

# **SAFETY DATA SHEET**

300 ULSW Arctic Shield<sup>™</sup> + Ultra Low Sulfur Pints

# Section 1. Identification

GHS product identifier	: 300 ULSW Arctic Shield <sup>™</sup> + Ultra Low Sulfur Pints
Other means of identification	: Not available.
Product type	: Liquid.
Identified uses	
Fuel additive for diesel and b	iodiesel fuels.
Supplier's details	: Schaeffer Mfg. Company 102 Barton Street Saint Louis, Missouri 63104 Tel: 314-865-4100 Fax: 314-865-4107 Toll Free: 1-800-325-9962 E-Mail: safety@schaefferoil.com Web: http://www.schaefferoil.com
Emergency telephone number (with hours of	: +1 314 865-4105 (24-hour response number)

operation)

## Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	<ul> <li>FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2</li> </ul>
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: Flammable liquid and vapor. Causes serious eye irritation.

## Section 2. Hazards identification

Precautionary statements	
General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non- sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash hands thoroughly after handling.
Response	: Collect spillage. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention. 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 attention.
Storage	: Store in a well-ventilated place. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
lazards not otherwise lassified	: None known.

## Section 3. Composition/information on ingredients

: Mixture

#### Substance/mixture

Ingredient name	%	CAS number	
Light aromatic petroleum naphtha	60 - 100	64742-95-6	
1,2,4-Trimethylbenzene	10 - 30	95-63-6	
Benzene, ethylenated, residues, distn. lights	10 - 30	178535-25-6	
Solvent naphtha (petroleum), heavy aromatic	10 - 30	64742-94-5	
Xylene	5 - 10	1330-20-7	
2-Butoxyethanol	5 - 10	111-76-2	
1,3,5-Triethylbenzene	1 - 5	102-25-0	
Ethylbenzene	1 - 5	100-41-4	
Naphthalene	1 - 5	91-20-3	

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

Eye contact	<ul> <li>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.</li> </ul>
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open

# Section 4. First aid measures

	airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Flush contaminated skin with plenty of water. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

Causes serious eye irritation.	
May cause respiratory irritation.	
Causes skin irritation.	
May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomad	:h.
<u>IS</u>	
Adverse symptoms may include the following: pain or irritation watering redness	
Adverse symptoms may include the following: respiratory tract irritation coughing	
Adverse symptoms may include the following: irritation redness	
Adverse symptoms may include the following: nausea or vomiting	
attention and special treatment needed, if necessary	
Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
No specific treatment.	
suspected that fumes are still present, the rescuer should wear an appropriate mas	k or
: tom : : : ! ! ! !	<ul> <li>Causes serious eye irritation.</li> <li>May cause respiratory irritation.</li> <li>Causes skin irritation.</li> <li>May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomactoms</li> <li>Adverse symptoms may include the following: pain or irritation watering redness</li> <li>Adverse symptoms may include the following: respiratory tract irritation coughing</li> <li>Adverse symptoms may include the following: irritation redness</li> <li>Adverse symptoms may include the following: irritation redness</li> <li>Adverse symptoms may include the following: irritation redness</li> <li>Adverse symptoms may include the following: nausea or vomiting</li> </ul>

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

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<u>Extinguishing media</u>	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet or water-based fire extinguishers.
Specific hazards arising from the chemical	: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	: Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

Personal precautions, prote	ctive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	<ul> <li>If specialized clothing is required to deal with the spillage, take note of any information Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".</li> </ul>
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
Methods and materials for o	ontainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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# Section 7. Handling and storage

Precautions for safe handling	1	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

