SECTION 1 – PRODUCT IDENTIFICATION

Product Identifier

Product Name: VaproTak™ SB

Other means of identification

Other Names/Synonyms: Part No. 60404625

Recommended use of the chemical and restrictions on use

Recommended use: Restricted to professional users as a liquid adhesive for self-adhered air barriers for use in building construction.

Uses advised against: No information available

Details of the supplier of the safety data sheet

Supplier Address: VAPROSHIELD, LLC
915 26TH Ave. NW, #C-5
Gig Harbor, WA 9335
866-731-7663

Emergency telephone number

Product Information: 8:00 AM – 5:00 PM PST Monday-Friday 1-866-731-7663

24 hour Emergency Contact: 24/7 CHEMTREC: 1-800-424-9300 or 1-703-527-3887

SECTION 2 – HAZARDS IDENTIFICATION

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification: TOXIC TO REPRODUCTION (Unborn child) – Category 2
AQUATIC HAZARD (ACUTE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 2

Flammable Liquids	Category 2
Skin Corrosion/Irritation	Category 2
Reproductive toxicity (fertility)	Category 2
Reproductive toxicity (unborn child)	Category 2
Specific Target Organ toxicity (single exposure) [narcotic effects]	Category 3
Specific Target Organ toxicity (repeated exposure)	Category 2
Aspiration Hazard	Category 1
Aquatic Toxicity (chronic)	Category 2

Label Elements

EMERGENCY OVERVIEW:

Signal word: Danger

Hazard statements

Highly flammable liquid and vapor.
Causes skin irritation.
Suspected of damaging fertility or the unborn child. May be fatal if swallowed and enters airways.
May cause drowsiness and dizziness.
May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

Appearance: Red **Physical state**: Liquid **Odor:** Hydrocarbon [strong]

PRECAUTIONARY STATEMENTS:

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, sparks, open flames and hot surfaces. - 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. Do not breathe vapor. Wash hands thoroughly after handling.

RESPONSE: Collect spillage. Get medical attention if you feel unwell. 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.

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

DISPOSAL: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified (US): None known.

PHYSICAL DESCRIPTION: This product is a liquid adhesive.

SECTION 3 – COMPOSITION/INFORMATION

Component	CAS-No.	Weight - %
Toluene	108-88-3	30 - 60 %
n-Hexane	110-54-3	30 - 60 %

The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200 or is due to batch variation.
Occupational exposure limits, if available are listed in section 8.
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.

SECTION 4 – FIRST AID MEASURES

Emergency Overview:

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. 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 airway.

SKIN EXPOSURE: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 20 minutes. Get medical attention.

EYE EXPOSURE: 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 if irritation occurs.

INGESTION: 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: Causes serious eye irritation.

Inhalation: Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.

Skin contact: Causes skin irritation.

Ingestion: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation: Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact: Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
increase in fetal deaths
skeletal malformation.

Ingestion: Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

SECTION 5 – FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Use an extinguished agent suitable for the surrounding fire.

Unsuitable extinguishing media: Do not use water jet or water-based fire extinguishers.

Specific hazards arising from the chemical: Highly flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products: Decomposition products may include the following materials:
Carbon dioxide
carbon monoxide

Special protective equipment: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in a positive pressure mode.

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.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures.

For non-emergency personal: 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unstable materials. See also the information in "For non-emergency personnel."

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 containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. 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. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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.

SECTION 7 – HANDLING AND STORAGE

Precautions, protective equipment and emergency procedures for safe handling

For non-emergency personnel: Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. 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: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

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).

Precautions, protective equipment and emergency procedures for safe handling

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.

