



Issue date 15-May-2017

Safety Data Sheet

Version 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product Identifier

Product name CHASE-MM INSECT REPELLENT FORMULA 2
Chemical name 7-7778-2

Other means of identification

Product code FG 419-2187-1
Synonyms Insect Repellent
Registration number(s) 498-154

Recommended use of the chemical and restrictions on use

Recommended Use To repel mosquitoes, chiggers, ticks, deer flies, stable flies, black flies, gnats and fleas on exposed skin surfaces.

Uses advised against See "APPLICATION INSTRUCTIONS" on label.

Details of the supplier of the safety data sheet

Supplier Address Chase Products Co. 2727 Gardner Road Broadview, IL 60155 708-273-1121	Manufacturer Address Chase Products Co. 2727 Gardner Road Broadview, IL 60155 708-273-1121
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Emergency Telephone Number

Company Phone Number 708-865-1000
24 Hour Emergency Phone Number 1-800-255-3924
Emergency telephone ChemTel 1-800-255-3924

2. Hazards Identification

Classification

Serious eye damage/eye irritation	Category 2A
FLAMMABLE AEROSOLS	Category 1
Gases Under Pressure	liquefied gas

Label Elements

EMERGENCY OVERVIEW

DANGER

hazard statements

Causes serious eye irritation
EXTREMELY FLAMMABLE AEROSOL
Contains gas under pressure; may explode if heated



Appearance Clear, yellowish liquid.

Physical State Aerosol

Odor Characteristic odor of DEET.

Precautionary Statements - Prevention

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

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. Store in a well-ventilated place
 Do not expose to temperatures exceeding 122 °F (50 °C)

Hazards not otherwise classified (HNOC)

Other Information

- Toxic to aquatic life with long lasting effects
 - Harmful to aquatic life
- 21.14% of this mixture consists of ingredient(s) of unknown toxicity.

3. Composition/information on Ingredients

Synonyms Insect Repellent.
Chemical Family MIXTURES.
Formula 7-7778-2
Chemical nature Mixture of organic compounds.

Chemical name	CAS No	weight-%	Trade secret
Ethyl alcohol	64-17-5	50-55	*
Propylene Glycol USP	57-55-6	15-20	*
N,N-Diethyl-m-toluamide	134-62-3	15.0	*
Propane	74-98-6	5-10	*
N-Butane	106-97-8	1-5	*

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

FIRST AID MEASURES

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 center or doctor for treatment advice.

Skin contact In case of skin reaction, wash skin with soap and water and consult a physician.

Inhalation If overcome by vapor, move person to fresh air.

Ingestion Ingestion from an aerosol product is unlikely to occur.

Most important symptoms and effects, both acute and delayed

Symptoms Irritating to the eyes on contact. May cause stinging, redness and swelling of the eyes. Prolonged contact with skin may cause allergic reactions on some individuals.

Indication of any immediate medical attention and special treatment needed

Note to physicians None needed.

5. Fire-fighting measures

Suitable extinguishing media

Dry chemical, CO2 or water spray.

Unsuitable extinguishing media Use water spray or fog; do not use straight streams.

Specific hazards arising from the chemical

Containers are under pressure. Temperatures above 130 °F may cause cans to burst.

Hazardous combustion products Thermal decomposition may yield gases like carbon monoxide and carbon dioxide.

Explosion data

Sensitivity to Mechanical Impact Contents under pressure, keep away from heat and open flame.

Sensitivity to Static Discharge Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Protective equipment and precautions for firefighters

Use personal protective equipment as required.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions CONTENTS UNDER PRESSURE. Do not puncture or incinerate cans.

Other Information Keep out of reach of children.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Provide adequate ventilation to area being treated. Soak up spills with chemically inert, absorbent material.

Methods for cleaning up Clean contaminated surface thoroughly.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling Avoid getting spray into eyes. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in a cool, dry place away from heat and open flame. Avoid storing at below-freezing temperatures. **AEROSOL STORAGE LEVEL II (NFPA 30B).**

Incompatible Materials Avoid heat, open flame and contact with strong oxidizers.

8. Exposure Controls/Personal Protection

Control parameters

Exposure guidelines See occupational exposure limits listed below.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
Propane 74-98-6	: See Appendix F: Minimal Oxygen Content	TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³
N-Butane 106-97-8	STEL: 1000 ppm	(vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m ³	TWA: 800 ppm TWA: 1900 mg/m ³

Appropriate engineering controls

Engineering controls Use with adequate general or local exhaust ventilation.

Individual protection measures, such as personal protective equipment

- Eye/face Protection** Conventional eyeglasses to guard against splashing.
- Skin and Body Protection** None required.
- Respiratory protection** For outdoor use only. Do not spray in enclosed areas.

