

# SAFETY DATA SHEET

## Polyguard 600 liquid adhesive

### Section 1. Identification

<b>Product identifier</b>	: Polyguard 600 liquid adhesive
<b>Chemical name</b>	: Aromatic hydrocarbon adhesive
<b>Other means of identification</b>	: Not available.
<b>Product type</b>	: Liquid.
<b>Identified uses</b>	: Adhesive used to promote adhesion of Polyguards' pipeline coatings and tapes.
<b>Supplier/Manufacturer</b>	: Polyguard Products Inc. 4101 South Interstate 45 Ennis, TX 75119 Tel: 214-515-5000
<b>Supplier's details</b>	: IN-LINE PIGGING SOLUTIONS LTD. 220-40TH Avenue NE Calgary, AB T2E 2M7 Canada
<b>Emergency telephone number (with hours of operation)</b>	: CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887 24/7

### Section 2. Hazard identification

<b>Classification of the substance or mixture</b>	: FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) - Category 1 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3
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#### GHS label elements

##### Hazard pictograms



##### Signal word

: Danger



## Section 2. Hazard identification

**Hazard statements** : H225 - Highly flammable liquid and vapor.  
 H319 - Causes serious eye irritation.  
 H315 - Causes skin irritation.  
 H361 - Suspected of damaging the unborn child.  
 H351 - Suspected of causing cancer.  
 H304 - May be fatal if swallowed and enters airways.  
 H336 - May cause drowsiness or dizziness.  
 H372 - Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS))  
 H401 - Toxic to aquatic life.  
 H412 - Harmful to aquatic life with long lasting effects.

### Precautionary statements

**Prevention** : P201 - Obtain special instructions before use.  
 P202 - Do not handle until all safety precautions have been read and understood.  
 P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.  
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P271 - Use only outdoors or in a well-ventilated area.  
 P273 - Avoid release to the environment.  
 P260 - Do not breathe vapor.  
 P270 - Do not eat, drink or smoke when using this product.  
 P264 - Wash hands thoroughly after handling.

**Response** : P314 - Get medical attention if you feel unwell.  
 P308 + P313 - IF exposed or concerned: Get medical attention.  
 P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.  
 P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.  
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
 P302 + P352 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.  
 P332 + P313 - If skin irritation occurs: Get medical attention.  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337 + P313 - If eye irritation persists: Get medical attention.

**Storage** : P405 - Store locked up.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Other hazards which do not result in classification/ HHNOC/PHNOC** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Chemical name** : Aromatic hydrocarbon adhesive  
**Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : Not applicable.  
**Product code** : Not available.



## Section 3. Composition/information on ingredients

Ingredient name	% (w/w)	CAS number
Toluene	75 - 90	108-88-3
Butanone	1 - 3	78-93-3
Stoddard solvent	1 - 3	8052-41-3
Solvent naphtha (petroleum), medium aliph.	1 - 3	64742-88-7
Naphtha (petroleum), hydrotreated heavy	1 - 3	64742-48-9
Carbon black, respirable powder	1 - 3	1333-86-4
Naphthalene	0.1 - 0.2	91-20-3
Nonane	0.1 - 0.2	111-84-2

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** : 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.
- 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 airway.
- 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 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.

### 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 or dizziness.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

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



## Section 4. First-aid measures

- 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
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
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.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- 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

- : 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. This material is toxic to aquatic life. This material is harmful 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.



## Section 5. Fire-fighting measures

**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, protective 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** : 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). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

**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. 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 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. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.



## Section 7. Handling and storage

**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.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Toluene	<p><b>CA Alberta Provincial (Canada, 4/2009). Absorbed through skin.</b> 8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 188 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 5/2015).</b> TWA: 20 ppm 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 7/2015).</b> TWA: 20 ppm 8 hours.</p> <p><b>CA Quebec Provincial (Canada, 1/2014). Absorbed through skin.</b> TWAEV: 50 ppm 8 hours. TWAEV: 188 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada). Absorbed through skin.</b> STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.</p>
Butanone	<p><b>CA Alberta Provincial (Canada, 4/2009).</b> 15 min OEL: 300 ppm 15 minutes. 8 hrs OEL: 200 ppm 8 hours. 8 hrs OEL: 590 mg/m<sup>3</sup> 8 hours. 15 min OEL: 885 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA British Columbia Provincial (Canada, 5/2015).</b> TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes.</p> <p><b>CA Ontario Provincial (Canada, 7/2015).</b> TWA: 200 ppm 8 hours. TWA: 590 mg/m<sup>3</sup> 8 hours. STEL: 300 ppm 15 minutes. STEL: 885 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Quebec Provincial (Canada, 1/2014).</b> TWAEV: 50 ppm 8 hours. TWAEV: 150 mg/m<sup>3</sup> 8 hours. STEV: 100 ppm 15 minutes. STEV: 300 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Saskatchewan Provincial (Canada).</b> STEL: 300 ppm 15 minutes. TWA: 200 ppm 8 hours.</p>
Stoddard solvent	<p><b>CA Alberta Provincial (Canada, 4/2009).</b> 8 hrs OEL: 572 mg/m<sup>3</sup> 8 hours. 8 hrs OEL: 100 ppm 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 5/2015).</b> TWA: 290 mg/m<sup>3</sup> 8 hours. STEL: 580 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Ontario Provincial (Canada, 7/2015).</b> TWA: 525 mg/m<sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.</p> <p><b>CA Quebec Provincial (Canada, 1/2014).</b> TWAEV: 100 ppm 8 hours. TWAEV: 525 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada).</b> STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.</p>
Solvent naphtha (petroleum), medium aliph.	<p><b>CA Quebec Provincial (Canada, 1/2014).</b> TWAEV: 400 ppm 8 hours.</p>



