Bugs Away

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 09/25/2018 Revision date: 03/26/2019 Version: 2.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture

Product name : Bugs Away

Other means of identification : MP25

1.2. Recommended use and restrictions on use

Recommended use : Degreaser

Restrictions on use : None known

1.3. Supplier

Krown Rust Control
35 MAGNUM DRIVE
L0G 1T0 SCHOMBERG - CANADA
T (905) 939-8750

1.4. Emergency telephone number

Emergency number : (905) 939-8750

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Flammable liquids, Category 4	H227
Acute toxicity (dermal), Category 4	H312
Skin corrosion/irritation, Category 1A	H314
Serious eye damage/eye irritation, Category 1	H318

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA) :

Signal word (GHS CA) : Danger

Hazard statements (GHS CA) : H227 - Combustible liquid
H312 - Harmful in contact with skin.
H314 - Causes severe skin burns and eye damage.

Precautionary statements (GHS CA) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.
P312 - Call a POISON CENTER or doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label)
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403 - Store in a well-ventilated place.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

Other hazards not contributing to the classification : None.

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	Conc. (% w/w)	Classification (GHS CA)
Sodium metasilicate	Disodium metasilicate / Silicate, disodium / Silicic acid (H2SiO3), disodium salt / Sodium metasilicate, anhydrous / Silicic acid, disodium salt / Disodium metasilicate (Na2SiO3) / Disodium trioxosilicate / Silicic acid (H2SiO3), sodium salt (1:2) / SODIUM METASILICATE / Silicic acid, sodium salt (1:2) / Sodium silicate	(CAS-No.) 6834-92-0	5 - 8	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 STOT SE 3, H335
2-Butoxyethanol	2-Butoxy-1-ethanol / Butoxyethanol / Ethanol, 2-butoxy- / Ethylene glycol monobutyl ether / Ethylene glycol n-butyl ether / Hydroxyethyl butyl ether / Ethylene glycol butyl ether / 2-Butoxyethan-1-ol / Ethylene glycol mono-n-butyl ether / 2-n-Butoxyethanol / Butyl glycol / BUTOXYETHANOL / EGBE / EGMBE / Butoxyethanol, 2- / Butyl Cellosolve / 2-Butyl Cellosolve	(CAS-No.) 111-76-2	5 - 6	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Immediately remove contaminated clothing or footwear. Wash skin with plenty of water. Call a physician immediately. Seek medical attention if burns develop.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. Consult an ophtalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

First-aid measures general : Call a physician immediately. If you feel unwell, seek medical advice (show the label where possible).

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : May be harmful in contact with skin. Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : Not applicable.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Not determined.

5.3. Specific hazards arising from the hazardous product

No additional information available

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : In case of large spillages: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Shovel or sweep up and put in a closed container for disposal. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-Butoxyethanol (111-76-2)		
Canada (Quebec)	VEMP (mg/m³)	97 mg/m³
Canada (Quebec)	VEMP (ppm)	20 ppm
Alberta	OEL TWA (mg/m³)	97 mg/m³
Alberta	OEL TWA (ppm)	20 ppm
British Columbia	OEL TWA (ppm)	20 ppm
Ontario	OEL TWA (ppm)	20 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Materials for protective clothing:

Wear long sleeves

Hand protection:

Chemically resistant protective gloves

Eye protection:

Chemical goggles or safety glasses. Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Liquid.

Colour : Blue

Odour : odourless

Odour threshold	:	No data available
pH	:	13
Relative evaporation rate (butylacetate=1)	:	> 1
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	0 °C
Boiling point	:	100 °C
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	No data available
Vapour pressure at 50 °C	:	No data available
Relative vapour density at 20 °C	:	0.6
Relative density	:	1.1032
Solubility	:	Soluble.
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	20 mPa·s
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	:	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	Oxidizing agents and strong acids.
Incompatible materials	:	Peroxides. Sodium hypochlorite.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. On combustion, forms: carbon oxides (CO and CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Dermal: Harmful in contact with skin.
Acute toxicity (inhalation)	:	Not classified

ATE CA (Dermal)	1650 mg/kg bodyweight

2-Butoxyethanol (111-76-2)	
LD50 oral rat	470 mg/kg
LD50 dermal rabbit	99 mg/kg
LC50 inhalation rat (ppm)	486 ppm/4h

Sodium metasilicate (6834-92-0)	
LD50 oral rat	1153 mg/kg

Skin corrosion/irritation	:	Causes severe skin burns and eye damage. pH: 13
Serious eye damage/irritation	:	Causes serious eye damage. pH: 13
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified

STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified
Symptoms/effects after skin contact	:	May be harmful in contact with skin. Burns.
Symptoms/effects after eye contact	:	Serious damage to eyes.
Symptoms/effects after ingestion	:	Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	Before neutralisation, the product may represent a danger to aquatic organisms.
Acute aquatic toxicity	:	Not classified
Chronic aquatic toxicity	:	Not classified

2-Butoxyethanol (111-76-2)	
LC50 fish 1	1490 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 fish 2	2950 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Log Pow	0.81 (at 25 °C)

Sodium metasilicate (6834-92-0)	
LC50 fish 1	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])
LC50 fish 2	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)

12.2. Persistence and degradability

Bugs Away	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Bugs Away	
Bioaccumulative potential	Not established.

