

# MATERIAL SAFETY DATA SHEET



Date-Issued:08/08/2005  
MSDS Ref. No:SD1H  
Date-Revised:08/08/2005  
Revision No:New MSDS

## Qualitek Super Deox 1H

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Qualitek Super Deox 1H

**PRODUCT DESCRIPTION:** Dross Reducer

#### MANUFACTURER

Qualitek International, Inc.

315 Fairbank St.

Addison, IL 60101

**Product Information:** (630) 628-8083

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

**Emergency Phone:** (800) 535-5053

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt.%</u>	<u>CAS#</u>	<u>EINECS#</u>
Ammonium Tetrafluoroborate	<40	13826-83-0	237-531-4

**COMMENTS:** This product contains no other hazardous ingredients in concentrations greater than 1 %, and it contains no other ingredients that are considered hazardous according to 29 CFR 1910.1200.

### 3. HAZARDS IDENTIFICATION

#### POTENTIAL HEALTH EFFECTS

**EYES:** Will cause severe eye irritation. Will injure eye tissue if not removed promptly.

**SKIN:** Brief contact may cause slight irritation with itching and local redness. Prolonged contact may cause mild to moderate local redness and swelling.

**INGESTION:** May cause severe shock, vasomotor depression, cardiac disturbances or hypocalcemia. This material is corrosive to the gastrointestinal tract and may cause hemorrhagic gastroenteritis. NOTE: The fatal dose for ammonium fluoborate is probably only slightly higher than the 1-4 grams reported for other fluorides.

**INHALATION:** High vapor concentrations cause irritation to the respiratory tract, experienced as nasal discomfort and discharge, with chest pain and coughing. Headache, nausea, vomiting, dizziness, and drowsiness may occur.

**CHRONIC:** Long term exposure to inorganic fluorides may cause osseous fluorosis (overabundance of fluorine in bone tissues), kidney damage, asthma, and symptoms resembling rheumatism.

### 4. FIRST AID MEASURES

**EYES:** Remove any contact lenses. Immediately flush eyes with large quantities of water for at least 15 minutes. Get medical attention if irritation or vision problems develop.

**SKIN:** Immediately wash skin with soap and copious amounts of water. Remove any contaminated clothing. Get medical attention if irritation develops. Wash contaminated clothing before reuse.

**INGESTION:** Do NOT induce vomiting. If person is conscious, immediately give several glasses of milk, milk of magnesia or other calcium containing liquid, if available. Otherwise, give several glasses of water. Seek immediate medical attention.

**INHALATION:** Move person to fresh air. If breathing is stopped or is labored, give assisted respiration (e.g. mouth-to-mouth). Supplemental oxygen may be indicated. Seek medical advice if necessary.

**COMMENTS:** If victims of chemical over-exposure are taken for medical attention, give a copy of the label or this MSDS to the physician/health care professional.

## 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** Not Flammable

**FLAMMABLE LIMITS:** N/A

**AUTOIGNITION TEMPERATURE:** Not Flammable

**EXTINGUISHING MEDIA:** Water. Avoid carbonate dry powder because of reactivity.

**FIRE FIGHTING PROCEDURES:** Move containers from the area of the fire if possible. If not, cool closed containers with water.

**FIRE FIGHTING EQUIPMENT:** Self contained breathing apparatus and full protective turn-out gear.

**HAZARDOUS DECOMPOSITION PRODUCTS:** At elevated temperatures, ammonium fluoborate decomposes to form ammonia, hydrogen fluoride, boron trifluoride, and other boron compounds.

---

## 6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:** Avoid raising dust if possible. Sweep, scoop, or vacuum up spilled material and place in containers for later recovery or disposal. Ventilate area and flush residual spill area.

---

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Store in a cool dry place away from incompatible materials. Keep away from heat, flame, sparks and other sources of ignition. Keep containers closed when not in use.

**HANDLING:** Do not store or transport in or otherwise use glass containers when handling this material.

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES:

#### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		<b>EXPOSURE LIMITS</b>					
		<b>OSHA PEL</b>		<b>ACGIH TLV</b>		<b>Supplier OEL</b>	
		<b>ppm</b>	<b>mg/m<sup>3</sup></b>	<b>ppm</b>	<b>mg/m<sup>3</sup></b>	<b>ppm</b>	<b>mg/m<sup>3</sup></b>
Ammonium Tetrafluoroborate	<b>TWA</b>	NL	35	NL	17	NL	NL
	<b>STEL</b>	NL	NL	NL	24	NL	NL

**ENGINEERING CONTROLS:** Local exhaust may be necessary if working with the product in enclosed areas or at elevated temperatures.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Face shield, safety glasses with side shield or chemical splash goggles.