## Section 8. Exposure controls/personal protection

Carbon black, respirable powder	<p>TWAEV: 1590 mg/m<sup>3</sup> 8 hours.  <b>CA British Columbia Provincial (Canada, 5/2015).</b>            TWA: 3 mg/m<sup>3</sup> 8 hours. Form: Inhalable  <b>CA Ontario Provincial (Canada, 7/2015).</b>            TWA: 3 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction  <b>CA Alberta Provincial (Canada, 4/2009).</b>            8 hrs OEL: 3.5 mg/m<sup>3</sup> 8 hours.  <b>CA Quebec Provincial (Canada, 1/2014).</b>            TWAEV: 3.5 mg/m<sup>3</sup> 8 hours.  <b>CA Saskatchewan Provincial (Canada).</b>            STEL: 7 mg/m<sup>3</sup> 15 minutes.            TWA: 3.5 mg/m<sup>3</sup> 8 hours.</p>
Naphthalene	<p><b>CA Alberta Provincial (Canada, 4/2009). Absorbed through skin.</b>            15 min OEL: 15 ppm 15 minutes.            8 hrs OEL: 10 ppm 8 hours.            8 hrs OEL: 52 mg/m<sup>3</sup> 8 hours.            15 min OEL: 79 mg/m<sup>3</sup> 15 minutes.  <b>CA British Columbia Provincial (Canada, 5/2015). Absorbed through skin.</b>            TWA: 10 ppm 8 hours.            STEL: 15 ppm 15 minutes.  <b>CA Ontario Provincial (Canada, 7/2015).</b>            TWA: 10 ppm 8 hours.            TWA: 52 mg/m<sup>3</sup> 8 hours.            STEL: 15 ppm 15 minutes.            STEL: 79 mg/m<sup>3</sup> 15 minutes.  <b>CA Quebec Provincial (Canada, 1/2014).</b>            TWAEV: 10 ppm 8 hours.            TWAEV: 52 mg/m<sup>3</sup> 8 hours.            STEV: 15 ppm 15 minutes.            STEV: 79 mg/m<sup>3</sup> 15 minutes.  <b>CA Saskatchewan Provincial (Canada). Absorbed through skin.</b>            STEL: 15 ppm 15 minutes.            TWA: 10 ppm 8 hours.</p>
Nonane	<p><b>CA Alberta Provincial (Canada, 4/2009).</b>            8 hrs OEL: 1050 mg/m<sup>3</sup> 8 hours.            8 hrs OEL: 200 ppm 8 hours.  <b>CA British Columbia Provincial (Canada, 5/2015).</b>            TWA: 200 ppm 8 hours.  <b>CA Ontario Provincial (Canada, 7/2015).</b>            TWA: 200 ppm 8 hours.            TWA: 1050 mg/m<sup>3</sup> 8 hours.  <b>CA Quebec Provincial (Canada, 1/2014).</b>            TWAEV: 200 ppm 8 hours.            TWAEV: 1050 mg/m<sup>3</sup> 8 hours.  <b>CA Saskatchewan Provincial (Canada).</b>            STEL: 250 ppm 15 minutes.            TWA: 200 ppm 8 hours.</p>

### 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.

### Individual protection measures

#### 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.



## Section 8. Exposure controls/personal protection

- 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.
- 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** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Black.
- Odor** : Hydrocarbon. [Strong]
- Odor threshold** : Not applicable.
- pH** : Not applicable.
- Melting point** : Not applicable.
- Boiling point** : 41°C (105.8°F)
- Flash point** : Open cup: -8.33°C (17°F) [Cleveland.]
- Evaporation rate** : 4.5 (ether (anhydrous) = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 1.2%  
Upper: 9%
- Vapor pressure** : 20.3 kPa (152 mm Hg) [room temperature]
- Vapor density** : 3.5 [Air = 1]
- Relative density** : 0.9
- Solubility** : Partially soluble in water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : 547°C (1016.6°F)
- Decomposition temperature** : Not available.
- Viscosity** : 73-80 KU
- Volatility** : Not available.
- VOC (w/w)** : 718 g/l



