C3h9al TMA Tank Gas Storage 6.5n 99.99995% Trimethylaluminium

Our Product Introduction

Basic Information

Place of Origin:	China
Brand Name:	CMC
Certification:	COA
Model Number:	C3h9al
Minimum Order Quantity:	1 L
Price:	US $650/L
Packaging Details:	Cylinder/Tank
Delivery Time:	15 days
Payment Terms:	L/C, T/T
Supply Ability:	5000L/month

Product Specification

Model NO.:	Trimethylaluminium
Appearance:	Colorless
Chemical Formula:	C3h9al
Transport:	By Sea
Model No:	Trimethylaluminium
Transport Package:	Cylinder
Specification:	Cylinder
Trademark:	CMC
Origin:	China
HS Code:	2812190091
Supply Ability:	100t/Year
CAS No.:	10025-78-2
Formula:	C3h9al
EINECS:	7783-82-6
Constituent:	Industrial Pure Air

More Images

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Product Description

Trimethylaluminum (TMA), also known as aluminium trimethyl, is an organometallic compound with the chemical formula Al(CH3)3. It is a pyrophoric liquid that is colorless and has a strong, unpleasant odor. TMA is highly reactive and primarily used as a precursor in various chemical processes, particularly in the semiconductor industry for the deposition of thin films.

Here are some key properties and applications of trimethylaluminum:

Properties:

Chemical Formula: Al(CH3)3

Molecular Weight: 90.1 g/mol

Boiling Point: 125-126°C (257-259°F)

Melting Point: -93°C (-135°F)

Density: 0.777 g/cm³ at 20°C (68°F)

Applications:

Chemical Vapor Deposition (CVD): TMA is widely used in the semiconductor industry as a precursor in the chemical vapor deposition process to deposit thin films of aluminum compounds, such as aluminum oxide (Al2O3), onto substrates. These films are essential for the fabrication of microelectronic devices.

Atomic Layer Deposition (ALD): TMA is also utilized in atomic layer deposition, a technique that enables precise and conformal deposition of ultra-thin films. TMA is often combined with other precursors to deposit high-quality aluminum-containing films.

Catalysis: Trimethylaluminum can act as a catalyst or co-catalyst in various organic reactions, such as polymerization and hydroformylation processes.

Flame Retardants: TMA is sometimes used as a flame retardant additive in certain polymers to improve their fire resistance properties.

Research and Development: TMA is employed in research laboratories for exploring new synthetic routes, developing new materials, and studying organometallic chemistry.

It's important to note that trimethylaluminum is highly flammable and reacts violently with air and water. Proper safety precautions, including handling in a well-ventilated area and using specialized equipment, are necessary when working with this compound.

Basic Info.

Model No:	C3H9Al	Source	Catalytic Reforming
Transport Package	Cylinder	Specification	7.5L / 5kg
Trademark	CMC	Origin	Suzhou, China
HS Code	2812190091	Production Capacity	100t/ Year

Product Description

Certificate of Analysis

Product	TMAL	Net weight	20kg
Batch No.	21MA081010	Production date	2021-8-1
Grade		UV Class	
Bubbler No.	1475Y0154 / 1475Y0026 / 1475Y0109 / 1475Y0131		

Element	Spec	DL	Result	Element	Spec	DL	Result
Ag	<0.2	<0.2	ND	Mg	<0.02	<0.02	ND
B	<0.2	<0.2	ND	Mn	<0.03	<0.03	ND
Ba	<0.1	<0.1	ND	Mo	<0.5	<0.5	ND
Bi	<0.5	<0.5	ND	Ni	<0.3	<0.3	ND
Ca	<0.05	<0.05	ND	P	<0.5	<0.5	ND
Cd	<0.02	<0.02	ND	Pb	<1	<1	ND
Co	<0.2	<0.2	ND	S	<1	<1	ND
Cr	<0.2	<0.2	ND	Si	<0.05	0.002	0.01
Cu	<0.05	<0.05	ND	Sr	<0.1	<0.1	ND
Fe	<0.1	<0.1	ND	Ti	<0.2	<0.2	ND
Ge	<0.5	<0.5	ND	W	<0.5	<0.5	ND
Li	<0.4	<0.4	ND	Zn	<0.05	0.001	0.033
Hg	<0.5	<0.5	ND				

All Values PPM by Weight on metal

Analysis method:ICP-OES-1, Si&Zn Element Analysis Method:ICP-OES-D

Organic or oxygen impurities by FT-NMR

Element	Unit	Spec.	Detection Limit	Result
Oxygen	ppm	<1.0	<1.0	ND

Company Information:

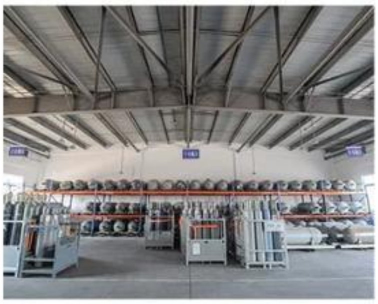
shanghai Kemike Chemical Co., Ltd is staffed by trained personnel, combine many years experience in Gas industry .We supply cylinder gas, electronic gas, etc ., and the gas holder, panel, valves and fittings and other equipment, parts and engineering services to our customers in China and worldwide; The products are involved in various industrial fields, such as semiconductor chip, solar cell, LED, TFT-LCD, optical fiber, glass, laser, medicine , etc., Our mission is to partner with our global customers to provide support, solutions and quality products that are innovative,reliable, and safe.
Our products mainly include: H2, O2, N2, Ar, CO2, propane, acetylene, helium, laser mixed gas, SiH4, Sih2cl2, SiHCL3, SiCL4, NH3, CF4, NF3, SF6, HCL, N2O, doping mixed gas (TMB, PH3, B2H6) and other electronic gases.

Detailed

Photos

Workshop Display:

Storage Workshop:



Packaging & Shipping

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