

1. PRODUCT IDENTIFICATION

PRODUCT NAME: Aluminum Trihydroxide
(Alumina Trihydrate, $Al(OH)_3$)
TRADE NAME: ONYX ELITE™ 632
PRODUCT CODES: ATHQ
MANUFACTURER'S NAME: Huber Engineered Materials
STREET ADDRESS: 3150 Gardner Expressway
CITY/STATE/POSTAL CODE/COUNTRY: Quincy, Illinois 62301
TELEPHONE NUMBER: 217.224.1100

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMMON CHEMICAL NAME: Alumina Trihydrate (non-fibrous) $Al_2O_3 \cdot H_2O$

SYNONYMS: Gibbsite, Alumina Trihydroxide, Alumina Hydroxide, Aluminum Oxide Trihydrate, Hydrated Alumina, ATH

| <u>COMPOUND</u> | <u>CAS NUMBER</u> | <u>TYPICAL CONCENTRATION, %</u> |
|--------------------|-------------------|-------------------------------------|
| ALUMINA TRIHYDRATE | 21645-51-2 | > 99 |

ADDITIVES OR INGREDIENTS WHICH MAY BE PRESENT, AND WHICH MIGHT BE OF INDUSTRIAL HYGIENE INTEREST:

SILICA: Product contains less than 0.1% total crystalline silica. Inhalable crystalline silica fraction, unknown.

3. HAZARDS IDENTIFICATION

| <u>ROUTE OF EXPOSURE</u> | <u>HAZARD DETERMINATION</u> | <u>BASIS FOR DETERMINATION</u> |
|------------------------------|---|------------------------------------|
| SKIN CONTACT | May cause slight mechanical irritation. | |
| SKIN ABSORPTION | Non-hazardous. | Historical |
| EYE CONTACT | May cause slight mechanical irritation. | |
| INGESTION | None reported. | Historical |
| INHALATION | | |

(For Total dust with UNDER 1.0% Total quartz)

Nuisance Dust: TLV = 10.0 mg/cu meter of Total dust. (ACGIH)
PEL = See 29 CFR 1910.1000; Tables Z-1-A and Z-3. (OSHA)

(For Total dust with OVER 1.0% Total quartz)

Respirable quartz not to exceed TLV of 0.1 mg/cu meter in the respirable dust.
PEL = See 29 CFR 1910.1000; Tables Z-1-A and Z-3. (OSHA)

SOURCE: OSHA 29 CFR 1910.1000 TABLE Z-1-A

SOURCE: ACGIH TLV'S Threshold Limit Values for Chemical Substances

SOURCE: To the best of our knowledge, no studies have been done on eye, skin or ingestion hazards.

4. FIRST AID MEASURES

EYE: Flush eyes with clean water for at least 15 minutes until no evidence of material remains.

SKIN: Rinse exposed areas with fresh water, then wash thoroughly with mild soap and warm water. Avoid vigorous scrubbing which could aggravate abrasion irritation.

INHALATION: Remove from exposure area to fresh air immediately.

SKIN ABSORPTION: None.

5. FIRE-FIGHTING MEASURES

FLASH POINT: N.A.

AUTOIGNITION TEMPERATURE: None.

FLAMMABLE LIMITS IN AIR: N.A.

ADDITIONAL INFORMATION: Evolves water vapor on heating to above 200° C. Special fire fighting procedures or extinguishing media are not applicable.

6. ACCIDENTAL RELEASE MEASURES

PROCEDURE WHEN MATERIAL IS RELEASED OR SPILLED: NOT a "toxic pollutant" or a "hazardous substance" under Sections 307 and 311 of the Clean Water Act. Clean spills by Sweeping or vacuuming.

NEUTRALIZING CHEMICALS: None required.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Avoid dusting and contact with eyes and skin. Do not inhale dust.

STORAGE: Keep material dry.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

EYE: Wear eye protection whenever airborne nuisance dust is generated. Goggles are recommended.

VENTILATION: Provide sufficient ventilation to maintain dust concentration below ACGIH Threshold Limit Values (TLVs).

GLOVES: Wear gloves to prevent skin abrasions.

RESPIRATORY PROTECTION: Use a dust mask approved by NIOSH.

