

Material Safety Data Sheet

Section 1 - Product Information

Product Name: **Super Deox #1**

Manufacturer: Qualitek International, Inc.
315 Fairbank Street
Addison, IL 60101 USA

Emergency telephone number: 1-800-535-5053
Information telephone number: 1-630-628-8083
Fax: 1-630-628-6543

Date Prepared: 08-15-00
Supersedes: 01-15-99

Section 2 - Hazardous Ingredients

Hazardous Components:

<u>Chemical %</u>	<u>CAS #</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Wt. %</u>
Ammonium Fluoborate	13826-83-0	*2.5mg/m ³ (as F)	*2.5mg/m ³ (as F)	<60

* No exposure limits have been established for ammonium fluoborate by either OSHA or ACGIH. Flouride (F) should only be emitted if the product is exposed to elevated temperature which could cause it to decompose.

Non-Hazardous

Potassium Salts ----- Not Established Not Established <40

No other hazardous ingredients exceed 1%. Other ingredients are not considered hazardous according to 29 cfr 1910.1200.

Hazard Rating Systems

	HMIS	NFPA
Health	2	2
Flammability	0	0
Reactivity	1	1

Section 3 - Physical and Chemical Characteristics

Boiling Point: Not applicable

Specific Gravity (H₂O = 1 @24°C): 1.871

Vapor Pressure (mm Hg): Not applicable Melting Point: Sublimes >300°C

Vapor Density (AIR = 1): Not applicable

Evaporation Rate (Butyl Acetate = 1): Not applicable

Solubility in Water: Complete

Appearance and Odor: White solid crystals; essentially odorless

Section 4 - Fire and Explosion Data

Flash Point: Not flammable

Flammable Limits:

Not applicable

Extinguishing Media: Water

Special Fire Fighting Procedures: SCBA with full face piece and protective clothing recommended for fire fighters.

Unusual Fire and Explosion Hazards: Ammonium fluoborate decomposes at elevated temperature to form ammonia, hydrogen fluoride and boron trifluoride.

Section 5 - Reactivity Data

Stability: Stable Unstable

Incompatibility (Materials to Avoid): Strong bases; cyanides, sulfides, strong oxidants

Hazardous Decomposition or Byproducts: Ammonium fluoborate decomposes at elevated temperature to form ammonia and other Boron Compounds.

Hazardous Polymerization: May Occur Will Not Occur

Conditions to Avoid: Do not place solutions of ammonium fluoborate in glass containers, hydrofluoric acid may form and react with glass.

Section 6 - Health Hazards

Route(s) of Entry: Inhalation? Skin? Ingestion?

Acute (Severe Short Term) Health Hazards: Irritation to eyes, skin, respiratory tract;

INGESTION - corrosive to the gastrointestinal tract and may cause hemorrhagic gastroenteritis. Fatal dose of ammonium fluoborate is probably only slightly higher than the 1 - 4 grams reported for fluorides.

Chronic (Long Term) Health Hazards: Long term exposure to inorganic fluorides may cause: osseous fluorosis, kidney damage, asthma, and symptoms resembling rheumatism.

Carcinogenicity: None according to NTP, IARC, and OSHA.

Signs and Symptoms of Exposure: **INGESTION** - severe shock; vasomotor depression; cardiac disturbances; hypocalcemia. **SKIN** - irritation; **EYE** - severe irritation, prolonged contact may cause corneal damage.

INHALATION - irritation, gross overexposure may result in chills, labored breathing, fevers, unproductive coughs.

Medical Conditions Generally Aggravated by Exposure: Not Determined

Emergency and First Aid Procedures: Perform the following First-Aid procedures; consult a physician and get proper medical attention when necessary.

Eye Contact: Flush eyes with plenty of water for 15 minutes.

Skin Contact: Wash thoroughly with soap and water. Promptly remove contaminated clothing and wash before reuse.

Inhalation: Remove to fresh air. Give oxygen. Get proper medical attention

Ingestion: Do not induce vomiting. If conscious, give several glasses of milk, other calcium containing liquids, or milk of magnesia; otherwise give large quantities of water. Keep patient warm (not hot) and quiet. Get proper medical attention.

Section 7 - Special Precautions and Spill/Leak Procedures

Steps to be taken in Case Material is Released or Spilled: Sweep or shovel up and collect in a plastic container. If permitted by applicable disposal regulations, flush residue with water to complete cleanup.

Waste Disposal Method: Dispose of in accordance with Federal, State, and local regulations.

Precautions to be taken in Handling and storage: Keep containers tightly closed.

Other Precautions: Should not be handled in glass containers.

Section 8 - Special Protection Information / Control Measures

Respiratory Protection: Where concentrations may exceed exposure limits use NIOSH/MSHA approved respirators to prevent overexposure by inhalation.

Ventilation: Local and/or General ventilation should be used to keep exposures below limits.

Protective Gloves: Chemical resistant gloves recommended

Eye Protection: Chemical goggles recommended

Other Protective clothing or Equipment: As needed to avoid contact.

Work / Hygienic Practices: Wash hands after handling product.

Section 9 - Other Regulatory Information

TSCA: Subject chemical substance(s) and ingredient(s) are all listed on the "TSCA Inventory" of chemical substances maintained by the U.S. Environmental Protection Agency.

CERCLA: The "RQ" for ammonium fluoborate is 5,000 lbs (2,270 Kg) under the Comprehensive Environmental Response, Compensation And Liability Act ("CERCLA") Contact local authorities to determine if there are any additional local reporting requirements.

SARA TITLE III: Section 311/312 - This product is classified into the following hazard categories: Immediate Health, Delayed Health. It may be reportable on the Tier I or Tier II reports if the threshold emergency planning quantity is exceeded (RQ). Section 313 - This product is not subject to the Community Right-To-Know reporting requirements.

DOT: DOT Proper Shipping Name - Non-regulated, unless shipped in quantity over the RQ, then it would be Environmentally hazardous substances, solid, n.o.s. (contains ammonium fluoborate), 9, UN 3077, III, RQ.

California Proposition 65: This product a chemical known to some states to cause cancer and birth defects or other reproductive harm.

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