

Foaming Bore Cleaner- Control

SECTION 1 - IDENTIFICATION

1.1 Product Identifier

Product Name : *Foaming Bore Cleaner- Control*
 Manufacturer Product Number : *RW-903-A-FC*

1.2 Other Means Of Identification

Other Identifiers : *Not Available*

1.3 Relevant Identified Uses Of The Substance Or Mixture And Uses Advised Against

Recommended Use : *Foaming gun cleaner.*
 Restrictions On Use : *None Identified*

1.4 Supplier Details

	Manufacturer Details	Supplier Details
Company Name	<i>Otis Technology, Inc.</i>	<i>Otis Technology,</i>
Address	<i>6987 Laura Street, Lyons Falls NY 13368</i>	<i>6987 Laura Street, Lyons Falls NY 13368</i>
Phone Number	<i>315-348-4300</i>	<i>315-348-4300</i>
Fax Number	<i>315-348-4332</i>	<i>315-348-4332</i>
Website	<i>http://www.otistec.com</i>	

1.5 24 Hr Emergency Phone Number

Emergency Number : *800-255-3924 (Chem-Tel)*

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification Of The Substance Or Mixture

Flammable Aerosols, Category 1 : *Extremely flammable aerosol*
 Gases Under Pressure : Compressed Gas : *Contains gas under pressure; may explode if heated*
 Acute Toxicity (Oral), Category 4 : *Harmful if swallowed*
 Acute Toxicity (Dermal), Category 4 : *Harmful in contact with skin*
 Hazardous To The Aquatic Environment — Acute Hazard, Category 3 : *Harmful to aquatic life*

2.2 Label Elements

Hazard Pictograms :



Signal Word :

Danger

Hazard Statements :

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Harmful if swallowed or in contact with skin. Harmful to aquatic life.

Precautionary Statements :

Keep away from heat/sparks/open flames/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. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves and eye protection. If swallowed: Call POISON CENTER if you feel unwell. If on skin: Wash with plenty of water. Call physician if you feel unwell. Specific treatment (see ... on this label). Rinse mouth. Take off contaminated clothing and wash it before reuse. Protect from sunlight. Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Dispose of contents/container to local regulations.

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2.3 Other Hazards Which Do Not Result In Classification

Hazards Not Otherwise Classified : None Identified.

2.4 Unknown Acute Toxicity

85.94% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)

85.94% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

78.24% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Not Applicable

3.2 Mixture

Ingredient	Cas Number	%	Classification*
N-Butane	106-97-8	5 - 10	Flam. Gas 1, H220 Press. Gas (Diss.), H280
2-Butoxyethanol	111-76-2	5 - 10	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315
Ethanol	64-17-5	1 - 5	Flam. Liq. 2, H225 Eye Irrit. 2A, H319
Propane	74-98-6	1 - 5	Flam. Gas 1, H220 Press. Gas (Diss.), H280

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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

SECTION 4 - FIRST-AID MEASURES

4.1 Description Of First-Aid Measures

General Measures : Call a poison center or a doctor if you feel unwell.

Eye Contact : Rinse eyes with water as a precaution.

Skin Contact : Wash skin with plenty of water. Take off contaminated clothing.

Ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

Inhalation : Remove person to fresh air and keep comfortable for breathing.

First-Aid Responder Protection : Wear adequate personal protective equipment based on the nature and severity of the emergency.

4.2 Most Important Symptoms And Effects, Both Acute And Delayed

Eye Contact : Liquid contact may cause pain along with moderate eye irritation.

Skin Contact : Prolonged or repeated exposure may cause skin irritation. Repeated contact may cause drying or flaking skin. May cause more severe response if confined to skin.

Ingestion : Due to being an aerosol, the product does not lend itself to ingestion. Should ingestion occur, it may cause irritation to membranes of the mouth, throat, and gastrointestinal tract resulting in vomiting and/or cramps. Aspiration of vomit into the lungs may cause inflammation, and possible chemical pneumonitis, bronchopneumonia, or pulmonary edema.

