



## CERTIFICATE OF ANALYSIS

Date: 09/07/18

PRODUCT NAME : DIETHANOLAMINE AR

CAS No : 111- 42- 2

Product code : 22975

Formula :  $C_4H_{11}NO_2$

Batch No : MCRT-16464

Mol. WT : 105.14

Mfd. : July 2018

Exp. : June 2023

| S.R | Test                                                                       | Specification                                           | Observation                         |
|-----|----------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------|
| 1   | Description                                                                | Clear colourless to faint yellow colour viscous liquid. | Faint yellow colour viscous liquid. |
| 2   | Assay (acidimetric)                                                        | 99% min                                                 | 99.81%                              |
| 3   | Refractive index                                                           | 1.477 – 1.478                                           | 1.478                               |
| 4   | Wt. per ml at 20 <sup>0</sup> C                                            | 1.095 – 1.097g                                          | 1.096g                              |
| 5   | Suitability for use as buffer for alkaline phosphate (test for inhibition) | Passes test                                             | Passes test                         |
| 6   | Sulphated ash                                                              | 0.01% max.                                              | 0.005%                              |
| 7   | Water                                                                      | 0.2% max.                                               | 0.17%                               |
| 8   | Triethanolamine                                                            | 1.0% max.                                               | <1.0%                               |
| 9   | Ethanolamine                                                               | 0.5% max.                                               | <0.5%                               |
| 10  | Cadmium(Cd)                                                                | 0.0001% max.                                            | <0.0001%                            |
| 11  | Cobalt (Co)                                                                | 0.0001% max.                                            | <0.0001%                            |
| 12  | Copper (Cu)                                                                | 0.0001% max.                                            | <0.0001%                            |
| 13  | Iron (Fe)                                                                  | 0.0001% max.                                            | <0.0001%                            |
| 14  | Lead (Pb)                                                                  | 0.0001% max.                                            | <0.0001%                            |
| 15  | Magnesium (Mg)                                                             | 0.0001% max.                                            | <0.0001%                            |
| 16  | Manganese (Mn)                                                             | 0.0001% max.                                            | <0.0001%                            |
| 17  | Nickel (Ni)                                                                | 0.0001% max.                                            | <0.0001%                            |
| 18  | Zinc(Zn)                                                                   | 0.0005% max.                                            | <0.0005%                            |

REMARK: THE PRODUCT COMPLIES WITH THE ABOVE SPECIFICATIONS

[Tested By]

[Q.C Incharge]

HEAD-QUALITY ASSUARANCE  
(G.G.Salian)

Note: Computer generated image requires no sign.

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2<sup>nd</sup> Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email : [info@molychem.net](mailto:info@molychem.net)

Works: Plot No. B/9, Badlapur M.I.D.C.,OPP.Shobhavat Textile Co.,

Kulgaon, Badlapur (E), Dist.-Thane-421 503