PRECAUTIONARY STATEMENTS/LABELING:

| PRODUCT SAFETY LABEL / ETIQUETA DE SEGURIDAD | | |
|---|------------|---|
| Health / Salud = | 0 * | NO ACUTE EFFECTS / Ninguno efecto agudo |
| Flammability / Inflamable = | 0 | NONE / No |
| Reactivity / Reactiva = | 0 | NONE / No |
| Maximum Personal Protection / Maxima Proteccion Personal = | E * | DUST MASK / Máscara de polvo * H.M.I.S. Label / H.M.I.S. Etiqueta |
| ALUMINUM TRIHYDROXIDE / TRIHIDRATO de ALUMINIO (CAS #21645-51-2) | | |
| * CAUTION: Prolonged breathing of excessive dust may affect lung function. Use dust mask in dusty areas. | | * ADVERTENCIA: Respiración de polvo excesivo puede afectar la función pulmonar. Use una mascarilla en áreas con mucho polvo. |
| J.M. Huber Corporation – Engineered Materials Division Atlanta, Georgia 30327 USA | | |
| LSL#4 | | |

9. PHYSICAL CHEMICAL PROPERTIES

APPEARANCE AND ODOR: White dry powder with negligible odor.

BOILING POINT: N.A.

SPECIFIC GRAVITY: 2.4

VOLATILITY: N.A.

pH: 8.5-10.2 at 20% solution.

MELTING POINT: N.A.

VAPOR DENSITY (air =1): N.A.

SOLUBILITY IN WATER: Negligible.

N.A. = NOT APPLICABLE

10. STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY: Stable in air, water, and heat (up to 200° C.).

INCOMPATIBILITY: Dissolves in mineral acids and caustic soda.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: None.

11. TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE OVEREXPOSURE: Eye contact may cause abrasion and irritation. Inhalation of airborne nuisance dust may cause coughing, shortness of breath, wheezing or general irritation of breathing passages. Contact with skin may cause dryness and irritation.

EFFECTS OF CHRONIC OVEREXPOSURE: Airborne nuisance dust may cause chronic effects in eye contact irritation, including permanent abrasion damage to cornea. Breathing airborne nuisance dust can cause chronic breathing difficulty.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Unknown.

12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY: Unknown.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: NOT a hazardous waste under RCRA Section 3001. Use normal solid waste disposal procedures which are in compliance with Federal, State and Local Regulations. Re-use material whenever possible. Waste material must be disposed of in accordance with local, state and federal agencies, at approved municipal landfill.

14. TRANSPORT INFORMATION

DOT: NOT RESTRICTED

INTERNATIONAL REGULATIONS

UN number: None.

Land transport: None.

Inland waterways: None.

Sea transport (IMDG code): None.

Air transport (IDAO/IATA): None.

15. REGULATORY INFORMATION

STATE

Consult Local and State Hazard Communication Regulations.

FEDERAL

CPSC: None.

USDA: None.

FDA: 21 CFR 182.90: Substances migrating to food from paper and paperboard products.

TSCA: Is this product and all its ingredients certified for inclusion in the Toxic Substances Control Act Inventory of Chemical Substances? **Yes.**

OSHA: Have ingredients in concentrations above 0.1% been:

1. Listed in the NTP Annual Report on Carcinogens? No.
2. Found to be a potential carcinogen by OSHA or IARC? No.

| | | | | | |
|----------|-----|----------|-----|-----------|-----|
| SARA304: | NO | SARA311: | NO | SARA312: | NO |
| SARA313: | NO | NJRTK: | YES | CAPROP65: | YES |
| CANDSL: | YES | ECOIN: | YES | RCRA: | NO |
| AICS: | YES | MITI: | YES | | |

WARNING: This product contains a chemical known to the State of California to cause cancer.
-- Trace amounts of lead, cadmium, respirable crystalline silica. --

16. OTHER INFORMATION

The information contained in this Material Safety Data Sheet is believed to be reliable. No guarantee is implied or expressed regarding the accuracy of this information or the use of the product since the conditions for use are beyond our control. Nothing contained herein should be construed as a recommendation to use this product in conflict with Federal or state regulations or existing patents covering any material or its use.

FOR MORE INFORMATION CONTACT: Huber Engineered Materials
Customer Service
PHONE: 877.949.5400

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