General hygiene considerations Wash hands thoroughly after handling.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State	Aerosol	Odor	Characteristic odor of DEET.
Appearance	Clear, yellowish liquid.	Odor threshold	No information available
Color	clear		
Property	Values	Remarks • Method	
pH	NA	Solvent-based product.	
Melting point/freezing point	NA	No information available	
Boiling point/boiling range	173 °F/ 78.33 °C Ethyl Alcohol	No information available	
Flash Point	Not available. This is an aerosol product with a Flame Projection of 18 in. with 3 in. flashback. Temperatures above 120 °F may cause cans to burst.	No information available	
Evaporation Rate	Faster than butyl acetate	No information available	
Flammability (solid, gas)		No information available	
Flammability Limits in Air		No information available	
Upper flammability limits	Not available		
Lower Flammability Limit	Not available		
Vapor pressure	Not available	No information available	
Vapor Density		No information available	
Relative Density	0.87 concentrate	No information available	
Water solubility	insoluble	No information available	
Solubility in other solvents		No information available	
Partition coefficient		No information available	
Autoignition Temperature		No information available	
Decomposition temperature		No information available	
Kinematic viscosity		No information available	
Dynamic viscosity		No information available	
Explosive properties	No information available		
Oxidizing properties	No information available		

Other Information

Softening point No information available

Molecular weight No information available
VOC content (%) 64.95%
Density No information available
Bulk Density 7.25 Lb/gal

10. Stability and Reactivity

Reactivity

Not applicable No data available

Chemical stability

Stable.

Possibility of hazardous reactions

Temperatures above 130 °F may cause cans to burst with force.

hazardous polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Temperatures above 122 °F (50 °C).

Incompatible Materials

Avoid heat, open flame and contact with strong oxidizers.

Hazardous decomposition products

Thermal decomposition may yield gases like carbon monoxide and carbon dioxide.

11. Toxicological Information

Information on likely routes of exposure

Product Information This product has not been tested as whole. See below for information on ingredients.

Inhalation See data below.

Eye Contact No data available.

Skin contact No data available.

Ingestion This is an aerosol product, ingestion is unlikely to occur. MAY BE HARMFUL IF SWALLOWED.

Chemical name	Oral LD50	dermal LD50	Inhalation LC50
Ethyl alcohol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
Propylene Glycol USP 57-55-6	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	-
N,N-Diethyl-m-toluamide 134-62-3	= 1892 mg/kg (Rat)	= 5 g/kg (Rat) = 3180 µL/kg (Rabbit) = 3180 mg/kg (Rabbit)	-
Propane 74-98-6	-	-	= 658 mg/L (Rat) 4 h
N-Butane 106-97-8	-	-	= 658 g/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms See information above.

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

sensitization No information available.
Germ cell mutagenicity No information available.

Carcinogenicity Not known chronic effects based on available information.

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product Information

Unknown acute toxicity 21.14% of this mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document .
ATEmix (oral) 5069 mg/kg
ATEmix (inhalation-gas) 2567122 mg/l
ATEmix (inhalation-dust/mist) 182.6 mg/l
ATEmix (inhalation-vapor) 176 mg/l

12. Ecological Information

ecotoxicity

11.09% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Ethyl alcohol 64-17-5		13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	10800: 24 h Daphnia magna mg/L EC50 9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static
Propylene Glycol USP 57-55-6	19000: 96 h Pseudokirchneriella subcapitata mg/L EC50	710: 96 h Pimephales promelas mg/L LC50 51400: 96 h Pimephales promelas mg/L LC50 static 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static 51600: 96 h Oncorhynchus mykiss mg/L LC50 static		1000: 48 h Daphnia magna mg/L EC50 Static 10000: 24 h Daphnia magna mg/L EC50
N,N-Diethyl-m-toluamide 134-62-3		71.25: 96 h Oncorhynchus mykiss mg/L LC50 static 106 - 114: 96 h Pimephales promelas mg/L LC50 flow-through	EC50 = 67.9 mg/L 5 min	

Persistence and degradability

No information available.

Bioaccumulation

See information below.

Chemical name	Partition coefficient
Ethyl alcohol 64-17-5	-0.32
Propane 74-98-6	2.3
N-Butane 106-97-8	2.89

Other adverse effects No information available

13. Disposal Considerations

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Waste treatment methods

Disposal of wastes Do not puncture or incinerate container. If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions.

Contaminated packaging Pressurized container: Do not pierce or burn, even after use.

Chemical name	California Hazardous Waste Status
Ethyl alcohol 64-17-5	Toxic Ignitable

14. Transport Information

DOT

UN/ID no Limited Quantity
Proper Shipping Name Consumer Commodity
Hazard Class ORM-D

IATA

UN/ID no UN1950
Proper Shipping Name Aerosols, flammable
Hazard Class 2.1

IMDG

UN/ID no UN1950
Proper Shipping Name Aerosols, flammable
Hazard Class 2.1

15. Regulatory information

International Inventories

TSCA All ingredients of this product are listed or are excluded from listing under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

DSL All ingredients are listed or are excluded from listing on the DSL.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

This product does not contain toxic chemicals (above the de minimis level) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

SARA 311/312 Hazard Categories

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

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40

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CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethyl alcohol 64-17-5	X	X	X
Propylene Glycol USP 57-55-6	X		X
Propane 74-98-6	X	X	X
N-Butane 106-97-8	X	X	X

U.S. EPA Label information

EPA Pesticide registration number 498-154

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: WARNING: Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes. Use of this product may cause skin reactions in rare cases. Wash treated clothing before wearing it again. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Avoid breathing of spray mist. Wash hands with soap and water after handling.

16. Other information

<u>NFPA</u>	Health Hazards 1	Flammability 4	Instability 1	Physical and chemical properties Not applicable
<u>HMIS</u>	Health Hazards 1	Flammability 4	Physical hazards 1	Personal Protection A - Eyes protection

Prepared by Regulatory Department

Issue date 15-May-2017

Revision note

This SDS supersedes a previous SDS dated May 18, 2016.

Disclaimer

The information provided in this Material 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 Safety Data Sheet