



**THE ANDHRA PETROCHEMICALS LIMITED, VISAKHAPATNAM.**  
**MATERIAL SAFETY DATA SHEET (MSDS)**  
**2-ETHYL HEXANOL**

**SECTION-1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Identifier:

Material Name:	2-Ethyl Hexanol
Chemical formula:	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> CH(C <sub>2</sub> H <sub>5</sub> )CH <sub>2</sub> OH
CAS. No:	104-76-7
Trade Name & synonyms:	2-Ethyl Hexanol, Ethyl Hexyl Alcohol, Octyl Alcohol, Octanol
Product Use:	Manufacturing of PVC, Plasticizers, Antifoam Agents, Solvents, etc.

Manufacturer's details:

Name:	The Andhra Petrochemicals Limited
Street:	P.B.No.1401, Opp: Naval Dockyard
City:	Visakhapatnam.
State:	Andhra Pradesh
Postal Code:	530 014
Emergency Tel.Nos:	+91-0891-2891500/2891495/414/411/412
Fax No.:	0891-2577751
E-Mail:	info.vskp@andhrapetrochemicals.com

Supplier's details:

Name:	The Andhra Petrochemicals Limited
Street:	No.202-A, 2 <sup>nd</sup> floor, My Home Sarovar Plaza, Secretariat Road, Saifabad
City:	Hyderabad
State:	Telangana
Postal Code:	500063
Emergency Tel.Nos:	040-23420666/23420667
Fax No.:	040-23420665
E-Mail:	info.hyd@andhrapetrochemicals.com

Date MSDS prepared:	14. Sept. 2015
MSDS prepared by:	Technical Services, APL

**SECTION-2: COMPOSITION/INFORMATION ON INGREDIENTS**

Composition:

2-EH purity:	99.5% (wt min)
Color, APHA:	10 (max)
Water:	0.1% (wt max)
Acidity as acetic acid:	0.015% (wt max)
Aldehyde (as EHA):	0.1% (wt max)
Sulphuric Acid colour, APHA:	50 (max)



**THE ANDHRA PETROCHEMICALS LIMITED, VISAKHAPATNAM.**  
**MATERIAL SAFETY DATA SHEET (MSDS)**  
**2-ETHYL HEXANOL**

**SECTION-3: HAZARDS IDENTIFICATION**

Hazardous Ingredients:	Nil
U.N.Number:	2282(3.0.0)(0)III
Haz Chem Code:	3YE
HMIS hazard ratings:	Health: 2, Flammability: 2, Stability/Reactivity: 0
OSHA Specified Hazards:	Not applicable
Interdictions:	Do not drink or eat in working area; Do not smoke in or near working area; The use of open flame in working areas is prohibited.
Hazardous Statements:	Combustible liquid. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.
Precautionary Statement:	
Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling.
Response:	In case of fire: Use water spray, CO2, dry chemical (or) foam for extinction. If Inhaled: Remove person to fresh air and keep comfortable for breathing If on skin: Wash with plenty of water/... If skin irritation occurs: Get medical advice/attention Take off contaminated clothing If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**SECTION-4: FIRST AID MEASURES**

First Aid Measure:	Flush the affected portion with water for 10 minutes. Remove contaminated clothing & provide fresh air.
Doctor's Advise:	Give artificial respiration if required.
Sources Used:	First Aid Centres, Private Hospitals etc.



Additional information:	May irritate and cause redness and pain. Treat symptomatically.
<b>SECTION-5: FIRE FIGHTING MEASURES</b>	
Flammability:	Yes
If yes, under what conditions:	At flash point temp.73°C & at Auto ignition temp. 230°C.
Means of Extention:	Use Dry chemical powder, CO2 extinguishers, foam, water spray.
Special Procedures:	Use Alcohol resistant foam AGFFF for bulk liquid fire. Use water fog for cooling.
Flash Point & Method:	73°C closed cup method.
Upper Explosion Limit (% by Volume):	9.7% V/V
Lower Explosion Limit (% by Volume):	0.9% V/V
Auto-ignition Temperature:	230°C
Hazardous Combustion Products:	Acrid Smoke and Fumes
General fire hazards:	Combustible liquid and vapor. Material will float and may ignite on surface of water.
Advice for fire-fighters:	Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire.
Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>SECTION-6: ACCIDENTAL RELEASE MEASURES</b>	
Personal precautions, protective equipment and emergency procedures:	Wear appropriate personal protective equipment.
Environmental Precautions:	Avoid release to the environment.
Methods and material for containment and cleaning up:	Eliminate sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.
Notification Procedures:	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
<b>SECTION-7: HANDLING AND STORAGE</b>	
Handling procedures and equipment:	Use Metal buckets and collect in drums or pump back to a container. Ground/bond container and receiving equipment.
Storage Requirements:	Can use MS or C.I. Containers. Store in well-ventilated place. Keep cool. Protect containers against physical damage. Use permit system.
Precaution for safe handling:	Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling.
<b>SECTION-8: EXPOSURE CONTROL / PERSONAL PROTECTION</b>	
Gloves:	PVC Gloves