### **Control parameters**

### **Occupational exposure limits**

Ingredient name	Exposure limits
Light aromatic petroleum naphtha	NIOSH REL (United States, 1/2013). TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist Manufacturer (United States). TWA: 40 ppm 8 hours.
1,2,4-Trimethylbenzene	ACGIH TLV (United States, 6/2013). TWA: 123 mg/m <sup>3</sup> 8 hours. TWA: 25 ppm 8 hours. NIOSH REL (United States, 4/2013). TWA: 125 mg/m <sup>3</sup> 10 hours.
	TWA: 25 ppm 10 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 25 ppm 8 hours. TWA: 125 mg/m <sup>3</sup> 8 hours.
Xylene	ACGIH TLV (United States, 6/2013). STEL: 651 mg/m <sup>3</sup> 15 minutes. STEL: 150 ppm 15 minutes. TWA: 434 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours. OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. TWA: 435 mg/m <sup>3</sup> 8 hours.
2-Butoxyethanol	<ul> <li>ACGIH TLV (United States, 6/2013). TWA: 20 ppm 8 hours.</li> <li>NIOSH REL (United States, 4/2013). Absorbed through skin. TWA: 24 mg/m<sup>3</sup> 10 hours. TWA: 5 ppm 10 hours.</li> <li>OSHA PEL (United States, 2/2013). Absorbed through skin. TWA: 240 mg/m<sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.</li> </ul>
Ethylbenzene	ACGIH TLV (United States, 6/2013). TWA: 20 ppm 8 hours. NIOSH REL (United States, 4/2013). STEL: 545 mg/m <sup>3</sup> 15 minutes. STEL: 125 ppm 15 minutes. TWA: 435 mg/m <sup>3</sup> 10 hours. TWA: 400 ppm 10 hours. OSHA PEL (United States, 2/2013). TWA: 435 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.
Naphthalene	ACGIH TLV (United States, 6/2013). Absorbed through skin. STEL: 79 mg/m³ 15 minutes. STEL: 15 ppm 15 minutes. TWA: 52 mg/m³ 8 hours. TWA: 10 ppm 8 hours. NIOSH REL (United States, 4/2013). STEL: 75 mg/m³ 15 minutes. STEL: 15 ppm 15 minutes. TWA: 50 mg/m³ 10 hours. TWA: 10 ppm 10 hours. OSHA PEL (United States, 2/2013). TWA: 50 mg/m³ 8 hours. TWA: 10 ppm 8 hours.

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

# Section 8. Exposure controls/personal protection

ndividual protection measu	<u>ires</u>	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

# Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Dark
Odor	: Strong aromatic solvent.
Odor threshold	: Not available.
рН	: Not applicable.
Melting point/ Dropping Point	: Not available.
Boiling point	: >87.77°C (>190°F)
Flash point	: Closed cup: 49°C (120.2°F) [Pensky-Martens.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.884
Solubility	: Dispersible in water.

# Section 9. Physical and chemical properties

Partition coefficient: n-	1	Not available.
octanol/water		
Auto-ignition temperature	1	Not available.
Decomposition temperature	1	Not available.
Viscosity	1	Not available.

# Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials and alkalis.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Light aromatic petroleum naphtha	LD50 Oral	Rat	8400 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	5 g/kg	-
Xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
2-Butoxyethanol	LC50 Inhalation Vapor	Rat	450 ppm	4 hours
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
-	LD50 Oral	Rat	3500 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Light aromatic petroleum naphtha	Eyes - Mild irritant	Rabbit	-	24 hours 100 µL	-
Solvent naphtha (petroleum), heavy aromatic	Skin - Mild irritant	Rabbit	-	24 hours 500 µL	-
Xylene	Eves - Mild irritant	Rabbit	-	87 mg	-
,	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	100%	-
2-Butoxyethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
Naphthalene	Skin - Mild irritant	Rabbit	-	495 mg	-
·	Skin - Severe irritant	Rabbit	-	24 hours 0.05 mL	-

### **Sensitization**

There is no data available.

### **Carcinogenicity**

There is no data available.

# Section 11. Toxicological information

<b>Classification</b>						
Product/ingredient name	OSHA	IARC	NTP			
Xylene 2-Butoxyethanol Ethylbenzene Naphthalene		3 3 2B 2B	- - - Reasona	ably anticipated to	o be a human carcinogen.	
Specific target organ toxicit	t <mark>y (single e</mark> )	<u>kposure)</u>				
Name				Category	Route of exposure	Target organs
1,2,4-Trimethylbenzene				Category 3	Not applicable.	Respiratory tract irritation
Specific target organ toxicit There is no data available.	ty (repeated	l exposure	<u>e)</u>			
Aspiration hazard					1	
Name					Result	
Light aromatic petroleum naphtha Solvent naphtha (petroleum), heavy	aromatic				ASPIRATION HAZARD - ( ASPIRATION HAZARD - (	
nformation on the likely outes of exposure	: Dermal	contact. E	ye contac	t. Inhalation. I	ngestion.	
otential acute health effects	_					
Eye contact	: Causes	-				
Inhalation	•	use respira	•	tion.		
Skin contact		skin irritat				
Ingestion	: May be	fatal if swa	allowed ar	nd enters airw	ays. Irritating to mout	h, throat and stomach
Symptoms related to the phy	vsical, chem	nical and t	oxicolog	ical characte	<u>ristics</u>	
Eye contact	: Adverse pain or i watering redness	rritation	s may inc	lude the follow	ving:	
Inhalation		ory tract irr		lude the follow	ving:	
Skin contact	: Adverse irritation redness	,	s may inc	lude the follow	ving:	
Ingestion		e symptom or vomiting		lude the follow	ving:	
Delayed and immediate effect	ts and also	chronic e	effects fro	om short and	long term exposure	1
Short term exposure Potential immediate effects	: No know	vn significa	ant effects	s or critical ha	zards.	
Potential delayed effects	: No know	vn significa	ant effects	s or critical ha	zards.	

