

## Material Safety Data Sheet

Company: DALCHEM, MOSKOVSKOE SHOSSE, 85, Nizhny Novgorod, 603000, RUSSIA TEL: +7 (8312) 753-772, FAX: +7 (8312) 750-799

SECTION 1: Product Identification							
Product name	(t-Butylimido)tris(methylethylamino)niobium						
CAS#	NA						
Catalog #	0410470						
Chemical family	Organic metal derivat	tives					
• 1 5							
SECTION 2: Composition, Information on Ingredients							
Component		%	CAS#	EINECS #	Hazard	R-Phrase	
Component		, .			Symbol		
(t-Butylimido)tris(methy	lethylamino)niobium		NA	none	F Xn	10 14 20/21/22	
(* 2 st.) minuto) a so (meany teany tuninino) motorum							
SECTION 3: Hazard Identification							
Emergency overview	Flammable liquid. Reacts with water. Harmful by inhalation, if swallowed and				swallowed and if		
	absorbed through the						
Eye contact	May cause irritation of the eyes.						
Skin contact	May cause irritation of the skin.						
Inhalation	May be harmful if inhaled. May cause severe irritation of the respiratory tract.						
Ingestion	Harmful if swallowed.						
<b>Chronic health effects</b>	No available information about long-term effects.						
SECTION 4: First Aid Measures							
Eye exposure	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally						
=y o onposon o	lifting the upper and l						
Skin exposure	Wash the affected ar						
<b>F</b>	Seek medical assistan						
Inhalation				<u> </u>	f not breathin	ng, give artificial	
	Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In such cases seek immediately.						
	medical assistance.						
Ingestion	Don't induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk						
	or water. Get medical	aid	immediate	ely.			
SECTION 5: Fire Fighting Measures							
General information	Flammable liquid. As in any fire, wear a self-contained breathing apparatus in						
	pressure-demand, MS					d full protective	
	gear. If involved in fi		•	<b>'</b>			
Extinguishing media	Use dry chemical or o	carbo	on dioxide.	Don't use water	er.		
SECTION 6: Accidental Release Measures							
Spill and leak	Small spills can be mixed with vermiculite or other suitable inert absorbents and						
procedures	placed in a suitable container. Ventilate area after material is removed.						
F	1 1						

SECTION 7: Handling and Storage				
Handling	Avoid inhalation. Don't get in eyes, on skin or on clothing. Handle under an			
C:	inert atmosphere of argon or nitrogen.			
Storage	Store in a cool, dry place. Keep away from heat, sparks and open flame. Avoid			
	contact with water. Store in a tightly closed container under an inert atmosphere.			
	CTION 8: Exposure Controls and Personal Protection			
Eye protection	Always wear approved safety glasses when handling a chemical substance in the			
	laboratory.			
Skin protection	Wear protective gloves.			
Ventilation	Handling material in an efficient fume hood. Work with this substance in a well-			
D	ventilated area.			
Respirator	Follow the OSHA respirator regulations found in 29CFR 1910.134 or European			
	Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.			
	respirator when necessary.			
	SECTION 9: Physical and Chemical Properties			
Appearance	Light yellow liquid			
Odor	No data			
Melting point	No data			
Boiling point	No data			
Flash point	No data			
Solubility in water	Reacts with water			
Specific gravity	1.0 g/cm <sup>3</sup>			
Molecular formula	C13H33N4Nb			
Molecular weight	338.34			
SECTION 10: Stability and Reactivity				
Stability	Air and moisture sensitive.			
Hazardous	No hazardous polymerization.			
polymerization				
Conditions to avoid	Contact with air, moisture and ignition sources.			
<b>Incompatibilities with</b>	Strong oxidizing agents.			
other materials				
Hazardous decompo-	Carbon monoxide, carbon dioxide, nitrogen oxides, niobium oxides.			
sition products				
SECTION 11: Toxicological Information				
RTECS Data	No data available.			
Carcinogenic effects	No data available.			
Mutagenic effects	No data available.			
Tetratogenic effects	No data available.			
SECTION 12: Ecological Information				
Ecological	No information available.			
information				

## **SECTION 13: Disposal Considerations**

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Dispose of in a manner consistent with federal, state, and local regulations.					
SECTION 14: Transport Information					
Shipping name (CFR)	Organometallic substance, liquid, water-reactive, flammable*				
Hazard class (CFR)	4.3				
Additional hazard	NA				
class (CFR)					
Packing group (CFR)	II				
UN ID number (CFR)	3399				
Shipping name	Organometallic substance, liquid, water-reactive, flammable*				
(IATA)					
Hazard class (IATA)	4.3				
Additional hazard	NA				
class (IATA)					
Packing group	II				
(IATA)					
UN ID number	3399				
(IATA)					
SECTION 15: Regulatory Information					
TSCA	Not listed in the TSCA inventory				
SARA	Not reported				
SECTION 16: Other Information					
Preparation date	30.06.09				
Revision date	17.08.09				

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