

**SAFETY DATA SHEET**

SDS NUMBER: 30456-14-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 02/10/2014

**MOMENTUM**

SUPERSEDES: NEW

**IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR POISONING INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-800-561-8273 or CHEMTREC 1-800-424-9300**

**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER****1.1 PRODUCT IDENTIFIER:****TRADE NAME:** MOMENTUM**1.2 RECOMMENDED USE:** HERBICIDE**1.3 SUPPLIER DETAILS:**

LOVELAND PRODUCTS CANADA, INC.

789 Donnybrook Drive • Dorchester, Ontario N0L 1G5

**1.4 24-Hour Emergency Phone :** 1-800-561-8273 - **Additional Emergency Phone (Canutec):** 1-613-996-6666 (Collect)**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification (67/548/EEC, 1999/45/EC)**

Not applicable

**2.2 Label elements****Labeling (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**Labeling according to EC directives (67/548/EEC)**

Further information : The product does not need to be labeled in accordance with EC directives or respective national laws.

**2.3 Other hazards**

None known

**KEEP OUT OF REACH OF CHILDREN –**

Appearance and odour: Yellow to brown liquid with aromatic odour.

**CAUTION! – MAY CAUSE EYE IRRITATION – MAY CAUSE SKIN IRRITATION****Potential Health effects****Routes of exposure**

Skin contact, eye contact, inhalation.

**Eyes**

May cause moderate eye irritation which may be slow to heal. May cause slight corneal injury.

**Skin**

Brief contact may cause slight skin irritation with local redness. May cause drying and flaking of skin. Prolonged contact may cause skin irritation with local redness

**Inhalation**

No adverse effects are anticipated from single exposure to mist. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

**Ingestion**

Low toxicity if swallowed.

**Target organs**

Skin. Eyes. Inhalation.

**Signs and symptoms**

May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system.

**Potential environmental effects**

This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have harmful or damaging effect on the environment.

**3. COMPOSITION, INFORMATION ON INGREDIENTS****3.2 Mixtures**

Chemical Name:	CAS No. / EC-No.	Classification (67/548/EEC)	Concentration [%]
Fluroxypyr 1-methylheptyl ester	81406-37-3 / 279-752-9		12.30
Clopyralid Monoethanolamine salt	57754-85-5		11.30
Heavy aromatic naphtha	64742-94-5 / 265-198-5		23.70
Dipropylene glycol monomethyl ether	34590-94-8		17.40
Naphthalene	91-20-3 / 202-049-5		>= 1.20 - <= 2.40
1,2,4-Trimethylbenzene	95-63-6 / 202-436-9		>= 0.20 - <= 1.20
1,3,5-Trimethylbenzene	108-67-8 / 203-604-4		0.20
Other Ingredients			>= 31.50 - <= 33.70

**4. FIRST AID MEASURES****4.1 Description of First Aid Measures**

General Advice : Get medical attention if symptoms occur.

**Inhalation:**

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. Call a poison control centre or doctor for treatment advice.

**Skin contact:**

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.

**Eye contact:**

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.

**Ingestion:**

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 a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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

Symptoms : No additional symptoms are expected.

## 4.3 Immediate Medical Attention and Special Treatment

Treatment : Maintain adequate ventilation and oxygenation of the patient. The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. If burn is present, treat as any thermal burn, after decontamination.

**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.

**NOTES TO PHYSICIAN:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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## 5. FIRE FIGHTING MEASURES

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### 5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media : Water fog, carbon dioxide (CO<sub>2</sub>), dry chemical, or foam.

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

Specific Hazards During Firefighting : During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen fluoride. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

### 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. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this SDS.

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## 6. ACCIDENTAL RELEASE MEASURES

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

Personal Precautions : Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them.

### 6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions : Prevent further leakage or spillage if safe to do so. Do not contaminate water.

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

Methods for Clean-Up : Contain or dike spilled material if possible. Should not be released into the environment. Large spills: Dike the spilled material where this is possible. Dig up heavily contaminated soil. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with small quantities of water. Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS

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## 7. HANDLING AND STORAGE

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### 7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling : Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. Spills of organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possible resulting in spontaneous combustion. Wash before eating, drinking and/or smoking.

### 7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers : Store in a dry place. Store in original container. Keep container tightly closed. Do not store near food, foodstuffs, drugs or potable water supplies.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### 8.1 CONTROL PARAMETERS:

Dipropylene glycol monomethyl ether	TWA (ACGIH)	100 ppm Skin
Naphthalene	TWA (ACGIH)	10 ppm Skin
Trimethylbenzene (all isomers)	TWA (ACGIH)	25 ppm

### 8.2 EXPOSURE CONTROLS:

#### Engineering Measures

Provide adequate general and local exhaust ventilation. Provide eyewash station.

#### Individual Protection Measures:

Eye / Face Protection : Use chemical goggles.

Skin Protection : Chemical resistant clothing. Routinely wash work clothing and protective equipment to remove contaminants. The use of polyethylene, ethylvinyl alcohol laminate, styrene/butadiene, Viton®, butyl rubber, or PCV gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Respiratory Protection : In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment. Wear respiratory protection during operations where spraying or misting occurs. Wear air supplied respiratory protection. Wear air supplied respiratory protection if exposure concentrations are unknown.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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9.1 APPEARANCE :	Liquid
ODOUR:	Aromatic.
ODOUR THRESHOLD:	Data not available.
COLOUR :	Yellow to brown.
pH :	4.77 (1% solution)
MELTING POINT / FREEZING POINT :	Not applicable / Freezing Point: Data not available.
BOILING POINT :	Data not available.
FLASH POINT :	> 100°C (closed cup)
FLAMMABILITY (solid, gas) :	This product is not flammable.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS :	No data.
VAPOR PRESSURE :	Data not available.
SOLUBILITY:	Emulsifiable
PARTITION CO-EFFICIENT, n-OCTANOL / WATER :	Data not available.
AUTO-IGNITION TEMPERATURE :	Data not available.
DECOMPOSITION TEMPERATURE :	Data not available
VISCOSITY :	27.7 cPs
SPECIFIC GRAVITY (Water = 1):	1.0419 g/ml
BULK DENSITY:	8.69 lbs/gal. / 1.04 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.