Potential immediate : No known significant effects or critical hazards. effects

Long term exposure

Potential delayed effects : No known significant effects or critical hazards.

# Section 11. Toxicological information

Potential chronic health eff	ects	
General	: No known significant effects or critical hazards.	
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.	
Mutagenicity	: No known significant effects or critical hazards.	
Teratogenicity	: No known significant effects or critical hazards.	
Developmental effects	: No known significant effects or critical hazards.	
Fertility effects	: No known significant effects or critical hazards.	

### Numerical measures of toxicity

### Acute toxicity estimates

Route	ATE value
Oral	2982.7 mg/kg
Dermal	3031.2 mg/kg
Inhalation (gases)	79507.7 ppm
Inhalation (vapors)	53.45 mg/L

# Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
1,2,4-Trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus pectenicrus - Adult	48 hours
	Acute LC50 22.4 mg/L Fresh water	Fish - Tilapia zillii	96 hours
Xylene	Acute IC50 10 mg/L	Algae	72 hours
	Acute LC50 8500 µg/I Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
2-Butoxyethanol	Acute EC50 >1000 mg/L Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000 mg/L Marine water	Crustaceans - Chaetogammarus marinus - Young	48 hours
	Acute LC50 1250000 µg/l Marine water	Fish - Menidia beryllina	96 hours
Ethylbenzene	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 2970 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 5200 µg/I Marine water	Crustaceans - Americamysis bahia	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
Naphthalene	Acute EC50 1600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 2350 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 213 µg/l Fresh water	Fish - Melanotaenia fluviatilis - Larvae	96 hours
	Chronic NOEC 0.67 ppm Fresh water	Fish - Oncorhynchus kisutch	40 days

### Persistence and degradability

There is no data available.

### **Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
1,2,4-Trimethylbenzene	3.63	243	low
Benzene, ethylenated, residues, distn. lights	3.43 to 6.5	-	high
Solvent naphtha (petroleum), heavy aromatic	2.8 to 6.5	99 to 5780	high
Xylene	3.12	8.1 to 25.9	low
2-Butoxyethanol	0.81	-	low
Ethylbenzene	3.6	-	low
Naphthalene	3.4	36.5 to 168	low

## Section 12. Ecological information

**Mobility in soil** 

Soil/water partition coefficient (Koc)

: Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 13. Disposal considerations

### United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Xylene	1330-20-7	Listed	U239
Naphthalene	91-20-3	Listed	U165

# 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1993	FLAMMABLE LIQUIDS, N. O.S. (Light aromatic petroleum naphtha, 1,2, 4-Trimethylbenzene). Marine pollutant (Benzene, ethylenated, residues, distn. lights, 1,3, 5-Triethylbenzene) RQ (Xylene, Naphthalene)	3	111		This product may be re- classified as "Combustible Liquid," unless transported by vessel or aircraft. Non- bulk packages (less than or equal to 119 gal) of combustible liquids, that are marine pollutants, are not regulated as hazardous materials in package sizes less than the product reportable quantity, unless transported by vessel. The marine pollutant mark is not required when transported on inland waterways in sizes of $\leq 5$ L or $\leq 5$ kg or by road, rail, or inland air in non-bulk sizes. <b>Reportable quantity</b> At all time please check for possible RQ (Reportable Quantities)
IMDG Class	UN1993	FLAMMABLE LIQUIDS, N. O.S. (Light aromatic petroleum naphtha, 1,2, 4-Trimethylbenzene). Marine pollutant (1,2, 4-Trimethylbenzene, Benzene, ethylenated, residues, distn. lights)	3	III		The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
IATA-DGR Class	UN1993	FLAMMABLE LIQUIDS, N. O.S. (Light aromatic petroleum naphtha, 1,2, 4-Trimethylbenzene)	3			The environmentally hazardous substance mark may appear if required by other transportation regulations.