Inhalation : Prolonged or repeated overexposure is anesthetic. May cause irritation of the respiratory tract, or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion or death. Irritation of the mucous membranes, coughing, and dyspnea are also possible.

4.3 Indication Of Immediate Medical Attention And Special Treatment

Notes To Physician : Treat symptomatically.

Specific Treatments/Antidotes : No Information Available.

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Immediate Medical Attention

: No Information Available.

SECTION 5 - FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media

Extinguishing Media : Water, carbon dioxide, dry chemical, universal aqueous film forming foam.

Unsuitable Media : Water jet.

5.2 Specific Hazards Arising From The Chemical Or Mixture

Decomposition Products : Decomposition products may include: oxides of carbon, smoke, vapors.

Hazards From The Product : Extremely flammable. Contents under pressure. In a fire or if heated, a pressure increase will occur which may result in container bursting. Vapors heavier than air may spread along the ground and travel to ignition an source.

5.3 Special Protective Actions For Fire-Fighters

Protective Actions : Use water spray to cool fire exposed aerosol containers, as contents can rupture violently from heat developed pressure.

Protective Equipment : Firemen should wear self-contained breathing apparatus with full face-piece operated in positive pressure mode.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment And Emergency Procedures

For Non-Emergency Personnel : Do not touch or walk through spill. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. No action should be taken involving any personnel without suitable training. Remove ignition sources and provide adequate ventilation only if it is safe to do so.

For Emergency Responders : Observe precautions provided for non-emergency personnel above. Use personal protection as recommended in Section 8.

6.2 Environmental Precautions

Precautions : Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

6.3 Methods And Materials For Containment And Cleaning Up

Containment Procedures : Product is an aerosol, therefore spills and leaks are unlikely. In case of rupture, released content may be contained with oil/solvent absorbent pads, socks, and/or absorbents.

Cleanup Procedures : Remove sources of ignition and use non-sparking equipment. Sweep up material and wash floor with soap and water. Place in container for waste disposal. . Soak up material with inert absorbent and place in safety containers for proper disposal.

Other Information : Aerosol products represent a limited hazard and will not spill or leak unless ruptured. In case of rupture contents are generally evacuated from the can rapidly. Area should be ventilated immediately and continuous ventilation provided until all fumes and vapors have been removed. Aerosol cans should never be incinerated or burned.

Prohibited Materials : Combustible absorbent material such as sawdust. Use of equipment that may cause sparking.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions For Safe Handling

General Handling Precautions : KEEP OUT OF THE REACH OF CHILDREN. Avoid prolonged or repeated skin contact. Avoid breathing of vapors. Do not incinerate (burn) containers. Always replace overcap when not in use. Avoid use around open flames or other sources of ignition. Exposure to heat or prolonged exposure to sun may cause can to burst. Use only with adequate ventilation, opening doors or windows to achieve cross-ventilation.

Hygiene Recommendations : Do not eat, drink or smoke when using this product. Wash hands thoroughly after use. Remove contaminated clothing and protective equipment before entering eating or smoking areas.

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7.2 Conditions For Safe Storage Including Any Incompatibilities

Storage Requirements	: Storage of individual cans should be done in an area below 55°C (120 °F), and away from heat sources. Ensure can is in a secure place to prevent knocking over and accidental rupture. For storage of pallet quantities, compliance with NFPA 30B (Manufacture and Storage of Aerosol Products) is recommended.
Incompatibilities	: Segregate storage away from materials indicated in Section 10.
NFPA 30B Classification	: This product is classified as a Level 1 Aerosol per NFPA 30B.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