2-Butoxyethanol (111-76-2)	
Log Pow	0.81 (at 25 °C)

12.4. Mobility in soil

Bugs Away	
Ecology - soil	Not established.

2-Butoxyethanol (111-76-2)	
Log Pow	0.81 (at 25 °C)

12.5. Other adverse effects

Ozone	:	Not classified
Effect on the global warming	:	Not established.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	:	Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

Transportation of Dangerous Goods

UN-No. (TDG)	:	UN1760
Packing group	:	II - Medium Danger
TDG Primary Hazard Classes	:	8 - Class 8 - Corrosives
Transport document description	:	UN1760 CORROSIVE LIQUID, N.O.S. (sodium metasilicate), 8, II
Proper Shipping Name (Transportation of Dangerous Goods)	:	CORROSIVE LIQUID, N.O.S. sodium metasilicate

Hazard labels (TDG)	:	8 - Corrosive substances

TDG Special Provisions	:	16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a)UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b)UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c)UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d)UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e)UN3249, MEDICINE, SOLID, TOXIC, N.O.S. An example in Canada is the “Food and Drugs Act”. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a)UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b)UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS. SOR/2014-306
Explosive Limit and Limited Quantity Index	:	1 L
Excepted quantities (TDG)	:	E2
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	:	1 L

14.2. Transport information/DOT

Department of Transport

DOT NA no.	:	UN1760
UN-No.(DOT)	:	1760
Packing group (DOT)	:	II - Medium Danger
DOT Symbols	:	G - Identifies PSN requiring a technical name
Transport document description	:	UN1760 Corrosive liquids, n.o.s. (sodium metasilicate), 8, II
Proper Shipping Name (DOT)	:	Corrosive liquids, n.o.s. sodium metasilicate
Contains Statement Field Selection (DOT)	:	
Class (DOT)	:	8 - Class 8 - Corrosive material 49 CFR 173.136
Division (DOT)	:	8
Hazard labels (DOT)	:	8 - Corrosive

Dangerous for the environment	:	No
DOT Special Provisions (49 CFR 172.102)	:	B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively. TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx)	:	154
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	202
DOT Packaging Bulk (49 CFR 173.xxx)	:	242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	30 L
DOT Vessel Stowage Location	:	B - (i) The material may be stowed ''on deck'' or ''under deck'' on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) ''On deck only'' on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other	:	40 - Stow ''clear of living quarters''
Emergency Response Guide (ERG) Number	:	154
Other information	:	No supplementary information available.

14.3. Air and sea transport

IMDG

UN-No. (IMDG)	:	1760
Proper Shipping Name (IMDG)	:	CORROSIVE LIQUID, N.O.S.
Transport document description (IMDG)	:	UN 1760 CORROSIVE LIQUID, N.O.S. (sodium metasilicate), 8, II
Class (IMDG)	:	8 - Corrosive substances
Packing group (IMDG)	:	II - substances presenting medium danger

IATA

UN-No. (IATA)	:	1760
Proper Shipping Name (IATA)	:	Corrosive liquid, n.o.s.
Transport document description (IATA)	:	UN 1760 Corrosive liquid, n.o.s. (sodium metasilicate), 8, II
Class (IATA)	:	8 - Corrosives
Packing group (IATA)	:	II - Medium Danger

SECTION 15: Regulatory information

15.1. National regulations

Bugs Away

Not listed on the Canadian DSL (Domestic Substances List)

2-Butoxyethanol (111-76-2)

Listed on the Canadian DSL (Domestic Substances List)

Sodium metasilicate (6834-92-0)

Listed on the Canadian DSL (Domestic Substances List)

Sodium xylenesulfonate (1300-72-7)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

2-Butoxyethanol (111-76-2)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on Turkish inventory of chemical

Toxic Substance (CEPA – Schedule I)	Yes

Sodium metasilicate (6834-92-0)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on INSQ (Mexican National Inventory of Chemical Substances) Listed on Turkish inventory of chemical

Sodium xylenesulfonate (1300-72-7)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on INSQ (Mexican National Inventory of Chemical Substances) Listed on Turkish inventory of chemical

SECTION 16: Other information

Date of issue : 09/25/2018

Revision date : 03/26/2019

Other information : DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H-statements:

H227	Combustible liquid
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

SDS Canada (GHS)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product