



MATERIAL SAFETY DATA SHEET

Issuing Date 7/8/2013

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name BACK UP 3 TITRANT

Product Code(s) 7116

Company LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620
USA

Emergency telephone number 24 Hour Emergency Number (CHEM-TEL):
USA, Canada, Puerto Rico 1-800-255-3924
Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

May be harmful if swallowed

May cause skin irritation

Appearance Clear, colorless

Physical state liquid

Odor None

OSHA Regulatory Status This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential health effects

Principle Routes of Exposure Skin Contact, and, Ingestion.

Acute toxicity

EYES

Not an expected route of exposure. May cause slight irritation.

skin

May cause irritation.

Inhalation

Not an expected route of exposure.

Ingestion

May be harmful if swallowed.

Chronic effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	26182-60-5	<0.1
Chloroform	67-66-3	<0.1
Water	7732-18-5	to 100%

A small amount of Chloroform has been added to this solution as a preservative.

4. FIRST AID MEASURES

Eye contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Wash skin with soap and water. Consult a physician if necessary.
Inhalation	Not expected to require first aid measures.
Ingestion	Drink 1 or 2 glasses of water. Consult a physician if necessary.
Protection of First-aiders	Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Flammable properties	Not a fire hazard.
Flash point	Not Applicable
Suitable extinguishing media	Water spray, dry chemical, carbon dioxide (CO ₂), or foam.

NFPA	Health hazard 0	flammability 0	stability 0	Physical and Chemical Hazards -
HMIS	Health hazard 1	flammability 0	stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Refer to Section 8. Use personal protective equipment.
Methods for containment	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.
Methods for cleaning up	If local regulations permit, rinse to drain with excess water. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Do not ingest. Do not eat, drink, or smoke when using this product.
Storage	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer 26182-60-5	None known	None known	None known
Chloroform 67-66-3	TWA: 10 ppm	None known	IDLH: 500 ppm STEL: 2 ppm STEL: 9.78 mg/m ³
Water 7732-18-5	None known	None known	None known

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Personal protective equipment**Eye/face Protection**

Safety glasses with side-shields.

Skin and body protection

Gloves & Lab Coat.

Respiratory protection

Maintain adequate ventilation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Clear, colorless

Odor

None

Physical state

liquid

pH

5

Flash point

Not Applicable

Autoignition temperature

Not Applicable

Boiling Point/Range

ca. 100°C/212°F

Vapor pressure

Essentially the same as water

Vapor density

Essentially the same as water

10. STABILITY AND REACTIVITY

stability

Stable under normal conditions of use and storage.

Incompatible Products

Strong oxidizing agents.

Conditions to avoid

Incompatible products.

Hazardous decomposition products Carbon oxides (COx). Sulfur oxides (SOx). Potassium Oxides.

Hazardous polymerization

Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	None known	None known	None known
Chloroform	908 mg/kg (Rat)	3980 mg/kg (Rabbit)	47.7 mg/L (Rat) 4 h
Water	90 mL/kg (Rat)	None known	None known

Chronic toxicity

Chemical name	ACGIH	IARC	NTP	OSHA
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	None known	None known	None known	None known
Chloroform	A3	Group 2B	Reasonably Anticipated	X
Water	None known	None known	None known	None known

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Endocrine Disruptor Information

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	None known	None known	None known
Chloroform	None known	None known	None known
Water	None known	None known	None known

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	None known	None known	None known	None known
Chloroform	EC50 = 560 mg/L 48 h	LC50= 18 mg/L Lepomis macrochirus 96 h LC50= 18 mg/L Oncorhynchus mykiss 96 h LC50= 300 mg/L Poecilia reticulata 96 h LC50= 70.7 mg/L Pimephales promelas 96 h	EC50 = 520 mg/L 5 min EC50 = 670 mg/L 15 min EC50 = 670 mg/L 30 min	EC50 = 28.9 mg/L 48 h
Water	None known	None known	None known	None known
Chemical name	Log Pow			
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	None known			
Chloroform	= 2 25 °C			
Water	None known			

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method**

Dispose according to federal, state, and local regulations.

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer - 26182-60-5	None known	None known	None known	None known
Chloroform - 67-66-3	Category I - Volatiles	None known	Toxic waste; (waste number F025); Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated	Toxic waste; waste number K021; Waste description: Aqueous spent antimony catalyst waste from fluoromethanes production.
Water - 7732-18-5	None known	None known	None known	None known

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer 26182-60-5 (<0.1)	XU	DSL	EINECS/ELINCS	ENCS	X	KECL	PICCS	AICS
Chloroform 67-66-3 (<0.1)	Present	X	X	2-37	X	KE-34076	X	X
Water 7732-18-5 (to 100%)	Present	X	X	ENCS	X	KE-35400	X	X

U.S. Federal Regulations

SARA 313

(Contains < 0.1% Chloroform which is less than the threshold value of 0.1%) Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	26182-60-5	<0.1	None known
Chloroform	67-66-3	<0.1	0.1
Water	7732-18-5	to 100%	None known

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer 26182-60-5 (<0.1)	None known	None known	None known	None known
Chloroform 67-66-3 (<0.1)	10 lb	X	X	X
Water 7732-18-5 (to 100%)	None known	None known	None known	None known

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

Chemical name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depleters	Class 2 Ozone Depleters
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	26182-60-5	<0.1	None known	None known	None known	None known
Chloroform	67-66-3	<0.1	Present	Group I	None known	None known

Water	7732-18-5	to 100%	None known	None known	None known	None known
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CERCLA

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	None known	None known
Chloroform	10 lb	10 lb
Water	None known	None known

U.S. State Regulations**California Proposition 65**

WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

Chemical name	CAS-No	California Prop. 65
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	26182-60-5	None known
Chloroform	67-66-3	Carcinogen Developmental
Water	7732-18-5	None known

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	None known	None known	None known	None known	None known
Chloroform	X	X	X	X	X
Water	None known	None known	None known	None known	None known

International Regulations**Mexico - Grade**

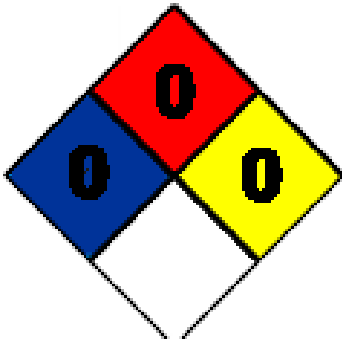

Chemical name	Carcinogen Status	Exposure Limits
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer	None known	None known
Chloroform	A3	Mexico: TWA= 10 ppm Mexico: TWA= 50 mg/m ³
Water	None known	None known

CANADA**NOT WHMIS CONTROLLED**

Component	WHMIS Hazard Class
Sulfuric acid, monoethenyl ester, potassium salt, homopolymer 26182-60-5 (<0.1)	Not Determined
Chloroform 67-66-3 (<0.1)	0.1 % D1B D2A D2B
Water 7732-18-5 (to 100%)	Uncontrolled product according to WHMIS classification criteria

Chemical name	NPRI
Chloroform	X

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table><tr><td>Health Hazard</td><td>1</td></tr><tr><td>Fire Hazard</td><td>0</td></tr><tr><td>Reactivity</td><td>0</td></tr></table>	Health Hazard	1	Fire Hazard	0	Reactivity	0		
Health Hazard	1								
Fire Hazard	0								
Reactivity	0								

Prepared by

Regulatory Affairs Department

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Revision note

Update to Format.

Disclaimer

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End of MSDS