Propane (74-98-6)		
OSHA	OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
NIOSH	US IDLH (ppm)	2100 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1800 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
California	California PEL (TWA) (mg/m ³)	1800 mg/m ³
California	California PEL (TWA) (ppm)	1000 ppm
n-Butane (106-97-8)		
ACGIH	ACGIH TWA (ppm)	1000 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1900
NIOSH	NIOSH REL (TWA) (ppm)	800 ppm
California	California PEL (TWA) (mg/m ³)	1900 mg/m ³
California	California PEL (TWA) (ppm)	800 ppm
2-Butoxyethanol (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	240 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm
NIOSH	US IDLH (ppm)	700 ppm
NIOSH	NIOSH REL (TWA) (ppm)	5 ppm
California	California PEL (TWA) (mg/m ³)	97 mg/m ³
California	California PEL (TWA) (ppm)	20 ppm
BEI	Butoxyacetic Acid (BAA) in Urine, End of shift	200 mg/g creatinine
Ethanol (64-17-5)		
ACGIH	ACGIH STEL (ppm)	1000 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	1900 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
NIOSH	US IDLH (ppm)	3300 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1900
NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
California	California PEL (TWA) (mg/m ³)	1900 mg/m ³
California	California PEL (TWA) (ppm)	1000 ppm

8.2 Exposure Controls

Engineering Measures	: Use only with adequate ventilation. General ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system may be necessary to control air contamination below that of the lowest OEL from the table above.
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Respiratory Protection	: An approved respirator with an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed occupational exposure limits. If respirators are needed, in the United States compliance with OSHA standard 29 CFR 1910.134 is necessary.
Skin Protection	: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing impervious to the ingredients listed in Section 2.
Eye/Face Protection	: Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact with this material could occur, chemical splash proof goggles are recommended.
Other Protective Equipment	: Safety showers and eye-wash stations should be available in the workplace near where the material will be used.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**9.1 Physical Properties**

Boiling Point	> 78.39 °C	Melting / Freezing Point	> -114.15 °C
Flash Point, Liquid	> 8.00 °C	Flash Point, Propellant	-104.00 °C
Explosive Limits	LEL: 0.70 UEL: 15.00 vol %	Autoignition Temperature, Liquid	230.00 °C
Flammability	Extremely Flammable Aerosol	Density	1.067 g/cm ³
Molecular Weight	Not Available	Weight	8.904 lbs/gal
Vapor Pressure	Not Available	pH	Not Available
Vapor Density	Not Available	Evaporation Rate (nBac=1)	Not Available
Viscosity	Not Available	Partition Coefficient	Not Available
Odor Threshold	Not Available	Refractive Index	Not Available
Physical Form	Pressurized Product	Heat Of Combustion	3615.65 BTU/lb
Odor	Characteristic	Water Solubility	Not Available
Appearance / Color	Clear, Colorless	Decomposition Temperature	Not Available

9.2 Environmental Properties

Percent Volatile	23.80 % wt	VOC Regulatory	226.09 g/L (1.89 lbs/gal)
Percent VOC	20.48 % wt	VOC Actual	218.52 g/L (1.82 lbs/gal)
Percent HAP	0.00 % wt	HAP Content	0.00 g/L (0.00 lbs/gal)
Global Warming Potential	0.39 GWP	Maximum Incremental Reactivity	0.4790 g O3/g
Ozone Depletion Potential	0.00 ODP		

SECTION 10 - STABILITY AND REACTIVITY**10.1 Reactivity**

Reactivity	: No specific test data related to reactivity is available for this products or its ingredients.
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10.2 Chemical Stability

Stability	: This product is stable.
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10.3 Possibility Of Hazardous Reactions

Reactions	: Under normal conditions of storage and use, hazardous reactions are not expected to occur.
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10.4 Conditions To Avoid

Conditions	: None identified.
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10.5 Incompatible Materials

Incompatibilities	: Strong Oxidizing Agents, Alkali Metals, Strong Acids, Halogen Compounds, Bases, Acid Anhydrides, Hydrogen Peroxide, Sulfuric Acid, Nitrating Agents.
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10.6 Hazardous Decomposition Products

Products : Oxides of carbon, Oxides of nitrogen.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1.1 Information On Toxicological Effects

Propane (74-98-6)

LC50 Inhalation (Rat) 658 mg/l/4h (Lit.)

n-Butane (106-97-8)

LC50 Inhalation (Rat) 658 mg/l/4h (Lit.)

