



# MATERIAL SAFETY DATA SHEET #3011

15885 Sprague Road, Strongsville, OH 44136-1799  
Emergency Phone: LESCO: (800) 321-5325  
CHEMTREC: (800) 424-9300

DATE ISSUED: 11/15/00  
SUPERSEDES: 03/30/00

## I. PRODUCT IDENTIFICATION

**Product:** LESCO 4 Flowable Mancozeb      **Chemical Family:** Ethylene Bisdithiocarbamate with Mn and Zn  
**Chemical Name/Synonyms:** Flowable Mancozeb with Zinc, Mancozeb

## II. PRODUCT INFORMATION: INGREDIENTS

Chemical Name	TLV/TWA	%(by wt.)	CAS#
Mancozeb	1.0 mg/M <sup>3</sup> TWA	36-39%	8018-01-7
Alkylaryl Sulfonate	None	2-3%	ND
Water	None	59-61%	7732-18-5
Related Reaction Products	None	None	--

## III. PHYSICAL AND CHEMICAL CHARACTERISTICS

<b>Boiling Point:</b>	100° C (water)	<b>Specific Gravity (water=1):</b>	1.3
<b>Melting Point:</b>	0° C/32° F	<b>Bulk Density (lbs./cu. ft.):</b>	NA
<b>Vapor Pressure (mm Hg):</b>	17 MM HG @ 20° C	<b>Evaporation Rate:</b>	Water
<b>Vapor Density (air = 1):</b>	<1 Water	<b>Percent Volatile:</b>	50%
<b>Solubility in Water:</b>	Dispersible	<b>Appearance and Odor:</b>	Yellow liquid with a sulfur odor
<b>pH:</b>	5 - 7		

## IV. FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (method Used):</b>	>150° C Setaflash Closed Cup	<b>Auto Ignition Temperature:</b>	ND
<b>Lower Explosion Limits:</b>	NA	<b>Upper Explosion Limits:</b>	NA
<b>NFPA/HMIS RATING:</b>	<b>HEALTH</b> 1	<b>FIRE</b> 1	<b>REACTIVITY</b> 0
<b>Extinguishing Media:</b>	<input type="checkbox"/> Foam <input checked="" type="checkbox"/> Water Spray	<input type="checkbox"/> Alcohol Foam <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Dry Chemical <input checked="" type="checkbox"/> CO <sub>2</sub>

**Special Fire-Fighting Procedures:** Wear protective clothing and use self-contained breathing apparatus. Dike area to prevent runoff and contamination of water sources. Remain upwind. Avoid breathing smoke. Use water spray to cool surface and prevent re-ignition.

**Unusual Fire and Explosion Hazards:** Pesticide particulates can become airborne. Combustion generates toxic fumes of the following: hydrogen disulfide, carbon disulfide, sulfur oxides, nitrogen oxides and carbon oxides.

## V. HEALTH HAZARDS

**Primary Route(s) of Entry:** Skin, eyes, inhalation, ingestion.

### Signs & Symptoms of Exposure

**Acute:** Inhalation of vapor or mist can cause irritation of nose and throat. Direct contact with eyes can cause possible irritation. Prolonged or repeated skin contact can cause slight skin irritation, dermatitis.

**Chronic:** A three month feeding study in rats indicated hind leg paralysis after a two week exposure, at a high dose level of 5,000 ppm, which also caused significant systemic toxicity and 40% mortality.

A two year feeding study indicated thyroid tumors in rats at a dietary concentration of 750 ppm. No evidence of carcinogenicity was observed in long-term studies with mice.

Mutagenicity tests provided a preponderance of negative results.

### Emergency First-Aid Procedures

**Eyes:** Flush eyes with a large amount of water for at least 15 minutes. Consult a physician if irritation persists.

**Skin:** Wash affected skin areas thoroughly with soap and water. Consult a physician if irritation persists.

**Inhalation:** Move subject to fresh air.

**Ingestion:** If swallowed, give two glasses of water to drink. Consult a physician. Never give anything by mouth to an unconscious person.