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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. Store locked up. 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.
handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits

Chemical Name	Exposure limits
Toluene	**NIOSH REL (United States, 6/2009).** STEL: 560 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 375 mg/m³ 10 hours. TWA: 100 ppm 10 hours. **OSHA PEL Z2 (United States, 11/2006).** AMP: 500 ppm 10 minutes. CEIL: 300 ppm TWA: 200 ppm 8 hours. **ACGIH TLV (United States, 3/2012).** TWA: 20 ppm 8 hours.
n-Hexane	**ACGIH TLV (United States, 3/2012). Absorbed through skin.** TWA: 50 ppm 8 hours. **NIOSH REL (United States, 6/2009).** TWA: 180 mg/m³ 10 hours. TWA: 50 ppm 10 hours. **OSHA PEL (United States, 6/2010).** TWA: 1800 mg/m³ 8 hours. TWA: 500 ppm 8 hours.

Appropriate Engineering: 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.

Individual Protection Measures

Hygiene Measure 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 risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases and 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

Form:	Liquid
Color:	Red
Odor:	Hydrocarbon. [Strong]
pH:	Not available
Melting/freezing point:	Not available
Boiling point:	67°C (152.6°F)
Flash point:	Closed cup: -19.4°C (-2.9°F) [Tagliabue.]
Burning time:	Not applicable.
Burning rate:	Not applicable.
Evaporation rate:	4.5 (ether (anhydrous) = 1)
Flammability (solid, gas):	Not available
Lower and upper explosive (flammable) limits:	Lower 1.2% Upper 7.5%
Vapor pressure:	20.3 kPa (152 mm Hg) [room temperature]
Vapor density	3.5 [Air = 1]
Relative density	0.9
Solubility	Partially soluble in the following materials: cold water and hot water.
Partition coefficient n- octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
SADT:	Not available
Viscosity:	Not available
VOC:	527 g/L

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: This product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reaction 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. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 – TOXICOLOGY INFORMATION

Information on toxicology effects
Acute toxicity

Product/ingredient	Result	Species	Dose	Exposure
Toluene	LD50 Inhalation Vapor LC50 Oral	Rat Rat	49 g/m^3 636 mg/m^3	4 hours -
n-Hexane	LD50 Inhalation Gas LC50 Oral	Rat	48000 ppm 15840 mg/kg	4 hours -

Irritation/Corrosion

Product/ingredient	Result	Species	Score	Exposure	Observation
Toluene	Eyes – Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Eyes – Mild irritant Eyes – Mild irritant Eyes – Severe irritant	Rabbit Rabbit Rabbit	- - -	870 µg 24 hours 2 mg 10 mg	- - -
	Skin – Mild irritant	Pig	-	24 hours 250 µL	-
	Skin – Mild irritant Skin – Moderate irritant	Rabbit Rabbit	- -	435 mg 500 mg	- -
	Skin – Moderate irritant	Rabbit	-	500 mg	-
n-Hexane	Eyes – Mild irritant	Rabbit	-	10 mg	-

Sensitization

Skin: There is no data available
Respiratory: There is no data available

Mutagenicity: There is no data available

Carcinogenicity:
Classification

Product/ingredient	OSHA	IARC	NTP
Toluene	-	3	-

Reproductive toxicity: There is no data available

Teratogenicity: There is no data available

Specific target organ toxicity (single exposure)

Product/ingredient	**Category**	**Route of exposure**	**Target organs**
Toluene n-Hexane	Category 3 Category 3	Not applicable Not applicable	Narcotic effects Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient	**Category**	**Route of exposure**	**Target organs**
Toluene n-Hexane	Category 2 Category 2	Not determined Not determined	Not determined Not determined

Aspiration hazard

Product/ingredient	**Results**
Toluene n-Hexane	Aspiration Hazard – Category 1 Aspiration Hazard – Category 1

Information on the likely routes of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation

Potential Acute Health Effects

Eye Contact Causes serious eye irritation

Inhalation Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.

Skin contact Causes skin irritation.