LC50 Inhalation (Rat) 276000 ppm/4h (ChemInfo)

2-Butoxyethanol (111-76-2)

LD50 Oral (Rat) 917 mg/kg (RTECS)

LD50 Dermal (Rabbit) 1060 mg/kg (Sigma-Aldrich)

LC50 Inhalation (Rat) 3380 mg/m³ (RTECS)

LC50 Inhalation (Rat) 925 ppm/4h (ChemInfo)

Ethanol (64-17-5)

LD50 Oral (Rat) 10740 mg/kg (EMD Millipore)

LD50 Dermal (Rabbit) > 15800 mg/kg (ChemInfo)

LC50 Inhalation (Rat) 124.7 mg/l/4h (EMD Millipore)

LC50 Inhalation (Rat) 32380 ppm/4h (ChemInfo)

11.1.2 Health Hazard Classification

Skin Corrosion/Irritation : Not classified
 Eye Damage/Irritation : Not classified
 Respiratory Or Skin Sensitization : Not classified
 Germ Cell Mutagenicity : Not classified
 Reproductive Toxicity : Not classified
 Stot-Single Exposure : Not classified
 Stot-Repeated Exposure : Not classified
 Aspiration Hazard : Not classified
 Carcinogen Data : The following ingredients are listed as known or suspected carcinogens:

2-Butoxyethanol (111-76-2)

ACGIH Category A3 - Confirmed animal carcinogen with unknown relevance to humans

11.1.3 Information On The Likely Routes Of Exposure

Routes Of Exposure : Eye Contact, Ingestion, Skin Contact, Inhalation, Skin Absorption.

11.1.4 Symptoms Related To The Physical, Chemical And Toxicological Characteristics

Symptoms of Exposure : Eye Irritation, Eye Damage, Nose Irritation, Throat Irritation, Confusion, Skin Irritation, Dizziness, Narcosis, Drowsiness, Cough.

11.1.5 Delayed And Immediate Effects And Also Chronic Effects From Short And Long Term Exposure

Delayed Effects : No known delayed effects.
 Immediate Effects : No known immediate effects.
 Chronic Effects : No chronic effects identified.
 Target Organs : Central Nervous System, Eyes, Respiratory System, Skin.
 Medical Conditions Aggravated : None identified.

SECTION 12 - ECOLOGICAL INFORMATION

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12.1 Ecotoxicity

Ecology - general : Harmful to aquatic life.

2-Butoxyethanol (111-76-2)	
LC50 fish 1	1490 mg/l Bluegill Sunfish - 96h
LC50 fish 2	1474 mg/l Rainbow Trout - 96hr
EC50 Daphnia 1	1698 - 1940 mg/l Water Flea - 24hr
EC50 other aquatic organisms 1	1840 mg/l Green Algae - 72hr
Ethanol (64-17-5)	
LC50 fish 1	14200 mg/l Fathead Minnow - 96h
EC50 Daphnia 1	9268 - 14221 mg/l Water Flea - 48hr

12.2 Ecological Properties

Propane (74-98-6)	
Persistence and degradability	Readily biodegradable in water. Not applicable (gas). Photodegradation in the air.
BCF fish 1	9 - 25 (BCF)
Log Pow	2.28 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
n-Butane (106-97-8)	
Persistence and degradability	Readily biodegradable in water.
Log Pow	2.89 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
2-Butoxyethanol (111-76-2)	
Persistence and degradability	Biodegradability 90% / 28 days.
Biochemical oxygen demand (BOD)	0.71 g O ₂ /g substance
Chemical oxygen demand (COD)	2.2 g O ₂ /g substance
ThOD	2.305 g O ₂ /g substance
BOD (% of ThOD)	0.31
Log Pow	0.81 (Experimental value; BASF test; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Ethanol (64-17-5)	
Persistence and degradability	Biodegradability 94% / 28 days.
Biochemical oxygen demand (BOD)	0.8 - 0.967 g O ₂ /g substance
Chemical oxygen demand (COD)	1.7 g O ₂ /g substance
ThOD	2.1 g O ₂ /g substance
Log Pow	-0.35 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 24 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