**2-ETHYL HEXANOL**

Respiratory:	Breathing Apparatus
Eyes /face protection:	PVC Goggles, Face Shield
Footwear:	PVC (Shoe)
Clothing:	PVC Suit
Leak and Spill procedures:	Contain the leak, keep away from Heat or Flame and in-compatible materials use sand to soak the leaked material.
General information:	Maintain Eye bath, washing facilities, Safety shower in work area.
Engineering controls:	Ventilation

**SECTION-9: PHYSICAL AND CHEMICAL PROPERTIES**

Physical State:	Liquid
Odour and Appearance:	Slightly Pungent Liquid
Molecular weight:	130.23
Relative density:	Liquid (Water = 1.0): 0.834 vapor (Air = 1.0): 4.5
Vapour Pressure:	0.2 mmHg at 20°C
Evaporation Rate:	No data available
Boiling point	179°C
Freezing Point:	-76°C
Solubility in water	0.15% W/W at 20°C
pH	Not pertinent
Flash point:	73°C
Auto-ignition:	230°C

**SECTION-10: STABILITY AND REACTIVITY**

Chemical Stability:	Stable at Normal condition
Incompatibility to other substances:	Strong Oxidisers
Hazardous Decomposition Products:	Acrid smoke and Fumes
Conditions to avoid:	Heat, sparks, flames.
Possibility of Hazardous Reactions:	Data not available.

**SECTION-11: TOXICOLOGICAL INFORMATION**

Route of Entry Skin Contact:	Yes
Skin Absorption	Yes
Eye Contact	Yes
Inhalation Acute	No



**THE ANDHRA PETROCHEMICALS LIMITED, VISAKHAPATNAM.**  
**MATERIAL SAFETY DATA SHEET (MSDS)**  
**2-ETHYL HEXANOL**

Inhalation Chronic:	No
Ingestion:	Yes
Effects of Acute Exposure:	-
Effects of Chronic Exposure:	Slightly Irritant to eyes, skin & Nasal, Non-Toxic
Exposure Limit(s):	Not applicable
Irritancy of Material:	Not applicable
Sensitization to Material:	Nil
Carcinogenicity, Reproductive, Teratogenicity, Mutagenicity effects:	No
Synergistic Material:	Nil

**SECTION-12: ECOLOGICAL INFORMATION**

Ecotoxicity:	
Acute hazards to the aquatic environment:	Fish Product: LC-50 (Fathead Minnow, 96 h): 28.2 mg/l
	Aquatic Invertebrates Product: EC-50 (daphnid, 48 h): 39 mg/l
Chronic hazards to the aquatic environment:	Fish Product: No data available. Aquatic Invertebrates Product: NOEC (Daphnia magna, 21 d): 7.5 µg/l Read-across from a similar material Toxicity to Aquatic Plants Product: EC-50 : Not expected to be harmful to aquatic organisms.
Persistence and Degradability:	Biodegradation Product: 100 % (14 d) BOD/COD Ratio Product: No data available.
Bio-accumulative Potential :	Bioconcentration Factor (BCF) Product: No data available. Partition Coefficient n-octanol / water (log Kow) Product: Log Kow: 3.1
Mobility in Soil:	No data available.
Other Adverse Effects:	No data available.

**SECTION-13: DISPOSAL CONSIDERATIONS**

Waste treatment methods:	
General information:	The generation of waste should be avoided or minimized wherever possible. Dispose of waste and residues in accordance with local authority requirements.
Disposal methods:	Dispose of waste and residues in accordance with local authority requirements. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.

**SECTION-14: TRANSPORT INFORMATION**



Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination; Flammable liquid; Pungent odour; Use nonsparking tools and explosion proof equipments. IMDG –



**THE ANDHRA PETROCHEMICALS LIMITED, VISAKHAPATNAM.**  
**MATERIAL SAFETY DATA SHEET (MSDS)**  
**2-ETHYL HEXANOL**

International Maritime Dangerous Goods Code: Class not regulated, Possible Shipping Descriptions: Not regulated.  
IATA - International Air Transport Association: Class not regulated, Possible Shipping Descriptions: Not regulated.

**SECTION-15: REGULATORY INFORMATION**

OSHA:	Hazardous
WHMIS Status & classification (Canada):	Controlled & Class B-3: Combustible liquid with flash point between 37.8°C & 93.3°C on DSL.
US EPCRA:	None
Pictograms & Symbols:	 Harmful  Irritant

**SECTION-16: OTHER INFORMATION**

Information contained in this Material Safety Data Sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy. Suitability for a particular application or results to be obtained from them. It is upto the User / Distributor to ensure that the information contained in the Material Safety Data Sheet is relevant to the product manufactured / handled or sold by him as the case may be APL makes no warranties, expressed or implied, in respect of the adequacy of this document for any particular purpose.