

**FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL DAY OR NIGHT 1-800-561-8273 or CHEMTREC – DAY OR NIGHT 1 800-424-9300**

**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

**1.1 PRODUCT IDENTIFIER:**

**TRADE NAME:** BONANZA® 480

**1.2 RECOMMENDED USE:** GROUP 3 HERBICIDE

**1.3 MANUFACTURED FOR AND DISTRIBUTED BY:**

LOVELAND PRODUCTS CANADA, INC.  
PO Box 5234 | 64137 Hwy 543 E • High River, Alberta T1V 1M4

**1.4 24 Hour Emergency Phone: (Chemtrec): 1-800-424-9300 (Toll Free) - Additional Emergency Phone 1-800-561-8273**  
**Loveland Technical Service: 1-800-328-4678**

**2. HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

**Classification according to 29 CFR 1910.1200**

Acute Toxicity – Oral	Category 4	H302
Sensitization – Skin	Category 1	H317
Eye Damage/Irritation	Category 2B	H320

**2.2 Label elements**



Signal word: WARNING  
Hazard Statement: H302 – Harmful if swallowed.  
H317 – May cause an allergic skin reaction.  
H320 – Causes eye irritation.

Precautionary Statement: (Prevention): P264 – Wash face, hands and any exposed skin thoroughly after handling.  
P270 – Do not eat, drink or smoke when using this product.  
P272 – Contaminated work clothing must not be allowed out of the workplace.  
P280 – Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement: (Response): P301+P312 – IF SWALLOWED: Call a poison center or doctor/physician if you feel unwell.  
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.  
P333+P313 – If skin irritation or rash occurs: Get medical advice/attention.  
P321 – Specific treatment (see FIRST AID and additional medical contact information on the product label).  
P363 – Wash contaminated clothing before reuse.  
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 – If eye irritation persists: Get medical advice/attention.

Precautionary Statement: (Storage): Not applicable or required.

Precautionary Statement: (Disposal): Not applicable or required.

**2.3 Other hazards**  
None known.



## SAFETY DATA SHEET

SDS NUMBER: 28289-16-LPI

SDS REVISIONS: SEC. 1

DATE OF ISSUE: 12/14/16

**BONANZA® 480**  
SUPERSEDES: 09/12/15

### 3. COMPOSITION, INFORMATION ON INGREDIENTS

#### 3.1 Substances

#### 3.2 Mixtures

Chemical Name:	CAS No.	Concentration [%]
Trifluralin	1582-09-8	43.00   480 g/L
Other ingredients*	n/a	57.00
Solvent Naphtha (Petroleum), Heavy Aromatic, contains Naphthalene)	64742-94-5 91-20-3	

\*Ingredients not specifically listed are non-hazardous or are to be considered proprietary or confidential business information

### 4. FIRST AID MEASURES

#### 4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

- If swallowed:** Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.
- 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 centre or doctor for treatment advice.
- If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre 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 mouth-to-mouth if possible. Call a poison control centre or doctor for further treatment advice.

#### 4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Harmful if swallowed. Causes eye irritation. May cause an allergic skin reaction.

#### 4.3 Immediate Medical Attention and Special Treatment

Treatment: Treat symptomatic and supportive.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-561-8273**

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

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## 5. FIRE FIGHTING MEASURES

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### 5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media:

Use medium appropriate to surrounding fire. Foam, carbon dioxide (CO<sub>2</sub>), dry chemical, foam or water spray or fog. Do not use water jet as this will spread the fire.

### 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting:

During a fire, oxides of carbon and oxides of nitrogen can be released.

### 5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment for Firefighters:

Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.

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## 6. ACCIDENTAL RELEASE MEASURES

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### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions:

Wash hands after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. See section 8 for PPE. Keep away from children.

### 6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions:

This product is extremely toxic to freshwater marine, and estuarine fish and aquatic invertebrates including shrimp and oyster. 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 in a manner in which will directly expose canals, lakes, streams, ponds, marshes or estuaries to aerial drift. Do not contaminate water when disposing of equipment wash waters.

### 6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up:

In case of leak or spill, contain by absorbing spilled liquid with clay or other absorbent material; scoop or sweep up material and place in a container for possible land application according to label use or for proper disposal. Wash the spill area with water containing a strong detergent. Check local, provincial and federal regulations for proper disposal.

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## 7. HANDLING AND STORAGE

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### 7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### 7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers:

Store in original containers only. Store above 4 °C. Protect from freezing. In case of spill, contain material and dispose as waste. Do not contaminate water, food or feed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 CONTROL PARAMETERS:  
OCCUPATIONAL EXPOSURE LIMITS**

**Workplace Exposure Level (ACGIH) TLVs**

Components	Type	Value
Naphthalene	TWA	52 mg/m <sup>3</sup> (Skin)

**Biological limit values**

**ACGIH Biological Exposure Indices**

Components	Value	Specimen
No listings		

**8.2 EXPOSURE CONTROLS:**

**Engineering Measures**

None specified.