SECTION 13 - DISPOSAL CONSIDERATIONS





13.1 Waste Treatment Methods

Waste Disposal	: Characteristics and waste stream classification can change with product use and location. It is the responsibility of the user to determine the proper storage, transportation, treatment, and/or disposal methodologies for spent materials and residues at the time of disposition. All waste must be disposed of in compliance with the respective national, federal, state, and/or local regulations.
Waste Disposal Of Packaging	: In the United States, an aerosol container that does not contain a significant amount of liquid would meet the definition of scrap metal (40 CFR 261.1(c)(6)), and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are to be disposed of (not recycled) it must be managed under all applicable RCRA and state regulations.
Landfill Precautions	: Not Available.
Incineration Precautions	: ** DO NOT INCINERATE ** CONTENTS UNDER PRESSURE **.

SECTION 14 - TRANSPORTATION INFORMATION

Transportation Information	Ground Transportation (DOT)	Air Transportation (IATA)	Ocean Transportation (IMDG)
Identification Number	UN1950	UN1950	UN1950

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Proper Shipping Name	Aerosols, Limited Quantity	Aerosols, Flammable, Limited Quantity	Aerosols, Limited Quantity
Hazard Class(es)	2.1	2.1	2.1
Packaging Group	None	None	None
Limited Quantity	Yes 	Yes 	Yes 
Marine Pollutant	No	No	No
Hazard Labels		2.1 - Flammable gas 	

SECTION 15 - REGULATORY INFORMATION

15.1 Federal Regulations

Trace Ingredient Disclosure : The product is using this ingredient at a trace amount. This ingredient is known to the State of California to cause cancer.

Diethanolamine CAS #111-42-2 -- 0.002277%

TSCA Inventory : All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

SARA 313 Reporting : Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Diethanolamine	CAS-No. 111-42-2	< 1%
T-Butyl Alcohol	CAS-No. 75-65-0	< 1%

Applicable Federal Regulations : One or more ingredients are regulated by other Federal Regulations.

2-Butoxyethanol (111-76-2)

SARA Section 311/312 Hazard Classes : Delayed (chronic) health hazard, Fire hazard, Immediate (acute) health hazard.

15.2 State Regulations

California Proposition 65 : This product may contain trace amounts of Bisphenol A (BPA), a chemical known to the State of California to cause birth defects or reproductive harm.

State Right-to-Know Lists : The following ingredients appear on one or more state Right-to-Know lists.

Propane (74-98-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

n-Butane (106-97-8)

U.S. - New Jersey - Right to Know Hazardous Substance List

2-Butoxyethanol (111-76-2)

U.S. - New Jersey - Right to Know Hazardous Substance List

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

U.S. - Massachusetts - Right To Know List

Ethanol (64-17-5)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16 - OTHER INFORMATION

SDS Compliance : This SDS complies with the below listed regulations only. For SDS that comply with other countries, please

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contact our Regulatory Department at msds@chem-pak.com.

OSHA Hazard Communication Standard (HCS 2012) 29 CFR 1910.1200

Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Revision 3

Disclaimer Of Liability

: The information contained herein is based upon data provided to us by our suppliers, and reflects our best judgement. However, no warranty of merchantability, fitness for any use, or any other warranty or guarantee is expressed or implied regarding the accuracy of such data, or the results to be obtained from use thereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of such application. This information is furnished upon the condition that the persons receiving it shall make their own determinations of the suitability of the material for any particular use. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist.

Full text of H-statements

H Code	H Phrase
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H225	Highly flammable liquid and vapour
H227	Combustible liquid
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H402	Harmful to aquatic life