PG\* : Packing group

**AERG** : 128

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

# Section 15. Regulatory information

U.S. Federal regulations		TSCA 8	(a) PAIR: Na	phthalene	•				
		TSCA 8(a) CDR Exempt/Partial exemption: Not determined							
		United \$	listed or exemp	oted.					
		Clean Water Act (CWA) 307: Ethylbenzene; Naphthalene							
		Clean W	Vater Act (C)	<b>NA) 311</b> :	Xylene; Ethylt	penzene; Naph	nthalene		
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	:	Listed							
Clean Air Act Section 602 Class I Substances	:	Not liste	d						
Clean Air Act Section 602 Class II Substances	:	Not liste	d						
DEA List I Chemicals (Precursor Chemicals)	:	Not liste	d						
DEA List II Chemicals (Essential Chemicals)	:	Not liste	d						
<u>SARA 302/304</u>									
Composition/information	on	<u>ingredie</u>	<u>nts</u>						
No products were found.									
SARA 304 RQ	:	Not app	licable.						
<u>SARA 311/312</u>									
Classification	:		ard ate (acute) he l (chronic) he						
Composition/information	on	<u>ingredie</u>	<u>nts</u>						
Name			%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard	

1,2,4-Trimethylbenzene	10 - 30	Yes.	No.	No.	Yes.	No.
Benzene, ethylenated, residues, distn.	10 - 30	No.	No.	No.	Yes.	No.
lights						
Xylene	5 - 10	Yes.	No.	No.	Yes.	No.
2-Butoxyethanol	5 - 10	No.	No.	No.	Yes.	No.
1,3,5-Triethylbenzene	1 - 5	Yes.	No.	No.	Yes.	No.
Ethylbenzene	1 - 5	Yes.	No.	No.	Yes.	Yes.
Naphthalene	1 - 5	Yes.	No.	No.	Yes.	Yes.
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### SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	1,2,4-Trimethylbenzene	95-63-6	10 - 30
	Xylene	1330-20-7	5 - 10
	2-Butoxyethanol	111-76-2	5 - 10
	Ethylbenzene	100-41-4	1 - 5
	Naphthalene	91-20-3	1 - 5
Supplier notification	1,2,4-Trimethylbenzene	95-63-6	10 - 30
	Xylene	1330-20-7	5 - 10
	2-Butoxyethanol	111-76-2	5 - 10
	Ethylbenzene	100-41-4	1 - 5
	Naphthalene	91-20-3	1 - 5

### Section 15. Regulatory information

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

#### **State regulations**

Massachusetts	<ul> <li>The following components are listed: 1,2,4-Trimethylbenzene; Xylene; Ethylbenzene; Naphthalene; 2-Butoxyethanol</li> </ul>
New York	: The following components are listed: Xylene; Cumene; Ethylbenzene; Naphthalene
New Jersey	<ul> <li>The following components are listed: 1,2,4-Trimethylbenzene; Xylene; Cumene; Ethylbenzene; Naphthalene; 2-Butoxyethanol</li> </ul>
Pennsylvania	<ul> <li>The following components are listed: 1,2,4-Trimethylbenzene; Xylene; Cumene; Ethylbenzene; Naphthalene; 2-Butoxyethanol</li> </ul>

### California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Ethylbenzene	Yes.	No.	41 μg/day (ingestion) 54 μg/day (inhalation)	No.
Naphthalene	Yes.	No.	Yes.	No.
Cumene	Yes.	No.	No.	No.

### Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health: 2 \* Flammability: 2 Physical hazards: 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller.

The customer is responsible for determining the PPE code for this material.

#### National Fire Protection Association (U.S.A.)

#### Health: 2 Flammability: 2 Instability: 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

US Tariff Heading Number	: 3811.90.0000
Schedule B Code	: 3811.90.0000
<u>History</u>	
Date of issue mm/dd/yyyy	: 05/15/2014
Version	: 1
Revised Section(s)	: Not applicable.
Prepared by	: KMK Regulatory Services Inc.

## Section 16. Other information

Although the information and recommendations set forth herein (hereafter referred to as information) are presented in good faith and believed to be accurate and factual as of the date hereof, Schaeffer Mfg. Company makes no representation as to the completeness or accuracy thereof. Information is supplied upon the condition that the person receiving the same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will Schaeffer Mfg. Company be responsible for damages of any natures whatsoever resulting from the use or reliance upon information. No representation or warranty, either expressed or implied, of merchantability or fitness for a particular purpose is made with respect to information of the product to which the information refers. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.



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