**Individual Protection Measures:**

- Eye / Face Protection: Goggles or shielded safety glasses are recommended especially during mixing and loading.
- Skin Protection: Coveralls over long-sleeved shirt and long pants. Chemical-resistant gloves. Socks and chemical-resistant footwear during mixing, loading, application, clean-up and repair.
- Respiratory Protection: Not normally required. Avoid inhalation of vapours. If respirators are used, a program should be in place to assure compliance.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- 9.1 APPEARANCE :** Liquid
- ODOR:** Mild aromatic.
- ODOR THRESHOLD:** No data available.
- COLOR:** Clear orange.
- pH:** 5.8 – 6.5 (1% v/v)
- MELTING POINT / FREEZING POINT:** No data available.
- BOILING POINT:** 450 – 527 °F / 232 – 275°C (Solvent)
- FLASH POINT:** > 93.3 °C (PMCC).
- FLAMMABILITY (solid, gas):** No data available.
- UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:** LFL: 1.8% | UFL: 11.8% (Based on the solvent).
- VAPOR PRESSURE:** < 1mm Hg @ 68 °F / 20 °C.
- SOLUBILITY:** Emulsifies.
- PARTITION CO-EFFICIENT, n-OCTANOL / WATER:** No data available.
- AUTO-IGNITION TEMPERATURE:** No data available.
- DECOMPOSITION TEMPERATURE:** No data available.
- VISCOSITY:** 5.2 cP @ 25 °C.
- SPECIFIC GRAVITY (Water = 1):** 1.12 g/ml
- DENSITY:** 1.12 kg/L

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

**10. STABILITY AND REACTIVITY**

**10.1 REACTIVITY**

Stable

**10.2 CHEMICAL STABILITY**

Stable under normal temperature conditions

**10.3 POSSIBILITY OF HAZARDOUS REACTIONS**

No data available. Will not polymerize.

**10.4 CONDITIONS TO AVOID**

Keep away from heat, sparks and open flame. Avoid freezing.

**10.5 INCOMPATIBLE MATERIALS**

Strong oxidizers.

**10.6 HAZARDOUS DECOMPOSITION PRODUCTS**

Oxides of nitrogen, oxides of carbon, fluorinated hydrocarbons and hydrogen fluoride may be formed in a fire situation.

**11 TOXICOLOGICAL INFORMATION**

**11.3 LIKELY ROUTES OF EXPOSURE**

Ingestion. Eye Contact. Inhalation. Dermal.

**LC<sub>50</sub> (rat):** > 7.74 mg/L (4 HR).

**LD<sub>50</sub> Oral (rat):** > 5,000 mg/kg

**LD<sub>50</sub> Dermal (rabbit):** > 2,000 mg/kg

**Acute Toxicity Estimates:** No data available.

**Skin Irritation (rabbit):** May causes skin irritation.

**Eye Irritation (rabbit):** Causes eye irritation

**Specific Target Organ Toxicity:** No data available.

**Aspiration:** No data available.

**Skin Sensitization (guinea pig):** May cause an allergic skin reaction.

**Carcinogenicity:** Naphthalene has been determined to be a Possible Human Carcinogen (Group 2B) by IARC; Confirmed Animal Carcinogen with Unknown Relevance to Humans by ACGIH (A3); Reasonably Anticipated to Be a Human Carcinogen (NTP-R) by NTP; and Cannot Be Determined (EPA-CBD) by US EPA.

**Germ Cell Mutagenicity:** Not observed in studies.

**Interactive Effects:** None known

**12 ECOLOGICAL INFORMATION**

**12.3 ECOTOXICITY**

This pesticide is extremely toxic to freshwater marine and estuarine fish and aquatic invertebrates including shrimp and oyster. 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 in a manner that will directly expose canals, lakes streams, ponds, marshes or estuaries to aerial drift. Do not contaminate water when disposing of equipment wash water. Do not apply when weather conditions favor drift from target area.

**Ecotoxicological Data**

	<b>Species</b>	<b>Test Results</b>
Trifluralin	Rainbow trout	0.41 ppm – 96 hour LC <sub>50</sub>
	Bluegill	0.58 ppm – 96 hour LC <sub>50</sub>
	Bee	> 100 µ/bee (contact)

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water.

Do not apply when weather conditions favor drift from target area.

**12.2 PERSISTENCE AND DEGRADABILITY**

Biodegradability: No data available.

**12.3 BIOACCUMULATIVE POTENTIAL**

Bioaccumulation: No data available.

**12.4 MOBILITY IN SOIL**

No data available.

**12.5 OTHER ADVERSE EFFECTS**



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Assessment:

SDS REVISIONS: SEC. 1  
No data available.

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## 13 DISPOSAL CONSIDERATIONS

### 13.1 WASTE TREATMENT METHODS

Do not reuse containers for any purpose. For disposal, the container may be returned to the point of purchase (dealer/distributor). Container is recyclable, and is to be disposed of at a container collection site. Contact your local dealer/distributor for the location of the nearest collection site. Before taking container to the collection site: Triple or pressure-rinse the empty container, adding the rinsate to the spray tank. Make the empty container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Do not contaminate water, food, or feed by storage or disposal.

## 14 TRANSPORT INFORMATION

### 14.3 LAND TRANSPORT

TDG Shipping Description: NOT REGULATED. (Packages will bear US DOT markings and labels).

DOT/TDG Shipping Description: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (TRIFLURALIN) 9, III ERG GUIDE 171

U.S. Surface Freight Classification: COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS 60)

## 15 REGULATORY INFORMATION

### 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:

NFPA

HMIS

2 Health	0 Least	2 Health
1 Flammability	1 Slight	1 Flammability
0 Instability	2 Moderate	0 Reactivity
	3 High	1 PPE
	4 Severe	

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:	Immediate	<u>Y</u>	Fire	<u>N</u>	Sudden Release of Pressure	<u>N</u>
	Delayed	<u>Y</u>	Reactive	<u>N</u>		

Reportable Quantity (RQ) under U.S. CERCLA: Not applicable.

SARA, Title III, Section 313: Not applicable.

RCRA Waste Code: Not listed.

CA Proposition 65: Not applicable.

## 16 OTHER INFORMATION

SDS STATUS: Section 1 revised.

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

PEST CONTROL PRODUCTS ACT REG. NO.: 28289

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