Ingestion Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye Contact Adverse symptoms may include the following:
pain or irritation
watering
redness

Skin contact Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight

increase in fetal deaths
skeletal malformations

Ingestion Adverse symptoms may include the following:
nausea or vomiting
reduced fetal wight
increase in fetal deaths
skeletal malformations

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

Short Term

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

Long term exposure

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

Potential chronic health effects

General: No known significant effects or critical hazards
Carcinogenicity: No known significant effects or critical hazards
Mutagenicity: No known significant effects or critical hazards
Reproductive toxicity: No known significant effects or critical hazards

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient	Oral (mg/kg)	Dermal (mg/kg)	Inhalation gases (ppm)	Inhalation vapors (mg/l)	Inhalation dust and mists (Mg/l)
Toluene	N/A	N/A	N/A	49	N/A
Ammonia	350	N/A	N/A	N/A	N/A
Ammonia, anhydrous	N/A	N/A	2000	N/A	N/A
Diuron	1000	N/A	N/A	N/A	N/A
Carbendazim	N/A	2000	N/A	N/A	N/A

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity

Product/ingredient name	Results	Species	Exposure
Toluene	Acute EC50 11600 µg/L Fresh water	Crustaceans-Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/L Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Chronic NOEC 2 mg/L Fresh water	Daphnia - Daphnia magna	21 days
Ammonia	Acute LC50 37 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
Ammonia, anhydrous	Acute EC50 29.2 mg/L Marine water	Algae - Ulva fasciata - Zoea	96 hours
	Acute LC50 2080 µg/L Fresh	Crustaceans - Gammarus pulex Daphnia –	48 hours

	water Acute LC50 0.53 ppm Fresh water Acute LC50 300 µg/L Fresh water Chronic NOEC 0.204 mg/L Marine water	Daphnia magna Fish - Hypophthalmichthys nobilis Fish – Dicentrarchus labrax	48 hours 96 hours 62 days
Diuron	Acute EC50 2.26 µg/L Marine water Acute EC50 0.0007 mg/L Fresh water Acute EC50 0.005 mg/L Fresh water Acute EC50 8.4 ppm Fresh water Acute IC50 2.41 µg/L Marine water Acute LC50 380 µg/L Fresh water Acute LC50 500 µg/L Fresh water Chronic EC10 0.11 µg/L Fresh water Chronic NOEC 0.34 µg/L Marine water Chronic NOEC 26.4 ppb	Algae - Coccolithus huxleyi - Exponential growth phase Algae - Pseudokirchneriella subcapitata Aquatic plants - Lemna sp. Daphnia - Daphnia magna Aquatic plants - Halodule uninervis Crustaceans - Gammarus lacustris Fish - Morone saxatilis - Larvae Algae - Fragilaria capucina - Exponential growth phase Aquatic plants - Zostera muelleri Fish - Pimephales promelas	72 hours 96 hours 96 hours 48 hours 72 hours 48 hours 96 hours 96 hours 72 hours 60 days
Carbendazium	Acute EC50 19.0562 mg/L Fresh water Acute EC50 20 µg/L Fresh water Acute LC50 77 µg/L Fresh water Acute LC50 7 µg/L Fresh water Chronic EC10 10 µg/L Fresh water Chronic NOEC 3.1 ppb Fresh water	Algae - Scenedesmus acutus var. acutus Daphnia - Daphnia magna Crustaceans - Gammarus pulex - Juvenile (Fledgling, Hatchling, Weanling) Fish - Ictalurus punctatus - Yolk- sac fry Crustaceans - Gammarus pulex - Adult Daphnia - Daphnia magna	96 hours 48 hours 48 hours 96 hours 21 days 21 days

Persistence and degradability: There is no data available.

Bioaccumulative potential

Product/ingredient name	$^{Log}P_{ow}$	BCF	Potential
Toluene	2.73	90	low
Diuron	2.84	5.2	low
Carbendazim	1.52	2.51	low

Mobility in soil

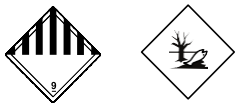
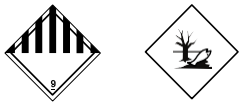
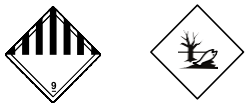
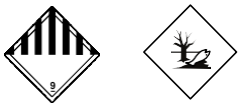
Soil/water partition coefficient (Koc): Not available

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

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14 – TRANSPORTATION INFORMATION

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN3082	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkanes, C14-C16, Chloro)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkanes, C14-C16, Chloro)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkanes, C14-C16, Chloro)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkanes, C14-C16, Chloro)
Transport hazard class(es)	9 	9 	9 	9 
Packing group	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes.