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## 10. STABILITY AND REACTIVITY

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### 10.1 REACTIVITY

Stable

### 10.2 CHEMICAL STABILITY

Stable at normal use temperatures

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No reactions known under normal use conditions. Will not polymerize.

### 10.4 CONDITIONS TO AVOID

Product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

### 10.5 INCOMPATIBLE MATERIALS

Avoid contact with strong acids, strong bases, and strong oxidizers.

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Hydrogen chloride. Hydrogen fluoride. Nitrogen oxides. Toxic gases are released during decomposition.

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## 11. TOXICOLOGICAL INFORMATION

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### 11.1 LIKELY ROUTES OF EXPOSURE

Skin contact, eye contact.

**LC<sub>50</sub> (rat):** 5.39 mg/l.

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

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

**Acute Toxicity Estimates:** No data available

**Skin Irritation (rabbit):** Moderate irritant

**Eye Irritation (rabbit):** Moderate irritant

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

**Aspiration:** No data available

**Skin Sensitization (guinea pig):** Not a sensitizer

**Carcinogenicity:** Naphthalene is listed as NTP-R: Reasonably Anticipated to Be a Human Carcinogen, IARC-2B: Possibly Carcinogenic to Humans, and ACGIH (TLV-A4): Not Classifiable as a Human Carcinogen

**Germ Cell Mutagenicity:** No data available

**Interactive Effects:** None known

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## 12. ECOLOGICAL INFORMATION

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### 12.1 ECOTOXICITY

Fluroxypyr 1-methylheptyl ester is highly toxic to aquatic organisms.

**LC<sub>50</sub>:** Rainbow trout (*Oncorhynchus mykiss*), semi-static test, > 0.225 mg/l, 96 hours

**LC<sub>50</sub>:** Sheepshead minnow (*Cyprinodon variegatus*), flow-through test, > 0.0866 mg/l, 96 hours

**EC<sub>50</sub>:** *Daphnia magna*, semi-static test, > 0.183 mg/l, 48 hours

**ErC<sub>50</sub>:** *Diatom Navicula* sp., static test, 0.24 mg/L, 72 hours

**LD<sub>50</sub> (oral)** *Colinus virginianus* (Bobwhite quail): > 2,000 mg/kg body weight

**LD<sub>50</sub> (dietary)** *Colinus virginianus* (Bobwhite quail): > 2,000 mg/kg diet

**LD<sub>50</sub> (oral and contact)** *Apis mellifera* (bees): > 100 micrograms/bee

**LC<sub>50</sub>** Earthworm (*Lumbricus terrestris*): > 1,000 mg/kg.

Clopyralid Monoethanolamine salt: Material is practically non-toxic to aquatic organisms on an acute basis

Heavy aromatic naphtha is highly toxic to aquatic organisms on an acute basis (LC<sub>50</sub> / EC<sub>50</sub> between 0.1 and 1 mg/L in the most sensitive species tested). Practically non-toxic to birds on a dietary basis (LC<sub>50</sub> > 5,000 ppm). Practically non-toxic to birds on an acute basis (LD<sub>50</sub> > 2,000 mg/kg).

Dipropylene glycol monomethyl ether: Practically non-toxic to aquatic organisms on an acute basis (> 100 mg/L).

Naphthalene: Highly toxic to aquatic organisms on an acute basis (LC<sub>50</sub> / EC<sub>50</sub> between 0.1 and 1 mg/L in the most sensitive species tested).

1,2,4-Trimethylbenzene: Moderately toxic to aquatic organisms on an acute basis (LC<sub>50</sub> / EC<sub>50</sub> between 1 and 10 mg/L in the most sensitive species tested).

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:** The product is not readily biodegradable. Stability in water (1/2 life): 12.8 – 16.5 h

### 12.3 BIOACCUMULATIVE POTENTIAL

**Bioaccumulation:** Moderate for major product components; low for minor components.

### 12.4 MOBILITY IN SOIL

Product expected to be immobile to medium in soil.

### 12.5 OTHER ADVERSE EFFECTS

**Assessment:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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## 13. DISPOSAL CONSIDERATIONS

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### 13.1 WASTE TREATMENT METHODS

Do not reuse containers for any purpose. 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.

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## 14. TRANSPORT INFORMATION

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### 14.1 LAND TRANSPORT

**TDG / DOT Shipping Description:** NOT REGULATED

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

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## 15. REGULATORY INFORMATION

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### 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	1 Health	0 Least	1 Health
	1 Flammability	1 Slight	1 Flammability
	0 Instability	2 Moderate	0 Reactivity
		3 High	X PPE
		4 Severe	

**CEPA – Domestic Substances List (DSL):** All substances in this product are listed on the DSL or not required to be listed

**Hazardous Products Act Information: CPR Compliance:** This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

**WHMIS Classification:** This product is exempt under WHMIS

**National Fire Code of Canada:** Not applicable.

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## 16. OTHER INFORMATION

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**MSDS STATUS:** New

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

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