



# SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC) or  
1-866-374-1975 (Tessengerlo Kerley)

## 1. IDENTIFICATION

**PRODUCT NAME:** Lorox DF Agricultural Herbicide  
**DESCRIPTION:** A granular herbicide  
**EPA Reg. No.:** 61842-23  
**Chemical Characterization:** Substance  
**COMPANY IDENTIFICATION:** Tessengerlo Kerley, Inc.  
 2910 N. 44<sup>th</sup> Street, Suite 100  
 Phoenix, AZ 85018-7272  
 (602) 889-8300

## 2. HAZARD IDENTIFICATION

### WARNING

Suspected of causing cancer (H351)  
 May cause damage to organs through prolonged or repeated exposure (H373)  
 Harmful if inhaled (H332)  
 May be harmful if swallowed (H303)  
 Very toxic to aquatic life with long lasting effects (H400+H410)



### HAZARD CLASSIFICATION

Health Hazards	Category	Physical Hazards	Category
Carcinogenicity	2	None	--
Specific target organ toxicity, repeated exposure	2		
Acute toxicity, inhalation	4	Environmental Hazards	Category
Acute toxicity, oral	5	Hazardous to the Aquatic Environment – Acute	1
		Hazardous to the Aquatic Environment – Chronic	1

### HAZARDS NOT REQUIRING CLASSIFICATION

None

### PRECAUTIONARY STATEMENTS

Obtain, read and follow all safety instructions before use. Wear protective gloves and protective clothing. Refer to Section 8 for specific PPE requirements. Do not breathe dust. Use only outdoors or in a well-ventilated area. (P203+P280+P260+P271)

IF exposed or concerned, get medical advice. Get medical help if you feel unwell. (P318+P319)

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Get medical help. (P304+P340+P317)

**IF SWALLOWED:** Get medical help. (P301+P317)

Store locked up. (P405)

Avoid release to the environment not in accordance with the product label. Collect spillage. (P273+P391)

Dispose of contents / container using instructions in the product label and in accordance with local / Federal regulations. (P501)

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Common Name</u>	<u>Chemical Name</u>	<u>CAS #</u>	<u>Composition</u>
Linuron	[3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea]	330-55-2	50.0%

NOTE: Values are not product specifications.

#### 4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical emergencies involving this product, call toll free 1-866-374-1975. See Label for Additional Precautions and Directions for Use.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

#### 5. FIREFIGHTING MEASURES

**Fire and Explosion Hazards:** Thermal decomposition or combustion may generate irritating and highly toxic fumes.

**Extinguishing Medium:** Use firefighting media appropriate for combustibles involved in the fire.

**Fire Fighting Equipment:** Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

**Fire Fighting Instructions:** Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

**Hazardous Combustion Products:** No data available

**NFPA Ratings:** Health – 2 / Flammability – 0 / Reactivity - 0

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document. Ensure adequate ventilation.

**Environmental Precautions:** Contain spillage and minimize spread. Dig up heavily contaminated soil and collect in containers for disposal. Keep out of drains, sewers, ditches and water ways. Do NOT contaminate water when disposing of rinse waters.

**Spill Cleanup:** Avoid creating dust during cleanup. Sweep, scoop or shovel spilled material and place into suitable closed containers for reuse or disposal. After decontamination, spill area can be washed with water. Collect washwater for approved disposal. Place leaking containers in oversize leakproof drums for transport.

#### 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes, skin or clothing.

**Storage:** Store product in original container only. Store in a cool, dry place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** If handling indoors, provide local exhaust ventilation.

**Protective Clothing:** Wear coveralls over short-sleeved shirt and long pants, chemical resistant footwear, chemical resistant gloves made of any waterproof material, and chemical-resistant apron.

**General:** Immediately remove all soiled and contaminated clothing. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and was PPE separately from other laundry.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	gray granules	<b>pH:</b>	not available
<b>Melting point:</b>	not available	<b>Kinematic viscosity:</b>	not available
<b>Boiling point:</b>	not available	<b>Solubility (water):</b>	Disperses. Solubility of linuron in water is 75 ppm
<b>Flammability:</b>	not available	<b>Partition coefficient:</b>	not available
<b>Flammability limits (upper/lower):</b>	not available	<b>Vapor pressure:</b>	not available
<b>Flash point (cc):</b>	not available	<b>Density:</b>	38 lbs./ft <sup>3</sup> (609 kg/m <sup>3</sup> )
<b>Auto-ignition temperature:</b>	not available	<b>Relative vapor density:</b>	not available
<b>Decomposition temperature:</b>	not available	<b>Particle characteristics:</b>	not available
<b>Odor:</b>	slight characteristic odor		

## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** Exposure to extreme heat and open flames.