AERG : 171

Additional information

DOT Classification: Non-bulk packages of this product are not regulated as hazardous materials in package sizes less than the product reportable quantity, unless transported by inland waterway. The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg.
Reportable quantity 34722.2 lbs. / 15763.9 kg [502.34 gal / 1901.6 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

TDG Classification: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark).
Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.

IMDG: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packaging meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

IATA: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packaging meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Special precautions for users: **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 to IMO instruments: Not available.

SECTION 15 – REGULATORY INFORMATION

U.S. Federal regulations: **TSCA 8(a) PAIR**: Naphthalene; Acetaldehyde; Diuron
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
Clean Water Act (CWA) 307: Toluene; Zinc oxide; Naphthalene
Clean Water Act (CWA) 311: Toluene; Ammonia, anhydrous; Naphthalene; Quinoline; Formaldehyde; Ammonia; Maleic Anhydride; Acetaldehyde; Diuron

Clean Air Act Section 112 (b) Hazardous air pollutants (HAPs) Listed

Clean Air Act (CAA) Section 602 Class I Substances Not Listed

Clean Air Act (CAA) Section 602 Class II Substances Not Listed

DEA List I Chemicals (Precursor chemicals) Not Listed

DEA List II Chemicals (Essential Chemicals) Not Listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ (lbs)	SARA 302 TPQ (gallons)	SARA 304 RQ (lbs)	SARA 304 RQ (gallons)
Ammonia, anhydrous	≤0.3	Yes.	500	-	100	-
Formaldehyde	≤0.0025	Yes.	500	73.9	100	14.8
Ethylene oxide	≤0.001	Yes.	1000	-	10	-

SARA 304 RQ: 52045.4 lbs / 23628.6 kg [753 gal / 2850.3 L]

SARA 311/312

Classification: TOXIC TO REPRODUCTION (Unborn child) - Category 2

Composition/information on ingredients

Name	%	Classification
Toluene	≥0.3 - <1	FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1

State regulations

Massachusetts: None of the components are listed
New Jersey: None of the components are listed
New York: None of the components are listed
Pennsylvania: None of the components are listed

California Prop.65

⚠ **WARNING**: This product can expose you to chemicals including Anionic / Nonionic, Ethylene oxide and 4-Methylpentan-2-one, which are known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Diuron, Naphthalene, Quinoline and its strong acid salts, Formaldehyde, Acetaldehyde and 1,4-Dioxane, which are known to the State of California to cause cancer, and Toluene, Methanol and Ethanediol, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Toluene	-	Yes.
Diuron	-	-
Methanol	-	Yes.
Naphthalene	Yes.	-
Anionic / Nonionic	-	-
Quinoline and its strong acid salts	-	-
Formaldehyde	Yes.	-
Ethanediol	-	Yes.
Acetaldehyde	Yes.	-
Ethylene oxide	Yes.	Yes.
1,4-Dioxane	Yes.	-
4-Methylpentan-2-one	-	-

Canadian lists

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list

Australia:	Not determined.
Canada:	All components are listed or exempted.
China:	Not determined.
Europe:	Not determined.
Japan:	**Japan inventory (ENCS)**: Not determined. **Japan inventory (ISHL)**: Not determined.
New Zealand:	Not determined.
Philippines:	Not determined.
Republic of Korea:	Not determined.
Taiwan:	Not determined.
Thailand:	Not determined.
Turkey:	Not determined.
United States (TSCA 8b):	All components are active or exempted.
Viet Nam:	Not determined.

SECTION 16 – OTHER INFORMATION

Procedure used to derive the classification:

Classification	Justification
TOXIC TO REPRODUCTION (Unborn child) - Category 2 AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2	Calculation method Calculation method Calculation method

OTHER INFORMATION

Key to abbreviations: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

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Disclaimer

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End of Safety Data Sheet