**SKIN:** Rubber, chemical resistant gloves. When material is heated, wear gloves to protect against thermal burns.

**RESPIRATORY:** Atmospheric levels should be maintained below the exposure guideline. For most conditions, no respiratory protection should be needed; however, if handling at elevated temperatures and/or without sufficient ventilation, use a NIOSH/MSHA approved air-purifying respirator.

**PROTECTIVE CLOTHING:** Protective clothing and safety shoes as necessary to minimize contact.

**WORK HYGIENIC PRACTICES:** Good personal hygiene practices should be used. Wash after any contact, before eating, and at the end of the work period.

**OTHER USE PRECAUTIONS:** Eye wash station and quick drench safety shower in immediate work area.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**ODOR:** Mild.

**APPEARANCE:** Crystalline solid.

**COLOR:** White  
**VAPOR PRESSURE:** Not Applicable  
**VAPOR DENSITY:** Not Applicable  
**BOILING POINT:** Not Applicable  
**MELTING POINT:** > 300°C (572°F)(sublimes)  
**SOLUBILITY IN WATER:** Complete  
**EVAPORATION RATE:** Not Applicable

---

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under ordinary use and storage conditions.

**POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:** At elevated temperatures, ammonium fluoborate decomposes to form ammonia, hydrogen fluoride, boron trifluoride, and other boron compounds.

**INCOMPATIBLE MATERIALS:** Inorganic acids, inorganic bases, oxidizing agents (including chlorine, oxygen, permanganates, perchlorates, percarbonates, peroxides, chromates, hypochlorites, nitric acid and sulfuric acid) and strong reducing agents (including hydrogen, hydrazine, sulfides, sulfites and nitrites).

---

## 11. TOXICOLOGICAL INFORMATION

### CARCINOGENICITY:

**IARC:** Not listed.

**NTP:** Not listed.

**OSHA:** Not listed.

---

## 12. ECOLOGICAL INFORMATION

**GENERAL COMMENTS:** No information on ecological toxicity is available at this time.

---

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of this material, contaminated absorbent material and other contaminated materials in an approved waste disposal facility, according to all applicable Federal, State, and Local regulations. Recovery and reuse, rather than disposal, should be the ultimate goal in handling efforts.

---

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Environmentally Hazardous Substances, Solids, N.O.S.

**TECHNICAL NAME:** Ammonium Fluoborate

**PRIMARY HAZARD CLASS/DIVISION:** 9

**UN/NA NUMBER:** UN 3077

**PACKING GROUP:** III

**REPORTABLE QUANTITY (RQ) UNDER CERCLA:** 5000 lb (2270 kg)

**OTHER SHIPPING INFORMATION:** Net quantities less than 2270 kg (5000 lbs) are not regulated.

---

## 15. REGULATORY INFORMATION

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** Acute health and chronic health hazard.

**313 REPORTABLE INGREDIENTS:** None.

#### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

**CERCLA RQ:** Ammonium fluoborate CAS# 13826-83-0

**REPORTABLE SPILL QUANTITY:** 5000 lbs (2270 kg)

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

**TSCA STATUS:** All ingredients are listed or are exempt from listing (as polymers) on the Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**CALIFORNIA PROPOSITION 65:** This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

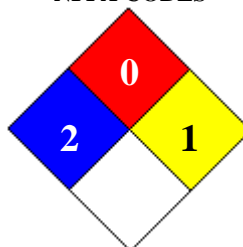
---

**16. OTHER INFORMATION**

**HMIS RATING**

<b>HEALTH:</b>	<input type="checkbox"/>	<b>2</b>
<b>FLAMMABILITY:</b>		<b>0</b>
<b>PHYSICAL HAZARD:</b>		<b>1</b>
<b>PERSONAL PROTECTION:</b>		<b>F</b>

**NFPA CODES**



**MANUFACTURER DISCLAIMER:** The information contained herein is based upon data considered to be accurate and is offered solely for information, customer consideration and investigation. The manufacturer extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. The content of this Material Safety Data Sheet relates only to this product as sold and does not relate to use with any other material or in any process. All chemical products should be used only by, or under, the direction of technically qualified personnel, who are aware of the hazards involved and of the necessity for reasonable care in handling. Hazard communication regulations, United States Occupational Health and Safety (OSHA) and Canadian Workplace Hazardous Materials Information System (WHMIS) require that employees must be trained in the use of Material Safety Data Sheets as a source of hazards information and response.

**PREPARED BY:** Tippy Wicker

**APPROVED BY:** Tippy Wicker    **TITLE:** Director of Product Management

**INFORMATION CONTACT:** (630) 628-8083

**REVISION SUMMARY** New MSDS