



HMIS RATING

HEALTH ----- 1  
FLAMMABILITY ----- 0  
REACTIVITY ----- 0  
PERSONAL PROTECTION - E

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved  
OMB No. 1218-0072



IDENTITY (As Used on Label and List)

HALTEX® Alumina Trihydrate (all grades)

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name <b>TOR Minerals International</b>	Emergency Telephone Number <b>361/883-5591</b>
Address (Number, Street, City, State, and ZIP Code) <b>722 Burleson Street (Plant) Corpus Christi, TX 78402</b>	Telephone Number for Information <b>361/883-5591</b>
	Date Prepared <b>June 20, 2000</b>
	Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
<b>Aluminium Trihydrate ( Al(OH)<sub>3</sub> ) (CAS No. 21645-51-2)</b>	<b>10 mg/m<sup>3</sup> (dust)</b>	<b>10 mg/m<sup>3</sup> (dust)</b>		<b>99.5</b>

(These are typical quantities and may change slightly with different lots.)

Section III - Physical/Chemical Characteristics

Boiling Point	<b>2980 ± 60</b>	Specific Gravity (H <sub>2</sub> O = 1)	<b>2.38 - 2.42</b>
Vapor Pressure (mm Hg.)	<b>N/A</b>	Melting Point	<b>2015 ± 15</b>
Vapor Density (AIR = 1)	<b>N/A</b>	Evaporation Rate (Butyl Acetate = 1)	<b>N/A</b>
Solubility in Water	<b>Insoluble</b>		
Appearance and Odor	<b>Fine white powder with no odor.</b>		

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	<b>Non-flammable</b>	Flammable Limits	<b>N/A</b>	LEL	<b>N/A</b>	UEL	<b>N/A</b>
Extinguishing Media	<b>As appropriate for surrounding combustibles. Does not burn or support combustion.</b>						
Special Fire Fighting Procedures	<b>Fire fighters should wear self-contained breathing apparatus.</b>						
Unusual Fire and Explosion Hazards	<b>No fire or explosion hazard.</b>						

### Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid	None in normal or expected use
	Stable	X		

Incompatibility (Material to Avoid) None Known

Hazardous Decomposition or Byproducts None in normal or expected use

Hazardous Polymerization	May Occur		Conditions to Avoid	None in normal or expected use
	Will Not Occur	X		

### Section VI - Health Hazard Data

Route(s) of Entry:	Primary	Inhalation?	Yes	Skin? Eye ?	No Yes	Ingestion?	Yes
--------------------	---------	-------------	-----	----------------	-----------	------------	-----

Health Hazards (Acute and Chronic)

Hydrated Alumina is environmentally safe and is not regulated under RCRA. None of the components are on the EPA list

of Extremely Hazardous Substances. However, high exposure to Alumina dust may produce irritation to the eyes and

respiratory system.

Carcinogenicity:	None known.	NTP?	N/A	IARC Monographs?	N/A	OSHA Regulated?	N/A
------------------	-------------	------	-----	------------------	-----	-----------------	-----

Signs and Symptoms of Exposure

Inhalation of dust may cause mechanical irritation of the respiratory tract. Skin and eye contact may cause mechanical abrasion - irritation.

Medical Conditions

Generally Aggravated by Exposure Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema, and asthma.

Emergency and First Aid Procedures

**Eye contact:** Flush eye with generous amounts of water for 15 min., consult a physician.  
**Inhalation:** Remove to fresh air. **Skin contact:** Wash from skin with soap and water. **Ingestion:** Consult a physician.

### Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Prevent spread of material and keep dust level down. Scoop up material or use vacuum technique and place in closed container.

Waste Disposal Method

Disposal must be made in accordance with Federal, State, and Local regulations, and pursuant to 40 CFR p. 261 of RCRA regulations currently in effect. Discarded hydrated alumina would not be classified as hazardous waste.

Precautions to Be Taken in Handling and Storing

Handle and keep in dry building area. Avoid handling methods which cause dusting. Avoid breathing dust. Use ventilation that will maintain exposure below recommended TLV. Wear goggles and use NIOSH/MSHA approved respirator. Wash thoroughly after handling.

Other Precautions

No special requirements. Use good, acceptable industrial hygiene practices.

### Section VIII - Control Measures

Respiratory Protection (Specify Type) Use NIOSH approved respirator in accordance with air contaminant standard.

Ventilation	Local Exhaust	Provide local system.	Special
	Mechanical (General)	Is recommended for potentially dusty conditions.	Other

Protective Gloves

No special requirement, ordinary work type.

Eye Protection Safety glasses or vented goggles.

Other Protective Clothing or Equipment

No special requirement, ordinary work clothes.

Work/Hygienic Practices

Good industrial hygiene practices. Wash thoroughly with soap and water before eating, drinking, or using tobacco products.

The information herein is believed to be correct and reliable. However no warranty is expressed or implied regarding the accuracy of these data, and none is made as to the marketability of the material or its fitness for any purpose. The consumer accepts the responsibility of and the conditions for liability of use of the products.

Date:	# of Pages:	<b>QUICK FAX</b>	
TO: <i>ANNE BRACKER</i>	From: <i>ROBERT</i>		
Co./Dept:	Co./Dept:		
Fax: <i>785-841-8142</i>	Fax:		
Phone:	Phone: <i>816 221-6713</i>		
Name: <i>SB136 / replan</i>	E-Mail:		

March 2000

722 Burleson St.

Corpus Christi, Texas

78402

www.haltex.com

HEET

**HALTEX<sup>®</sup> 315**  
**ALUMINA TRIHYDRATE AL(OH)<sub>3</sub>**  
**CAS #: 21645-51-2**

- Smoke suppressant; flame retardant
- Functional filler for Resins
- Particle size ~15 microns

*SB136*  
*OFFSET*

**PRELIMINARY PHYSICAL PROPERTIES (Typical)**

	<b>315</b>
Brightness .....	91
325 Mesh Residue, % .....	9%
Specific Gravity .....	2.42
Bulk Density, Loose (lbs./ft. <sup>3</sup> ) .....	61
Bulk Density, Packed (lbs./ft. <sup>3</sup> ) .....	85
Oil Absorption .....	16-18
Median Particle Diameter (microns) .....	15

**PACKAGING**

HALTEX<sup>®</sup> Alumina Trihydrates are available in 50 lb. (22.7 Kg.) multi-wall paper bags. There are 50 bags (2500 lbs.) per pallet. All pallets are stretch-wrapped prior to shipment.

Special packaging available upon request.

Alumina Trihydrate is not regulated as a hazardous material by the Department of Transportation.