

DeLaval Livestock Marking Spray Green

SAFETY DATA SHEET

Preparation Date: 29-Aug-2019

Revision Date: 29-Aug-2019

Revision Number: 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name DeLaval Livestock Marking Spray Green

Other means of identification

Item#: 90696813

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use coloring agent

Uses advised against All other

Details of the supplier of the safety data sheet

Supplier

Canada DeLaval Inc.
PO Box 4600
Peterborough, ON K9J 7B7
Tel: (705) 741-3100

United States DeLaval Inc.
11100 N. Congress Ave.
Kansas City, MO 64153
Tel: 816-891-7700, 8am – 5pm M-F

Emergency Telephone Number

Canada Canutec 1-613-996-6666

United States Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation	Category 2
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Flammable aerosols	Category 1
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Label Elements

Emergency Overview

DANGER

Hazard Statements

Causes serious eye irritation
Extremely flammable aerosol



Appearance Green

Physical state Aerosol

Odor solvent

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Pressurized container: Do not pierce or burn, even after use
Do not spray on an open flame or other ignition source

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Precautionary Statements - Storage

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Ethyl alcohol	64-17-5	70 - 80
Butane (containing < 0.1% butadiene (203-450-8))	106-97-8	20 - 30
Pentane	109-66-0	<1

If a concentration range is shown, the exact concentration has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first-aid measures

- General Advice** Get medical attention if symptoms occur. Show this safety data sheet to the doctor in attendance.
- Eye contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, consult a specialist.
- Skin contact** Wash off immediately with soap and plenty of water.
- Inhalation** Move to fresh air. Remove from exposure, lie down.
- Ingestion** Drink plenty of water. If possible drink milk afterwards. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed

Irritating to eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Ingestion may cause irritation to mucous membranes. Repeated exposure may cause skin dryness or cracking.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Carbon dioxide (CO₂). Dry powder.

Unsuitable Extinguishing Media

No information available.

Specific hazards arising from the chemical

Heating of containers may cause pressure rise, with risk of bursting. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Extremely flammable. In the event of fire and/or explosion do not breathe fumes.

Sensitivity to static discharge None.

Protective Equipment and Precautions for Firefighters

Personal protective equipment. In the event of fire, wear self-contained breathing apparatus. In the event of fire and/or explosion do not breathe fumes. Do not breathe vapours.

NFPA

Health hazards 1

Flammability 4

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. For personal protection see section 8.

Environmental Precautions

Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling

Keep away from open flames, hot surfaces and sources of ignition. Remove all sources of ignition. Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F. Avoid breathing vapors or mists. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage

Pressurized container. Keep away from direct sunlight. Keep at temperature not exceeding 50°C. Keep in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep away from open flames, hot surfaces and sources of ignition. Keep out of the reach of children. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Incompatible Materials

No materials to be especially mentioned

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	3300 ppm
Butane (containing < 0.1% butadiene (203-450-8)) 106-97-8	STEL: 1000 ppm	TWA: 800 ppm TWA: 1900 mg/m ³	1600 ppm
Pentane 109-66-0	TWA: 1000 ppm	TWA: 600 ppm TWA: 1800 mg/m ³ STEL: 750 ppm STEL: 2250 mg/m ³ TWA: 1000 ppm TWA: 2950 mg/m ³	1500 ppm

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

- Eye/face Protection** If splashes are likely to occur, wear: Wear eye/face protection. Eye wash bottle with pure water.
- Skin and body protection** If splashes are likely to occur, wear: Protective gloves. nitrile rubber. (1 - 4 H). butyl-rubber. Neoprene gloves. Viton (R). Polyethylene/ethylenevinyl alcohol (PE/EVOH). (4 - 8H).
- Respiratory Protection** In case of inadequate ventilation wear respiratory protection. Cartridge A2. Filter type P3.

General Hygiene Considerations Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Aerosol	Odor	solvent
Appearance	Green	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	< 0 °C	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor Pressure	No information available	
Vapor Density	No information available	
Specific Gravity	0.70	
Water Solubility	Soluble in water	

Partition coefficient: n-octanol/water	No information available
Autoignition Temperature	No information available
Decomposition temperature	No information available
Viscosity of Product	No information available
Dynamic viscosity	No information available
Explosive Properties	No information available

Oxidizing Properties No information available

Other information

Liquid Density No information available
VOC Content Max. 670 g/l

10. STABILITY AND REACTIVITY

Reactivity
None known.

Chemical Stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal use.

Conditions to Avoid
Temperatures above 50°C. Extremes of temperature and direct sunlight.

Incompatible Materials
No materials to be especially mentioned

Hazardous decomposition products
None under normal use.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eyes May cause eye irritation.
Skin May cause slight irritation. Repeated exposure may cause skin dryness or cracking.
Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation May irritate nose, throat, and respiratory tracts.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes. May cause irritation of the mucous membranes. May cause slight irritation.
Sensitization No information available.
Mutagenic effects Contains no ingredient listed as a mutagen.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethyl alcohol 64-17-5	A3	Group 1	Known	X

Legend:

- ACGIH (American Conference of Governmental Industrial Hygienists)
- A3 - Confirmed animal carcinogen with unknown relevance to humans
- IARC (International Agency for Research on Cancer)
- Group 1 - Carcinogenic to Humans
- NTP (National Toxicology Program)
- Known - Known Carcinogen
- OSHA (Occupational Safety and Health Administration of the US Department of Labor)
- X - Present

Reproductive Effects None known.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity

If available, toxicity values of individual components are shown below.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethyl alcohol 64-17-5	= 7060 mg/kg (Rat)	>20000 mg/kg (rabbit)	124.7 mg/L (rat)
Butane (containing < 0.1% butadiene (203-450-8)) 106-97-8	No data available	No data available	= 658 g/m ³ (Rat) 4 h
Pentane 109-66-0	> 2000 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	= 364 g/m ³ (Rat) 4 h

0% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

If available, ecotoxicity values of individual components are shown below.

Chemical name	Algae/aquatic plants	Fish	Microtox	Waterflea
Ethyl alcohol 64-17-5	No data available	100: 96 h Pimephales promelas mg/L LC50 static 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static 9268 - 14221: 48 h Daphnia magna mg/L LC50
Pentane 109-66-0	No data available	9.99: 96 h Lepomis macrochirus mg/L LC50 9.87: 96 h Oncorhynchus mykiss mg/L LC50 11.59: 96 h Pimephales promelas mg/L LC50	No data available	9.74: 48 h Daphnia magna mg/L EC50

Persistence and degradability

Propane, butane: readily biodegradable.

Bioaccumulation/Accumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method

Contact your local waste disposal authority for advice, or pass to a chemical disposal company.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT

UN-No 1950
Proper Shipping Name Aerosols
Hazard Class 2.1

Packing Group

Not regulated

15. REGULATORY INFORMATION

California Proposition 65

The list of Proposition 65 chemicals lists "Ethyl alcohol in alcoholic beverages" and is intended to cover only that use of Ethyl Alcohol.

State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethyl alcohol 64-17-5	X	X	X
Butane (containing < 0.1% butadiene (203-450-8)) 106-97-8	X	X	X
Pentane 109-66-0	X	X	X

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

Preparation Date: 29-Aug-2019

Revision Date: 29-Aug-2019

Revision Note: None

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS