



# Safety Data Sheet

Issue Date: 20-Apr-2012

Revision Date: 27-July-2017

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Autoguard Engine Degreaser

### Other means of identification

**SDS #** AG-038

### Recommended use of the chemical and restrictions on use

**Recommended Use** Engine Degreaser

### Details of the supplier of the safety data sheet

Warren Oil Company, LLC  
2340 Highway 301 North  
Dunn, NC 28334

### Emergency Telephone Number

**Company Phone Number** 1-800-428-9284  
**Emergency Telephone (24 hr)** CHEMTREC 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### GHS-US classification

Flam. Aerosol 1	H222
Compressed gas	H280
Eye Irrit. 2A	H319
Carc. 1B	H350
Asp. Tox. 1	H304

Full text of H-phrases: see Section 16

#### Label elements

#### GHS-US Labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US):

Danger

Hazard statements (GHS-US):

H222 – Extremely flammable aerosol  
H280 – Contains gas under pressure; may explode if heated  
H304 – May be fatal if swallowed and enters airways

	H319 – Causes serious eye irritation. H350 – May cause cancer.
Precautionary statements (GHS-US):	<p>P201 – Obtain special instructions.</p> <p>P202 – Do not handle until all safety precautions have been read and understood.</p> <p>P210 – Keep away from heat, hot surfaces, open flames, sparks. No smoking</p> <p>P211 – Do not spray on an open flame or other ignition source</p> <p>P251 – Pressurized container: Do not pierce or burn, even after use</p> <p>P264 – Wash affected areas thoroughly after handling.</p> <p>P280 – Wear protective gloves, protective clothing, eye protection, face protection.</p> <p>P301+P310 – If swallowed: Immediately call a poison control center, doctor, physician,</p> <p>P305+P351+P338 – If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P308+P313 – If exposed or concerned: Get medical advice/attention.</p> <p>P331 – Do NOT induce vomiting</p> <p>P337+P313 – If eye irritation persists: Get medical advice/attention.</p> <p>P405 – Store locked up</p> <p>P410+P403 – Protect from sunlight. Store in a well-ventilated place</p> <p>P410+P412 – Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F</p> <p>P501 – Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations</p>

**Other hazards:**

Other hazards not contributing to the classification:

Contains gas under pressure; may explode if heated. None under normal conditions.

**Unknown acute toxicity (GHS-US):**

No data available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Not applicable

**Mixture**

Name	Product Identifier	%	Classification (GHS-US)
Distillates (Petroleum), Hydrotreated Light	(CAS No.) 64742-47-8	70 – 85	Asp. Tox. 1, H304
Naphtha, Heavy Aromatic	(CAS No. 64742-94-5	<= 13.39	Carc. 1B, H350 Asp. Tox. 1, H304
2-Butoxyethanol	(CAS No.) 111-76-2	5 - 10	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 Eye Irrit. 2A, H319
2-Methylnaphthalene	(CAS No.) 91-57-6	< 3.4814	Acute Tox. 4 (Oral), H302
Carbon Dioxide, Liquefied, Under Pressure	(CAS No.) 124-38-9	1 - 5	Compressed gas, H280
Naphthalene	(CAS No.) 91-20-3	< 1.8746	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1-Methylnaphthalene	(CAS No.) 90-12-0	< 1.67375	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302
Acetone	(CAS No.) 67-64-1	< 1	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Polyethylene Glycol 200-600	(CAS No.) 25322-68-3	<= 0.0366	Not classified
Nonyl Nonoxynol-5	(CAS No.) 9014-93-1	<= 0.0244	Not classified

The exact percentage is a trade secret.

## 4. FIRST-AID MEASURES

### Description of first aid measures

First-aid measures general:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation:	Cough. Allow victim to breath fresh air. Allow the victim to rest.
First-aid measures after skin contact:	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact:	Rinse cautiously with water for several minutes. Direct contact with the eyes is likely to be irritating. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion:	Rinse mouth. DO NOT induce vomiting. Obtain emergency medical attention.

### Most important symptoms and effects, both acute and delayed

Symptoms/injuries:	May cause cancer.
Symptoms/injuries after inhalation:	Shortness of breath. Coughing. Irritation of the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Dizziness.
Symptoms/injuries after skin contact:	May cause slight irritation. May cause moderate irritation. Red skin.
Symptoms/injuries after eye contact:	Inflammation/damage of the eye tissue. Irritation of the eye tissue. Redness of the eye tissue. Causes serious eye irritation.
Symptoms/injuries after ingestion:	May be fatal if swallowed and enters airways. May be harmful if swallowed and enters airways.

### Indication of any immediate medical attention and special treatment needed

No additional information available.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

<b>Suitable Extinguishing Media:</b>	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
<b>Unsuitable Extinguishing Media:</b>	Do not use a heavy water stream.

### Special hazards arising from the substance or mixture

Fire Hazard:	Extremely flammable aerosol.
Explosion hazard:	Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

### Advice for firefighters

Firefighting instructions:	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. DO NOT fight fire when fire reaches explosives. Evacuate area.
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Protection during firefighting:	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information:	Aerosol Level 3.

## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment and emergency procedures**

General measures: No open flames. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.

### **For non-emergency personnel**

Protective equipment: Gloves. Safety glasses.

Emergency procedures: Evacuate unnecessary personnel.

### **For emergency responders**

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

### **Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### **Methods and material for containment and cleaning up**

For containment: Dam up the liquid spill. Contain released substance, pump into suitable containers. Plug the leak, cut off the supply.

Methods for cleaning up: Store away from other materials.

### **Reference to other sections**

See Section 8. Exposure controls and personal protection.

## 7. HANDLING AND STORAGE

### **Precautions for safe handling**

Additional hazards when processed: Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use.

Precautions for safe handling: Wash hands or other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not spray on an open flame or other ignition source. Obtain special instructions. Do not handle until all safety precautions have been read and understood.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash affected areas thoroughly after handling. Always wash hands after handling the product. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### **Conditions for safe storage, including any incompatibilities**

Technical measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.

Storage conditions:	Keep only in the original container in a cool, well ventilated place away from: Keep container closed when not in use. Do not expose to temperatures exceeding 50 °C/ 122°F. Keep in fireproof place.
Incompatible products:	Strong bases. Strong acids.
Incompatible materials:	Sources of ignition. Direct sunlight. Heat sources.
Storage area:	Store in well-ventilated place.

**Specific end use(s)**

Follow Label Directions.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

<b>Benzene (71-43-2)</b>		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	5 ppm
USA ACGIH	ACGIH Ceiling (ppm)	25 ppm
USA OSHA	OSHA PEL (TWA)(ppm)	1 ppm
USA OSHA	OSHA PEL (Ceiling)(ppm)	5 ppm
<b>Carbon Dioxide, Liquefied, Under Pressure (124-38-9)</b>		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	9000 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (ppm)	5000 ppm (Carbon dioxide; USA; Time-weighted average exposure limit 8 h; TLV – Adopted Value)
USA ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	54000
USA ACGIH	ACGIH STEL (ppm)	30000 ppm
USA OSHA	OSHA PEL (TWA)(mg/m <sup>3</sup> )	9000 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA)(ppm)	5000 ppm
<b>Distillates (Petroleum), Hydrotreated Light (64742-47-8)</b>		
USA ACGIH	ACGIH TWA (ppm)	200 ppm 8 Hours
<b>2-Butoxyethanol (111-76-2)</b>		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	97 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (ppm)	20 ppm (2-Butoxyethanol (EGBE); USA; Time-weighted average exposure limit 8 h; TLV – Adopted Value)
USA OSHA	OSHA PEL (TWA)(mg/m <sup>3</sup> )	240 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA)(ppm)	50 ppm
<b>1-Methylnaphthalene (90-12-0)</b>		
USA ACGIH	ACGIH TWA (ppm)	0.5 ppm (1-methylnaphthalene; USA; Time-weighted average exposure limit 8; TLV – Adopted Value)
<b>2-Methylnaphthalene (91-57-6)</b>		
USA ACGIH	ACGIH TWA (ppm)	0.5 ppm (2-methylnaphthalene; USA; Time-weighted average exposure limit 8; TLV – Adopted Value)
<b>Naphtha, Heavy Aromatic (64742-94-5)</b>		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup> 1-METHYLNAPHTHALENE
USA ACGIH	ACGIH TWA (ppm)	0.5 ppm 1-METHYLNAPHTHALENE
<b>Acetone (67-64-1)</b>		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1188 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (ppm)	500 ppm
USA ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	1782 mg/m <sup>3</sup>
USA ACGIH	ACGIH STEL (ppm)	750 ppm
USA OSHA	OSHA PEL (TWA)(mg/m <sup>3</sup> )	2400 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA)(ppm)	1000 ppm

**Exposure controls**

Appropriate engineering controls

Local exhaust ventilation, vent hoods. Ensure good ventilation of the work station.

Personal protective equipment: Gloves. Safety glasses. Avoid all unnecessary exposure.



Materials for protective clothing: GIVE EXCELLENT RESISTANCE:

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Wear appropriate mask.

Consumer exposure controls: Avoid contact during pregnancy/while nursing.

Other information: Do not eat, drink or smoke during use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical State:	Gas
Appearance:	Liquid
Color:	Milky
Odor:	Aromatic. Strong odor
Odor threshold:	No data available
pH:	No data available
Relative evaporation rate (butyl acetate=1):	No data available
Melting point:	No data available
Freezing point:	No data available
Boiling point:	160 – 343 °C
Flash point:	94.7 °C
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability (solid, gas):	No data available
Vapor pressure:	No data available
Relative vapor density at 20°C:	> 4.7
Relative density:	0.88
Solubility:	Poorly soluble in water
	Water: 25%
Log Pow	No data available
Log Kow	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available
Explosive limits:	No data available

### Other information

VOC content:	< 10 %
Gas group:	Compressed gas

## 10. STABILITY AND REACTIVITY

### Reactivity

No additional information available

### Chemical Stability

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

### Possibility of Hazardous Reactions

Not established.

### Conditions to Avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks, Open flame. Overheating.

### Incompatible Materials

Strong acids. Strong bases.

### Hazardous Decomposition Products

Toxic fume. Carbon monoxide. Carbon dioxide.

## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

Acute toxicity: Not classified

<b>Benzene (71-43-2)</b>	
LD50 oral rat	> 930 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; > 2000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 8240 mg/kg (Rabbit; Experimental value; 21 CFR 191.10; > 9.4; Rabbit)
LC50 inhalation rat (mg/l)	43.767 mg/l/4h (Rat; Experimental value)
LC50 inhalation rat (ppm)	13700 ppm/4h (Rat; Experimental value)
<b>Distillates (Petroleum), Hydrotreated Light (64742-47-8)</b>	
LD50 oral rat	5000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.28 mg/l/4h Based on lack of mortality and systemic effects
<b>2-Butoxyethanol (111-76-2)</b>	
LD50 oral rat	1300 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value; OECD 402; Acute Dermal Toxicity)
LD50 dermal rabbit	435 mg/kg (435 mg/kg bodyweight; Rabbit; Rabbit; Experimental value, 435 mg/kg bodyweight; Rabbit; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	2.17 mg/l/4h (Rat; Experimental value; 2.35 mg/l/4h; Rat; Experimental value)
LC50 inhalation rat (ppm)	450-486, Rat; Weight of evidence
<b>Polyethylene Glycol 200-600 (25322-68-3)</b>	
> 15000 mg/kg (Rat)	
> 20000 mg/kg (Rabbit)	
<b>1-Methylnaphthalene (90-12-0)</b>	
LD oral rat	1840 mg/kg (Rat; Literature study)
Ld dermal rabbit	> 5000 mg/kg (Rabbit; Literature study)
<b>2-Methylnaphthalene (91-57-6)</b>	
LD oral rat	1630 mg/kg (Rat)
<b>Naphthalene (91-20-3)</b>	
ATE CLP (oral)	500.000 mg/kg bodyweight

<b>Naphtha, Heavy Aromatic (64742-94-5)</b>	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (Rat)
<b>Acetone (67-64-1)</b>	
LD50 oral rat	5800 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	20000 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402)
LC50 inhalation rat (mg/l)	71 mg/l/4h (Rat; Experimental value; 76 mg/l/4h; Rat; Experimental value)
LC50 inhalation rat (ppm)	30000 ppm/4h (Rat; Experimental value)

Skin corrosion/irritation:	Not classified
Serious eye damage/irritation:	Causes serious eye irritation.
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified. Based on available data, the classification criteria are not met.
Carcinogenicity:	May cause cancer.

<b>Benzene (71-43-2)</b>	
IARC group	1
<b>2-Butoxyethanol (111-76-2)</b>	
IARC group	3
<b>Naphtha, Heavy Aromatic (64742-94-4)</b>	
IARC group	2B
National Toxicology Program (NTP) Status	3

Reproductive toxicity:	Not classified
Specific target organ toxicity (single exposure):	Not classified
Specific target organ toxicity (repeated exposure):	Not classified
Aspiration hazard:	May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms:	Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation:	Shortness of breath. Coughing. Irritation of the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Dizziness.
Symptoms/injuries after skin contact:	May cause slight irritation. May cause moderate irritation. Itching. Red skin.
Symptoms/injuries after eye contact:	Inflammation/damage of the eye tissue. Irritation of the eye tissue. Redness of the eye tissue. Causes serious eye irritation.
Symptoms/injuries after ingestion:	May be fatal if swallowed and enters airways. May be harmful if swallowed and enters airways.

## 12. ECOLOGICAL INFORMATION

### Toxicity:



<b>Benzene (71-43-2)</b>	
LC50 fish 1	5.3 mg/l (LC50; 96h; Salmo gairdneri)
EC50 Daphnia 2	10 mg/l (EC50; OECD 202; Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna)
Threshold limit algae 1	100 mg/l (ErC50; OECD 201; Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
<b>Carbon Dioxide, Liquefied, Under Pressure (124-38-9)</b>	
LC50 fish 1	35 mg/l (LC50; 96 h; Salmo gairdneri)
<b>Acetone (67-64-1)</b>	
EC50 Daphnia 2	12600 mg/l (LC50; Other; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
<b>Polyethylene (Glycol 200-600 (25322-68-3)</b>	
LC50 fish 2	> 5000 mg/l (LC50; 24 h)
Threshold limit algae 2	500 mg/l (EC0; 720 h)
<b>1-Methylnaphthalene (90-12-0)</b>	
LC50 fish 1	8.4 mg/l (LC50; 48 h; Salmo fario)
EC50 Daphnia 1	1.848 mg/l (LC50; 48 h)
LC50 fish 2	9 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 2	1.2 mg/l (EC50; 48 h)
Threshold limit algae 1	1.71 – 5.12, EC50; 3 h
Threshold limit algae 2	1200 µg/l (EC50); 14 days)
<b>2-Methylnaphthalene (90-12-0)</b>	
LC50 fish 1	8 mg/l (LC50; 96 h)
<b>Naphtha, Heavy Aromatic (64742-94-5)</b>	
EC50 Daphnia 1	0.95 mg/l (EC50; 48 h)
LC50 fish 2	2.34 mg/l (LC50; 96 h; Oncorhynchus mykiss)
Threshold limit algae 2	2.5 mg/l (EC50; 72h)
<b>Acetone (67-64-1)</b>	
LC50 fish 1	6210 mg/l (96 h; Pimephales promelas; Nominal concentration)
EC50 Daphnia 1	8800 mg/l (48 h; Daphnia pulex)
LC50 fish 2	5540 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
TLM fish 1	13000 ppm (96 h; Gambusia affinis; Turbulent water)
TLM fish 2	> 1000 ppm (96 h; Pisces)
Threshold limit other aquatic organisms 1	3000 mg/l (Plankton)
Threshold limit other aquatic organisms 1	28 mg/l (Protozoa)
Threshold limit algae 1	7500 mg/l (Scenedesmus quadricauda; pH = 7)
Threshold limit algae 2	3400 mg/l (48 h; Chlorella sp.)

**Persistence and degradability:**

<b>AUTOGUARD ENGINE DEGREASER 16 Oz.</b>	
Persistence and degradability	Not established
<b>Benzene (71-43-2)</b>	
Persistence and degradability	Readily biodegradable in water. Ozonation in water. Forming sediments in water. Biodegradable in the soil. Low potential for adsorption in soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	2.18 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.15 g O <sub>2</sub> /g substance
ThOD	3.10 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.70

<b>Carbon Dioxide, Liquefied, Under Pressure (124-38-9)</b>	
Persistence and degradability	Biodegradability: not applicable. Not applicable (gas).
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
<b>Distillates (Petroleum), Hydrotreated Light (64742-47-8)</b>	
Persistence and degradability	Not established.
<b>Acetone (67-64-1)</b>	
Persistence and degradability	Not established.
<b>2-Butoxyethanol (111-76-2)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.71 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.20 g O <sub>2</sub> /g substance
ThOD	2.305 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.31
<b>Polyethylene Glycol 200-600 (25322-68-3)</b>	
Persistence and degradability	Biodegradability in water: not data available. Not established.
<b>Nonyl Nonoxynol-5 (9014-93-1)</b>	
Persistence and degradability	Not established.
<b>1-Methylnaphthalene (90-12-0)</b>	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water.
<b>2-Methylnaphthalene (91-57-6)</b>	
Persistence and degradability	Inherently biodegradable. Not readily biodegradable in water.
<b>Naphthalene (91-20-3)</b>	
Persistence and degradability	May cause long-term adverse effects in the environment.
<b>Naptha, Heavy Aromatic (64742-94-5)</b>	
Persistence and degradability	Not readily biodegradable in water.
<b>Acetone (67-64-1)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test) data on mobility of the substance available. Not established.
Biochemical oxygen demand (BOD)	1.43 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.92 g O <sub>2</sub> /g substance
ThOD	2.20 g O <sub>2</sub> /g substance
BOD (% of ThOD)	(20 day(s)) 0.872)

**Bioaccumulative potential:**

<b>AUTOGUARD ENGINE DEGREASER</b>	
Bioaccumulative potential	Not established
<b>Benzene (71-43-2)</b>	
BCF fish 1	19 (BCF)
BCF fish 2	< 10 (BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; ;3 days; Leuciscus idus; Flow-through system; Fresh water; Experimental value)
BCF other aquatic organisms 1	30 (BCF; 24 h; Chlorella sp.)
Log Pow	2.13 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

<b>Carbon Dioxide, Liquefied, Under Pressure (124-38-9)</b>	
Log Pow	0.83 (Experimental value)
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>Distillates (Petroleum), Hydrotreated Light (64742-47-8)</b>	
Bioaccumulative potential	Not established.
<b>Acetone (67-64-1)</b>	
Bioaccumulative potential	Not established.
<b>2-Butoxyethanol (111-76-2)</b>	
Log Pow	0.81 (Experimental value; BASF test; 25 °F)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>Polyethylene Glycol 200-600 (25322-68-3)</b>	
Log Pow	-1.2
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
<b>Nonyl Nonoxynol-5 (9014-93-1)</b>	
Bioaccumulative potential	Not established.
<b>1-Methylnaphthalene (90-12-0)</b>	
BCF fish 1	20 (BCF; 5 weeks)
BCF fish 2	113-2000, BCF; 1 – 2 weeks
Log Pow	3.87 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>2-Methylnaphthalene (91-57-6)</b>	
BCF fish 1	407 (BCF; 624 h; Lepomis macrochirus)
BCF fish 2	190 (BCF; 840 h; Oncorhynchus kisutch)
Log Pow	3.86 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>Naphthalene (91-20-3)</b>	
Bioaccumulative potential	Not established.
<b>Naphtha, Heavy Aromatic (64742-94-5)</b>	
Log Pow	2.9 – 6.1
Bioaccumulative potential	Bioaccumuable
<b>Acetone (67-64-1)</b>	
BCF fish 1	0.69 (Pisces)
BCF other aquatic organisms 1	3
Log Pow	-0.24 (Test data)
Bioaccumulative potential	Not bioaccumulative. Not established.

**Mobility in soil:**

<b>Benzene (71-43-2)</b>	
Surface tension	0.029 N/m (20 °C)
Log Koc	Koc,134.1; QSAR
<b>2-Butoxyethanol (111-76-2)</b>	
Surface tension	0.027 N/m (25 °C)
<b>1-Methylnaphthalene (90-12-0)</b>	
Log Koc	Koc,2300
<b>Acetone (67-64-1)</b>	
Surface tension	0.0237 N/m (20 °C)

**Other adverse effects:** Avoid release to the environment.

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste disposal facility in accordance with local, regional, national, international regulations.

Additional information: Flammable vapors may accumulate in the container.

Ecology – waste materials: Avoid release to the environment. Hazardous waste due to toxicity.

## 14. TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG/ IATA / ADN

US DOT (ground): UN1950, Aerosols, 2, 1, Limited Quantity

ICAO/IATA (air): UN1950, Aerosols, 2, 1, Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2, 1, Limited Quantity

Special Provisions: N82 – See 173.306 of this subchapter for classification criteria for flammable aerosols

### UN proper shipping name

Proper Shipping Name (DOT): Aerosols  
Flammable, (each not exceeding 1 L capacity)

Transport Hazard Classes (DOT): 2.1 – Class 2.1 – Flammable gas 49 CFR 173.115

Hazard labels (DOT): 2.1 – Flammable gas



DOT Special Provisions (49 CFR 172.102) N82 – See 173.306 of this subchapter for classification criteria for flammable aerosols

DOT Packaging Exceptions (49 CFR 173.xxx) 306

DOT Packaging Non Bulk (49 CFR 173.xxx) None

DOT Packaging Bulk (49 CFR 173.xxx) None

### Additional information

Other information : No supplementary information available.

### Overland transport

No additional information available

### Transport by sea

DOT Vessel Stowage Location : A – The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

DOT Vessel Stowage Other: 48 – Stow "away heat" sources of heat; 87 – Stow "separated from" Class 1 (explosives) except Division 14,126 – Segregation same as for Class 9, miscellaneous hazardous materials.

### Air Transport

DOT Quantity Limitations Passenger aircraft/ 75 kg rail (49 CFR 173.27) :

DOT Quantity Limitations Cargo aircraft only 150 kg (49 CFR 175.75):

<b>15. REGULATORY INFORMATION</b>
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**US Federal Regulations**

<b>AUTOGUARD ENGINE DEGREASER 16 Oz.</b>	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard Sudden release of pressure hazard
<b>Benzene (71-43-2)</b>	
Listed on the United States (TSCA Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
<b>Carbon Dioxide, Liquefied, Under Pressure (124-38-9)</b>	
SARA Section 311/312 Hazard Classes	Sudden release of pressure hazard Immediate (acute) health hazard
<b>Distillates (Petroleum), Hydrotreated Light (64742-47-8)</b>	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
<b>2-Butoxyethanol (111-76-2)</b>	
Listed on the United States (TSCA Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard
<b>Naphthalene (91-20-3)</b>	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Immediate (acute) health hazard
<b>Naphtha, Heavy Aromatic (64742-94-5)</b>	
Listed on the United States (TSCA Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 – Emission Reporting	14 % Naphthalene (CAS 91-20-3)
<b>Acetone (67-64-1)</b>	
Listed on the United States (TSCA Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard Delayed (chronic) health hazard

**International regulations:****CANADA**

<b>AUTOGUARD ENGINE DEGREASER 16 Oz.</b>	
WHMIS Classification	Class B Division 5 – Flammable Aerosol
<b>Benzene (71-43-2)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
<b>Distillates (Petroleum), Hydrotreated Light (64742-47-8)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
<b>2-Butoxyethanol (111-76-2)</b>	
Listed on the Canadian DSL (Domestic Substances List)	

<b>Naphthalene (91-20-3)</b>	
WHMIS Classification	Class B Division 4 – Flammable Solid Class D Division 1 Subdivision B – Toxic material causing immediate and serious toxic effects.
<b>Naphtha, Heavy Aromatic (64742-94-5)</b>	
<b>Acetone (67-64-1)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 2 – Flammable Liquid Class D Division 2 Subdivision B – Toxic material causing other toxic effects

**EU-Regulations**

<b>2-Butoxyethanol (111-76-2)</b>	
Listed on the EEC Inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	
<b>Naphtha, Heavy Aromatic (64742-94-5)</b>	
<b>Acetone (67-64-1)</b>	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)-Directive 79/831/EEC, sixth Amendment of Directive 67/548/EEC (dangerous substances)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

**Classification according to Regulation (EC) No. 1272/2008 [CLP]****Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**

Carc.Cat.3 ; R40  
F ; R11  
Xn ; R20/21/22  
Xi ; R36/38

Full text of R-phrases: see Section 16

**National Regulations**

<b>Benzene (71-43-2)</b>	
Listed on the IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	
Listed on the KECI (Korean Existing Chemicals Inventory)	
Listed on the NZIoC (New Zealand Inventory of Chemicals)	
Listed on the PICCS (Philippines Inventory of Chemicals and Chemical Substances)	
Listed on the AICS (Australian Inventory of Chemical Substances)	
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory	
<b>2-Butoxyethanol (111-76-2)</b>	
Listed on the AICS (Australian Inventory of Chemical Substances)	
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)	
Listed on the Korean ECL (Existing Chemicals Inventory)	
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	
<b>Naphtha, Heavy Aromatic (64742-94-5)</b>	
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 Canadian NDSL (Non-Domestic Substances List)	
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory	
Listed on the KECI (Korean Existing Chemicals Inventory)	
Listed on the PICCS (Philippines Inventory of Chemicals and Chemical Substances)	
<b>Acetone (67-64-1)</b>	
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)	
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	
Listed on KECI (Korean Existing Chemicals Inventory)	
Listed on the AICS (Australian Inventory of Chemical Substances)	
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory	
Listed on the Korean ECL (Existing Chemicals List)	

**US State regulations**

<b>AUTOGUARD ENGINE DEGREASER</b>				
U.S. – California – Proposition 65 – Carcinogens List		No		
U.S. – California – Proposition 65 – Developmental Toxicity		No		
U.S. – California – Proposition 65 – Reproductive Toxicity – Female		No		
U.S. – California – Proposition 65 – Reproductive Toxicity – Male		No		
State or local regulations		U.S. – California – Proposition 65		
<b>Benzene (71-43-2)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	Yes	No	Yes	
<b>Carbon Dioxide, Liquefied, Under Pressure (124-38-9)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
<b>Distillates (Petroleum), Hydrotreated Light (64742-47-8)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
<b>Acetone (67-64-1)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
<b>2-Butoxyethanol (111-76-2)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
<b>Polyethylene Glycol 200-600 (25322-68-3)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
<b>Nonyl Nonoxynol-5 (9014-93-1)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
<b>1-Methylnaphthalene (90-12-0)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
<b>2-Methylnaphthalene (91-57-6)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

<b>Naphthalene (91-20-3)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	
<b>Naphtha, Heavy Aromatic (64742-94-5)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	Yes	Yes	
<b>Acetone (67-64-1)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California – Proposition 65 – Reproductive Toxicity - Female	U.S. – California – Proposition 65 – Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	
<b>Benzene (71-43-2)</b>				
<b>State or local regulations</b>				
U.S. – California – Proposition 65 U.S. – Pennsylvania – RTK (Right to Know) List New Jersey Right-to-Know				
<b>2-Butoxyethanol (111-76-2)</b>				
<b>State or local regulations</b>				
U.S. – Pennsylvania – RTK (Right to Know) Environmental Hazard List U.S. – New Jersey - Right-to-Know Hazardous Substance List				
<b>Naphthalene (91-20-3)</b>				
<b>State or local regulations</b>				
U.S. – Pennsylvania – RTK (Right to Know) List U.S. – Massachusetts – Right to Know List U.S. – California – Proposition 65				
<b>Naphtha, Heavy Aromatic (64742-94-5)</b>				
<b>State or local regulations</b>				
U.S. – California – Proposition 65 Illinois Right to Know Louisiana Right to Know Michigan Right to Know Minnesota Right-to-Know New Jersey Right-to-Know U.S. – Pennsylvania – RTK (Right to Know) List Rhode Island Right to Know				
<b>Acetone (67-64-1)</b>				
<b>State or local regulations</b>				
U.S. – California – Proposition 65 Benzene 71-43-2 U.S. – Massachusetts – Right to Know List U.S. – New Jersey – Right to Know Hazardous Substance List U.S. – Pennsylvania – RTK (Right to Know) List				

**16. OTHER INFORMATION**

Other information: None

Full text of H-phrases: see Section 16:



H222	Extremely flammable aerosol
H227	Combustible liquid
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H350	May cause cancer
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

**NFPA health hazard:** 2 – Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

**NFPA fire hazard:** 3 – Liquids and solids that can be ignited under almost all ambient conditions.

**NFPA reactivity** 0 – Normally stable, even under fire exposure conditions, and are not reactive with water.



**HMIS III Rating:**

**Health** 2 Moderate Hazard – Temporary or minor injury may occur

**Flammability** 4 Severe Hazard

**Physical** 1 Slight Hazard

**Personal Protection** B

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**Revision Note:** Chemical change

**Disclaimer**

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**End of Safety Data Sheet**