

MATERIAL SAFETY DATA SHEET

Date-Issued : 02/16/2010
MSDS Ref. No : SD #1H
Date-Revised : 02/16/2010
Revision No : 1

Qualitek Lead Free Super Deox #1H

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Qualitek Lead Free Super Deox #1H
PRODUCT DESCRIPTION: Dross Reducer

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Content</u>	<u>CAS</u>	<u>EINECS</u>
Ammonium Tetrafluoroborate	< 40	13826-83-0	237-531-4

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)

<u>Chemical Name</u>	<u>EXPOSURE LIMITS</u>								
	<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>Supplier OEL</u>				
	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>			
Ammonium Tetrafluoroborate	TWA	NL ppm	35	mg/m ³	NL ppm	17 mg/kg	NL ppm	NL	mg/m ³
	STEL	NL ppm	NL	mg/m ³	NL ppm	24 mg/kg	NL ppm	NL	mg/m ³

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

APPROVED BY: P. Han **TITLE:** Technical Director

PREPARED BY: J. Saleda-Layton

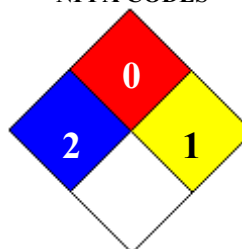
INFORMATION CONTACT: (630) 628-8083

REVISION SUMMARY Revision #: 1 This MSDS replaces the February 16, 2010 MSDS. Any changes in information are as follows:

HMIS RATING

HEALTH:		2
FLAMMABILITY:		0
PHYSICAL HAZARD:		1
PERSONAL PROTECTION:		F

NFPA CODES



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