## 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. 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. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Toluene	LC50 Inhalation Vapor	Rat	49 g/m <sup>3</sup>	4 hours
Butanone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
Naphtha (petroleum), hydrotreated heavy	LD50 Oral	Rat	>6 g/kg	-
Carbon black, respirable powder	LD50 Oral	Rat	>15400 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-
Nonane	LC50 Inhalation Gas.	Rat	3200 ppm	4 hours
	LC50 Inhalation Vapor	Rat	17000 mg/m <sup>3</sup>	4 hours

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Eyes - Mild irritant	Rabbit	-	870 µg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Pig	-	24 hours 250 µL	-
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Skin - Moderate irritant	Rabbit	-	500 mg	-
Butanone	Skin - Mild irritant	Rabbit	-	24 hours 14 mg	-
Stoddard solvent	Eyes - Mild irritant	Human	-	100 ppm	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Naphthalene	Skin - Mild irritant	Rabbit	-	495 mg	-
Nonane	Skin - Mild irritant	Pig	-	24 hours 250 µL	-
	Skin - Moderate irritant	Rat	-	96 hours 300 µL	-

#### Sensitization

There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

#### Classification



## Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Toluene	-	3	-	A4	-	-
Carbon black, respirable powder	-	2B	-	A3	-	+
Naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.	A3	-	-

### Reproductive toxicity

There is no data available.

### Teratogenicity

There is no data available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 3	Not applicable.	Narcotic effects
Butanone	Category 3	Not applicable.	Narcotic effects
Nonane	Category 3	Not applicable.	Narcotic effects

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 2	Not determined	Not determined
Stoddard solvent	Category 1	Not determined	central nervous system (CNS)
Solvent naphtha (petroleum), medium aliph.	Category 1	Not determined	central nervous system (CNS)

### Aspiration hazard

Name	Result
Aromatic hydrocarbon adhesive	ASPIRATION HAZARD - Category 1
Toluene	ASPIRATION HAZARD - Category 1
Stoddard solvent	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), medium aliph.	ASPIRATION HAZARD - Category 1
Naphtha (petroleum), hydrotreated heavy	ASPIRATION HAZARD - Category 1
Nonane	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

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



## Section 11. Toxicological information

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

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- 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** : Causes damage to organs through prolonged or repeated exposure.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : Suspected of damaging the unborn child.
- 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	170000 mg/kg



## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	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
Butanone	Chronic NOEC 2 mg/L Fresh water	Daphnia - Daphnia magna	21 days
	Acute EC50 >500000 µg/L Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 5091000 µg/L Fresh water	Daphnia - Daphnia magna - Larvae	48 hours
Carbon black, respirable powder	Acute LC50 3220000 µg/L Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 37.563 mg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	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
Naphthalene	Acute LC50 213 µg/L Fresh water	Fish - Melanotaenia fluviatilis - Larvae	96 hours

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Toluene	2.73	90	low
Butanone	0.3	-	low
Stoddard solvent	3.16 to 7.06	-	high
Naphtha (petroleum), hydrotreated heavy	-	10 to 2500	high
Naphthalene	3.4	36.5 to 168	low
Nonane	5.65	105	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : There is no data 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 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 unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.



## Section 14. Transport information

	TDG Classification	IMDG	IATA
UN number	UN1139	UN1139	UN1139
UN proper shipping name	COATING SOLUTION	COATING SOLUTION	COATING SOLUTION
Transport hazard class(es)	3 	3 	3 
Packing group	II	II	II
Environmental hazards	No.	No.	No.
Additional information	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).	<b>Emergency schedules (EmS)</b> F-E, S-E	-

AERG : 127

**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.

## Section 15. Regulatory information

### Canadian lists

**Canadian NPRI** : The following components are listed: Toluene; Naphtha (petroleum), hydrotreated heavy; Solvent naphtha (petroleum), medium aliph.; Stoddard solvent; Butanone

**CEPA Toxic substances** : The following components are listed: Naphthalene

**Canada inventory** : All components are listed or exempted.

## Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) - Category 1 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Expert judgment Calculation method Calculation method

### History

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## Section 16. Other information

<b>Prepared by</b>	: KMK Regulatory Services Inc.
<b>Key to abbreviations</b>	: 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) UN = United Nations HPR = Hazardous Products Regulations

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