

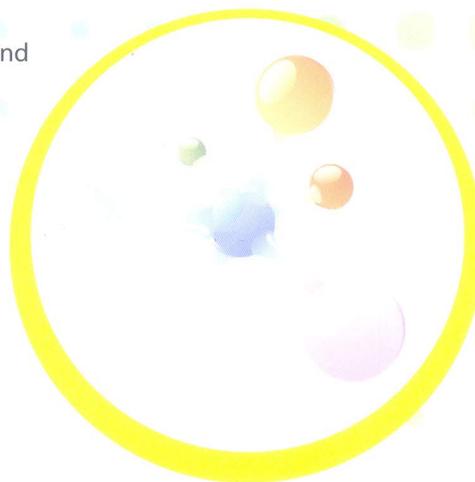
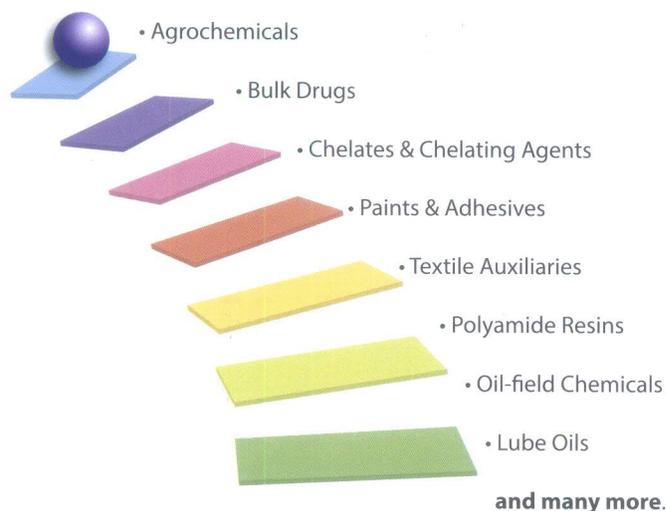
Diamines  
Quality driven



# Making Presence Felt...

**ETHYLENEAMINES** : a series of homologous poly-amines act as the Building Blocks in numerous applications across a wide spectrum of Industries because of their excellent synergy in reactivity, basicity and surface activity. These are mainly used as intermediates in the production of functional products.

Diamines has pioneered the ethylene amines development in India and has presence in the following segments



## Meeting Approvals...

- Diamines has ISO 9001:2015 accreditation from BVC.
- R & D Center recognized by The D S I R, Government of India.



## Monitoring Process...

Qualified and experienced Engineers keep a vigil 24X7 on the continuous process.

Armed with the latest automation system they dove-tail their process with the Plant Safety Program to ensure maximum output at optimum costs and with zero down time.

Diamines has in place sophisticated equipment to produce the right Quality of the products required by our valued Customers at the right time.



## Quality Assurance...

At Diamines, **Quality** starts with a capital **Q**. Quality is a sine qua non for ensuring the Company's continued presence in the market.

Equipped with the latest testing instruments, the Q A Laboratory tests to stringent standards, incoming raw materials, in-process goods and the finished products.

Customers' complaints are a very rare event at Diamines.

This speaks volumes for its commitment to always give the best it can to all its Customers.



# Meeting Customer Requirements...



DACL R & D Center is approved by DSIR, Government of INDIA.

The center harbors a culture that fosters innovation and helps shape inventions into innovative commercial products.

We are working on development of various new products as per customer requirements having applications in Pharmaceuticals, Polymer, Agrochemicals, Cosmetics, Dyes, Textile Industries etc.

## FACILITIES

- Well Equipped R & D Laboratory
- Well Equipped Analytical R & D Laboratory
- Hydrogenation Reaction Facility
- Reaction Scale-up & Distillation Facility

## Customer Focus...

Diamines exists for and because of its Customers.

Armed with a long list of prestigious and satisfied Customers both in India and over-seas, for years on, Diamines has constantly aimed at ensuring CUSTOMER PEACE for all those who order out our products in various packings up to ISO Tanks.

Diamines is perceived to be a reliable and consistent indigenous source of supply of Ethylene amines.



## In Big League...

Diamines is the first and only producer of Ethylene amines in India. It is the excellent Quality of its products, technology and services that drives Diamines into a big league of large producers across Continents. Meets competition successfully. Ensures total satisfaction for Customers.



## We Care...

As a responsible Corporate, Diamines has resolved to be protecting the environment and help generating Power by harnessing Wind Energy.

Diamines is a proud owner of Wind Turbine Generators and lends its hand in continuously generating Power through renewable means.

## We Take Care...

PEOPLE, are our most valuable assets.

We care for them by way of welfare activities and providing primary medical attention and ensuring a safe & healthy work environment conducive to maximum contribution.

Diamines takes cognizance of their presence in order to make the Company's presence felt in the markets.



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## What the Future beholds?

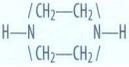
Diamines is in a growth mode to increase market share rapidly across new frontiers and beyond the seven seas.

In the pipeline are a few value-added products for diverse applications.

Dedicated R & D pilots continuous improvement in the Quality of the products.

The future beckons Diamines for Collaboration and Consolidation. Indeed a bright prospect ahead.

