



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 844-005
Product name **Water Base Stainless Steel Maintainer**
Effective date 24-Jan-2011
Company information Claire Manufacturing Co.
1005 S. Westgate Drive
Addison, IL 60101 United States
Company phone General Assistance 630-543-7600
Emergency telephone US 800-424-9300
Emergency telephone outside US 703-527-3887
Version # 13
Supersedes date 10-Aug-2010

2. Hazards Identification

Emergency overview FLAMMABLE
Aerosol. CONTENTS UNDER PRESSURE.
Irritating to eyes. Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure Skin contact. Ingestion.

Eyes Causes eye irritation.

Skin Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Prolonged inhalation may be harmful.

Ingestion Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.

Target organs Central nervous system. Lungs.

Chronic effects May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. May cause delayed lung injury.

Signs and symptoms Discomfort in the chest. Narcosis. Coughing. Defatting of the skin. Skin irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Synthetic Isoparaffinic Hydrocarbon	64742-47-8	15 - 20
n-Butane	106-97-8	10 - 15
Odorless Mineral Spirits	64742-48-9	8 - 10
Propane	74-98-6	5 - 8
Non-hazardous and other components below reportable levels		40 - 60

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Wash off with warm water and soap. Get medical attention if irritation develops and persists.

Inhalation If inhalation of gas/fume/vapor/dust/mist from the material is excessive (air concentration is greater than the TLV or health effects are noticed), immediately remove the affected person(s) to fresh air. Get medical attention if symptoms persist.

Ingestion

If material is ingested, immediately contact a poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.

5. Fire Fighting Measures

Flammable properties	Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.
Extinguishing media	
Suitable extinguishing media	Foam. Dry chemical. Carbon dioxide (CO2). Do not use water jet.
Protection of firefighters	
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Protective equipment and precautions for firefighters	In case of fire and/or explosion do not breathe fumes. Containers should be cooled with water to prevent vapor pressure build up.

6. Accidental Release Measures

Methods for containment	Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk.
Methods for cleaning up	Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

7. Handling and Storage

Handling	Pressurized container: Do not pierce or burn, even after use. Do not smoke while using or until sprayed surface is thoroughly dry. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not re-use empty containers. Wear personal protective equipment. Avoid prolonged exposure.
Storage	Contents under pressure. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Avoid exposure to long periods of sunlight. Store in cool place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Level 2 Aerosol.

8. Exposure Controls / Personal Protection

Exposure limits**ACGIH**

Components	CAS #	TWA	STEL	Ceiling
n-Butane	106-97-8	1000 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Propane	74-98-6	1000 ppm	Not established	Not established

Personal protective equipment

Eye / face protection	Chemical goggles are recommended.
Skin protection	Wear appropriate chemical resistant clothing. Chemical resistant gloves.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Boiling point	226.4 °F (107.8 °C) estimated
Color	White.
Density	0.8138 g/cm3 estimated

Flammability (HOC)	20.1252 kJ/g estimated
Flash back	No
Flash point	-156 °F (-104.4 °C) Propellant
Form	Aerosol.
Freezing point	Not available
Odor	Characteristic.
pH	Not Applicable
Physical state	Liquid.
Pressure	50 - 70 psig @ 70F
Solubility	Negligible
Specific gravity	0.8139

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological Information

Acute effects	Acute LD50: 8459 mg/kg estimated, Rat, Dermal	
Component analysis - LD50		
Toxicology Data - Selected LD50s and LC50s		
n-Butane	106-97-8	Inhalation LC50 Rat 658 mg/L 4 h
Odorless Mineral Spirits	64742-48-9	Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >3160 mg/kg
Propane	74-98-6	Inhalation LC50 Rat 658 mg/L 4 h
Synthetic Isoparaffinic Hydrocarbon	64742-47-8	Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg
Sensitization	Not expected to be hazardous by OSHA criteria.	
Teratogenicity	Not expected to be hazardous by OSHA criteria.	

12. Ecological Information

Ecotoxicity	Components of this product have been identified as having potential environmental concerns.
	LC50 267 mg/L, Fish, 96.00 Hours,

13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 F
Disposal instructions	Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container to hazardous or special waste collection point. If discarded, this product is considered a RCRA ignitable waste, D001.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG**Basic shipping requirements:**

Proper shipping name AEROSOLS
Hazard class 2.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Item 5F
Labels required None
Transport Category 2

**IATA****Basic shipping requirements:**

Proper shipping name Aerosols, flammable
Hazard class 2.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Labels required 2.1

**15. Regulatory Information****US federal regulations**

OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.
 This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
 CERCLA/SARA Hazardous Substances - Not applicable.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Hazard categories (311/312)
 Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - Yes
 Pressure Hazard - Yes
 Reactivity Hazard - No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations**U.S. - Pennsylvania - RTK (Right to Know) List**

n-Butane	106-97-8	Present
Odorless Mineral Spirits	64742-48-9	Present
Propane	74-98-6	Present
Synthetic Isoparaffinic Hydrocarbon	64742-47-8	Present

16. Other Information

Further information	HMIS® is a registered trade and service mark of the NPCA.
HMIS® ratings	Health: 1* Flammability: 3 Physical hazard: 0
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. The information in the sheet was written based on the best knowledge and experience currently available.
MSDS sections updated	Product and Company Identification: Product Review Composition / Information on Ingredients: Ingredients Accidental Release Measures: Containment procedures Handling and Storage: Storage Transport Information: Agency Name and Packaging Type/Transport Mode Selection
Prepared by	Regulatory Compliance