### Toxicity Information:

**Oral LD<sub>50</sub>:** >5,000 mg/kg body weight (rats)    **Dermal LD<sub>50</sub>:** >5,000 mg/kg body weight (rabbits)

**Inhalation LC<sub>50</sub>:** (rat): >5.14 mg/L for 4 hours(rat)

**Eye Irritation:** Inconsequential irritation

**Skin Irritation:** Slightly Irritating

**Positive Teratogen or Mutagen Carcinogen(NTP):** No **Potential Carcinogen (OSHA):** No **(IARC):**

## VI. REACTIVITY

**Stability:** This material is considered stable. However, avoid temperatures above 49° C/120° F.

**Conditions to Avoid:** High temperatures for storage (over 49° C/120° F).

**Incompatibility:** Avoid contact with oxidizing agents and acids.

**Hazardous Decomposition Products:** Thermal decomposition may yield carbon disulfide and hydrogen sulfide.

**Hazardous Polymerization:**  Will not occur  Will occur

#### VII. SPILL, LEAK, AND DISPOSAL PROCEDURES

**If material is spilled:** Dike large spills using absorbent or impervious materials such as sand or clay. Recover and contain as much free liquid as possible. Recover remaining spilled material as appropriate. Absorb small spills on inert material such as sand or vermiculite. Wear appropriate personal protective equipment during cleanup activities. Do not allow product to contaminate drains, sewers, streams, ditches or bodies of water. Ensure adequate decontamination of tools and equipment following cleanup.

**Waste Disposal Method:** Triple rinse (or equivalent) and puncture empty container. Dispose empty container in a sanitary landfill or by incineration as allowed by state or local authorities. Avoid inhalation of smoke if incinerated.

#### VIII. SPECIAL PROTECTION INFORMATION

**Protective Equipment Suggested for Outdoor Application:**

Impervious Gloves  Dust Mask  Respirator (use NIOSH/MSHA approved)  
 Impervious Boots  Clean Clothing  Eye Goggles / Safety Glasses

**Protective Equipment Suggested for Confined Areas:**

Sufficient Ventilation  Respirator (use NIOSH/MSHA approved)  
 Dust Mask  Splash Goggles/Safety Glasses  
 Eyewash Station  Emergency Shower  Impervious Apron

#### IX. STORAGE AND HANDLING

**Precautions:** Do not get in eyes. Avoid exposure by ingestion or inhalation. Avoid getting on skin or on clothing. Do not store near food, feedstuffs, fertilizers, seed or drinking water. Do not contaminate water, food or feed by storage or disposal.

**Other Precautions:** Store in a well ventilated area. Store in a dry area. Keep container tightly closed when not in use. Keep from freezing; material stability may be affected. The maximum recommended storage temperature for this material is 49° C/120° F.

#### X. FEDERAL REGULATORY INFORMATION:

**SARA TITLE III; SEC. 311/312 HAZARD CATEGORIES**

Y Immediate (Acute) Health

N Delayed (Chronic) Health

N Fire

N Sudden Release of Pressure

N Reactivity

EPA Reg. No.: 707-156-10404

SEC 302: NA

SEC 304: NA

SEC 313: NA

CERCLA RQ: NA

CAA RQ: NA

HM 181 Shipping Name: Not Regulated

NA = Not Applicable

ND = Not Determined

Preparation and distribution of this Material Safety Data Sheet done by LESCO, Inc., 15885 Sprague Road, Strongsville, OH 44136-1799, pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The information contained herein is based on available data. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof; and you should make your investigation to determine safety for the use you contemplate. LESCO, Inc. makes no warranty of merchantability of fitness for a particular use, nor is there any other express or implied warranty except as may be specifically provided otherwise on product.

LESCO, Inc. assumes no responsibility or liability for any incidental or consequential damages whether related to personal injury or property damage, to vendees, users or third parties, caused by the material; and LESCO, Inc.'s responsibility is limited to replacement of, or repayment of, the purchase price for the material(s) with respect to which any damages are claimed. All vendees or users assume all risk associated with the use of the material(s).

**For further information, contact: LESCO, Inc., • 15885 Sprague Road • Strongsville, OH 44136-1799 or (440) 333-9250.**

G:\REGUL\WP\MSDS\Strongsville MSDS\3011flow.msdoc 11/00WPT