## Trimethylaluminium, 2M in Toluene

## INTRODUCTION

Trimethylaluminium belongs to class of organometallics. It is a highly reactive chemical and its solution in toluene is normally used to facilitate workability. Its general applications are in cross coupling and carboalumination reactions.

## Manufacture

The organometallic is manufactured from metallic aluminium either by reaction with methylmercury or with chloromethane.

| Synonym | Trimethylalane Trimethylalumine |
| :---: | :---: |
| CAS no. | 75-24-1 |
| EINECS no. | 200-853-0 |
| Molecular formula | $\mathrm{C}_{3} \mathrm{H}_{9} \mathrm{Al}$ |
| Molecular weight | 72.09 |
| Structure |  |

## Applications

## API

- Imidocarb Dipropionate, an antiprotozoal agent


## Intermediates

- 9,9-Dimethyl-9H-xanthene
- Bis(cyclopentadienyl)dimethyltin
- Amidochloromethyl aluminium
- Trimethylborane
- 3,3-Dimethylcyclohexane


## Others

- Co-catalyst in polyolefin synthesis
- forms a series of carbonyl compounds with 4-bromo-2,6-di-t-butylphenol
- In preparation of Tebbe Reagent
- Produces luminous trail in upper atmosphere to track rockets
- As a precursor for MOCVD method in semiconductors



## PRODUCT IN FOCUS

## SPECIFICATIONS

| Test | Unit | Specifications |
| :--- | :---: | :--- |
| Appearance | - | Clear or slightly hazy pale yellow liquid |
| Solubility | - | Soluble in organic liquids |
| Density at 25 deg cel | $\mathrm{gm} / \mathrm{ml}$ | $0.800-0.820$ |
| Molarity | M | $1.83-1.98$ |
| Concentration | $\%$ | $16.30-17.60$ |
| Trimethylaluminium Neat | $\%$ | Min 97.0 |
| Assay | $\%$ | $36.3-37.4$ |
| Al content |  |  |

## STORAGE

At $15-25^{\circ} \mathrm{C}$, air sensitive. It is shipped in reefer container.

## PACKING

90 kg UN-approved cylinder

## REACH Status

Not registered

ExSyn offers trimethylaluminium solution in toluene on commercial scales and welcomes enquiries. No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please contact us.