# Products and applications...

Product	Piperazine Anhydrous PIP-A	Ethylene Diamine EDA	Diethylene Triamine DETA	Polyethylene Polyamine-Mix PA-M	Monoethanol Amine MEA	Triethylene Diamine TEDA
<b>Synonyms</b>	Hexahydropyrazine, Diethylenediamine, 1,4 Diazacyclohexane	1,2-Ethanediamine; 1,2-Diaminoethane	1,2-Ethylenediamine N-(2-Aminoethyl); Bis(2-Aminoethyl) Amine	Mixture of Higher poly- ethylene Polyamines	2-Aminoethanol; 2-Hydroxyethylamine	1,4-Diazabicyclo [2.2.2] octane; DABCO Crystals
<b>Molecular formula</b>	C4H10N2	C2H8N2	C4H13N3	H2NCH2CH2(NHCH2CH2)xNH2	C2H7NO	C6H12N2
<b>CAS No.</b>	[110-85-0]	[107-15-3]	[111-40-0]	[29320-38-5]	[141-43-5]	[280-57-9]
<b>Chemical Structure</b>		H2N-CH2-CH2-NH2	H2N-(CH2)2-NH-(CH2)-2NH2	H2NCH2CH2(NHCH2CH2)xNH2	H2N-CH2-CH2-OH	
<b>Molecular weight</b>	86.1	60.1	103.2		61.08	112.17
<b>Specifications</b>						
Appearance	White flakes	Clear colorless liquid	Clear colorless liquid	Dark brown clear liquid, free of suspended matter	Clear colorless hygroscopic liquid	White to light Yellow solid, Hygroscopic
Assay by GC %	99.7 min.	99.7 % min	98.5 min		99.00 min	99.7 min
Water (by KF) Wt %	0.5 max.	1.0 % max	1.0 % max	1.0 max	1.0 max	
Color (APHA)	50 max. (20% solution)	30 max	50 max		50 max	White to off-white
Viscosity at 40 °C;cst				70-120		
<b>Packing and Storage*</b>	50 kg Fiber Drums with double polyethylene liners inside	180 kg HMDPE Drums and in SS Road Tankers For exports in ISO Tanks	195 kg HMDPE Drums and in SS Road tankers For exports in ISO Tanks	200 kg. HMDPE Drums Also supplied in SS Road tankers	210 kg HMDPE Drums Also supplied in SS road tankers	25 kg Fiber Drums with special liners inside
<b>Transport Classification</b>						
IMDG Class	8	8	8	8	8	8
U.N. No	2579	1604	2079	2735	2491	2925
Packing Group	III	II	II	III	III	III
Hazard Label	Corrosive	Corrosive	Corrosive	Corrosive	Corrosive	Corrosive
<b>Applications</b>	Used as raw material for the manufacture of quinolone drugs like Ciprofloxacin and Norfloxacin Also used in manufacture of other drugs like Anti-helmentics, Sedatives, Antihistamines, Antifilarials, Tranquilizers and Analgesics. Used for speciality chemicals and polymeric products like corrosion inhibitors, photographic chemicals, wetting agents, polyamides, rubber auxiliaries and hardener for epoxy resins. <b>Gas sweetening as well.</b>	Used as raw material for Fungicide, Chelating Agents, Corrosion Inhibitor, Elastomeric Fibers, Textile Auxiliaries, Lube Oil and Fuel Additives, Water Treatment Chemicals, Drugs Intermediates, Plastic Additives, Polyamide Resins, Rubber Processing Additives, Paper Chemicals, Mining Chemicals.	Used as raw material for Asphalt Additives, Chelating Agents, Corrosion Inhibitors, Drainage Aids, Fabric Softners, Lube Oil & Fuel Additives, Mineral Processing Aids, Polyamide Resins, Surfactants, Textile Additive, and Wet Strength Resin.	Asphalt Additives, Corrosion Inhibitors, Epoxy Curing Agents, Hydrocarbon Purification, Lube Oil and Fuel Additives, Mineral Processing Aids, and Petroleum Production Chemical	MEA is mainly used for scrubbing acidic gases (H2S, CO2), detergent neutralizing and is also used as surface active agent, emulsifier. As a solvent in pesticides	Used extensively as a catalyst to promote both gelling and blowing reactions in the production of flexible, semi-rigid and rigid polyurethane foams, as well as, elastomers and adhesives. It is also used in polyurethane coating applications. Also used as a raw material for manufacture of Chlorpyrifos and also in organic syntheses as acid absorber.

\*\* Corrodes copper and its alloys. Reacts violently with acids and chlorinated Hydrocarbons. Absorbs carbon dioxide from air. Discolors in contact with air."

**IMPORTANT:** While the descriptions and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Many factors may affect processing or application/use. We recommend that you make tests to determine the suitability of the product for your particular purpose prior to use. No representation or warranty, expressed or implied, is made as to the accuracy or completeness of the information or data contained herein and Diamines in no event will be liable for incidental or consequential damages.

## NEW Products and applications...

Product Name	CAS No.	Applications
1-Methylpiperazine	109-01-3	Olanzapine, Levocetirizine, ofloxacin, Rifampicin, Clozapine, Sildenafil, etc.
Piperazine Citrate	144-29-6	Pharma intermediate
Piperazine Adipate	142-88-1	Pharma intermediate
Piperazine Hexahydrate	142-63-2	Pharma intermediate
Piperazine Phosphate	14538-56-8	Pharma intermediate
Piperazine Dihydrochloride	142-64-3	Pharma intermediate
Triethylenediamine [Crystalline]	280-57-9	As a catalyst Polyurethane, Plastic, Elastomers, Adhesives, Foams
33% Triethylenediamine in Dipropylene glycol	280-57-9	As a catalyst Polyurethane, Plastic, Elastomers, Adhesives, Foams
33% Triethylenediamine in Monoethylene glycol	280-57-9	As a catalyst Polyurethane, Plastic, Elastomers, Adhesives, Foams
33% Triethylenediamine in Dimethylformamide	280-57-9	As a catalyst Polyurethane, Plastic, Elastomers, Adhesives, Foams



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