TOXICOLOGICAL PROPERTIES OF MATERIAL

Route of Entry Skin Contact	:	Yes
Skin Absorption	:	Yes
Eye Contact	:	Yes
Inhalation Acute	:	No
Inhalation Chronic	:	No
Ingestion	:	Yes
Effects of Acute Exposure to Material	:	Nil
Effects of Chronic Exposure to material	:	A serious systemic effect or Potential to increase hearing loss. Nasal, Non-Toxic
Exposure Limit(s)	:	Not applicable
Irritancy of Material	:	Not applicable
Sensitization to Material	:	Nil
Carcinogenicity, Reproductive effects, Teratogenicity, Mutagenicity.	:	Nil
Synergistic Material	:	Nil

SECTION - VIII – PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

Gloves (Specify)	:	PVC Gloves or Neoprene Gloves
Respiratory (Specify)	:	Breathing Apparatus when required or chemical cartridge.
Eyes (Specify)	:	Face Shield or Panoramic goggles
Footwear (Specify)	:	Use PVC gum boot
Clothing (Specify)	:	PVC Overall or suit
Other (Specify)	:	Nil
Engineering controls (e.g., ventilation, enclosed process etc.) please specify	:	Maintain good ventilation
Leak and Spill procedures	:	Contain the leaked material earthern bund and avoid flaring to water bodies, collect the material. Use sand to soak the material.
Waste Disposal	:	Incenerate the waste
Handling Procedures and Equipment	:	Use GI Metal buckets. Plane buckets can also be used. Drums for storage.
Storage Requirements	:	Store in MS Containers, keep in a cool and Ventilated place.
Special Shipping Information	:	Flammable liquid. Pungent odour. Not toxic.

SECTION - IX – FIRST AID MEASURE

First Aid Measure	:	Flush eyes or affected part with large quantity of water. Remove contaminated clothing, get medical aid.
Sources Used	:	First Aid Centers, Private Nursing homes, Hospitals etc.
Additional information	:	---
Date of Revision	:	24.01.2009

Note:-

Source of Format, Model rules under the Factories Act, 1987 (Amendment act 1987).

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