**CHEMICAL STABILITY:** Stable under all normal use and storage conditions.

**INCOMPATIBILITY WITH OTHER MATERIALS:** Strong acids or bases.

**HAZARDOUS DECOMPOSITION PRODUCTS:** No data available.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**ORAL TOXICITY (rat LD<sub>50</sub>):** 2,600 mg/kg

**DERMAL TOXICITY (rat LD<sub>50</sub>):** > 2,000 mg/kg

**INHALATION TOXICITY (rat LC<sub>50</sub>):** > 218 mg/L

**EYE IRRITATION:** Slight conjunctival redness at 24 hrs; clear at 72 hrs

**SKIN IRRITATION:** Non-irritating

**SKIN SENSITIZATION:** Not a sensitizer

**CARCINOGENICITY:**

**EPA:** Group C without Q<sub>1</sub> (Possible human carcinogen)

**ACGIH:** Not Listed                      **NTP:** Not Listed

**IARC:** Not Listed                      **OSHA:** Not Listed

**REPRODUCTIVE TOXICITY:** Not a reproductive toxin.

**MUTAGENICITY / GENOTOXICITY:** Not mutagenic or genotoxic.

## 12. ECOLOGICAL INFORMATION

The following information is for the active ingredient, Linuron:

**AQUATIC TOXICITY - Acute**

Sheepshead Minnow (96-hour LC<sub>50</sub>): 0.89 mg/L

Daphnia (48-hour EC<sub>50</sub>): 0.12 mg/L

Algae (72-hour EC<sub>50</sub>): 0.067 mg/L

## 12. ECOLOGICAL INFORMATION (Continued)

### AQUATIC TOXICITY - Chronic

Rainbow Trout (21-day NOEC): 0.1 mg/L

Daphnia (21-day NOEC): 0.13 mg/L

### AVIAN TOXICITY

Bobwhite Quail Oral (LD<sub>50</sub>): 940 mg/kg

**Degradability:** In plants, metabolism involves demethylation and demethoxylation. Microbial degradation is the primary factor in disappearance from soil. Half-life under field conditions is 2-5 months, F. Kempson-Jones and R. J. Hance *Pestic. Sci.*, 1979, 10: 449. In soil, DT50 38-67 d. Soil adsorption K<sub>∞</sub> 500-600.

**Mobility:** This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use.

## 13. DISPOSAL CONSIDERATIONS

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. See container label for container handling and disposal instructions.

## 14. TRANSPORT INFORMATION

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

### US-DOT:

**Containers ≤ 11 lbs. (5 kg):**

Not regulated

**Containers > 11 lbs. (5 kg):**

UN3077, Environmentally hazardous substance, solid, N.O.S. (linuron), 9, PG III, Marine Pollutant

**DOT Emergency Guide:** 171

### IMDG:

UN3077, Environmentally hazardous substance, solid, N.O.S. (linuron), 9, PG III, Marine Pollutant

### IATA:

UN3077, Environmentally hazardous substance, solid, N.O.S. (linuron), 9, PG III, Marine Pollutant

### EMS Number:

F-A, S-F

**Additional Transportation Information:** In accordance with 49 CFR 171.4(c), non-bulk packagings (max capacity of 119 gal. (450 L) or less for liquids or 882 lbs. (400 kg) or less for solids) transported by motor vehicle, rail car or aircraft are excepted from all Marine Pollutants regulations in 49 CFR and therefore treated as non-hazardous material. All bulk shipments or any shipment transported partially or entirely by vessel are treated as regulated Marine Pollutants and are shipped according to the requirements listed.

## 15. REGULATORY INFORMATION

### FIFRA –

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the GHS classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where weather conditions favor drift from areas treated. Do not contaminate water when cleaning off equipment or disposing of equipment wash waters or rinsate.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

#### ***Safety, health and environmental regulations/legislation specific for the substance or mixture***

##### **Section 355 (extremely hazardous substances):**

Not listed.

##### **SARA Title III – Section 302 Extremely Hazardous Substances**

Not listed

##### **SARA Title III – Section 311/312 Hazard Categories**

Immediate (Acute), Delayed (Chronic)

##### **Section 313 (Toxic Release Reporting-Form R):**

<u>Chemical name</u>	<u>CAS No.</u>	<u>Concentration</u>
Linuron	330-55-2	50.0%

##### **CERCLA/SUPERFUND:**

RQ (Reportable Quantity): Not applicable

##### **California Proposition 65**

**⚠ WARNING:** This product can expose you to Linuron, which is known to the State of California to cause developmental toxicity. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

##### **RCRA Classification**

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

##### **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

##### **CANADA**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## 16. OTHER INFORMATION

The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information herein.

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