

# SAFETY DATA SHEET

## Splice Cement



### Section 1. Identification

**GHS product identifier** : Splice Cement  
**Product code** : 98-250, 98-872  
**Other means of identification** : NR Splice Cement  
**Product type** : Liquid.

#### Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** : Rubber adhesive.

**Manufacturer** : Patch Rubber Company  
 100 Patch Rubber Road  
 Weldon, NC 27890  
 United States  
 Phone: (252)536-2574

**Emergency telephone number (with hours of operation)** : CHEMTREC, U.S. : 1-800-424-9300 International: +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 of the substance or mixture** : FLAMMABLE LIQUIDS - Category 2  
 SKIN CORROSION/IRRITATION - Category 2  
 RESPIRATORY SENSITIZATION - Category 1  
 SKIN SENSITIZATION - Category 1  
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
 ASPIRATION HAZARD - Category 1  
 AQUATIC HAZARD (ACUTE) - Category 2  
 AQUATIC HAZARD (LONG-TERM) - Category 2

#### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H225 - Highly flammable liquid and vapor.  
 H315 - Causes skin irritation.  
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H317 - May cause an allergic skin reaction.  
 H304 - May be fatal if swallowed and enters airways.  
 H336 - May cause drowsiness or dizziness.  
 H411 - Toxic to aquatic life with long lasting effects.

#### Precautionary statements



## Section 2. Hazards identification

- Prevention**
- : P280 - Wear protective gloves. Wear eye or face protection.
  - P284 - Wear respiratory protection.
  - P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
  - P242 - Use only non-sparking tools.
  - P243 - Take precautionary measures against static discharge.
  - P233 - Keep container tightly closed.
  - P271 - Use only outdoors or in a well-ventilated area.
  - P273 - Avoid release to the environment.
  - P261 - Avoid breathing vapor.
  - P264 - Wash hands thoroughly after handling.
  - P272 (OSHA) - Contaminated work clothing must not be allowed out of the workplace.
- Response**
- : P391 - Collect spillage.
  - P304 + P341 (OSHA) + P312 - IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
  - P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or physician.
  - 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 or shower.
  - P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.
  - P333 + P313 - If skin irritation or rash occurs: Get medical attention.
- Storage**
- : P405 - Store locked up.
  - P403 - Store in a well-ventilated place.
  - P235 - Keep cool.
- Disposal**
- : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified**
- : None known.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : NR Splice Cement

Ingredient name	%	CAS number
Naphtha (petroleum), hydrotreated light	≥50 - ≤75	64742-49-0
Rubber, natural	≥10 - ≤25	9006-04-6
Carbon black, non-respirable	≥3 - ≤5	1333-86-4
Heptane	≥1 - ≤3	142-82-5
Zinc oxide	≥0.3 - ≤1	1314-13-2
Rosin	≤0.3	8050-09-7
di(Benzothiazol-2-yl) Disulphide	≤0.3	120-78-5
4-(1,1,3,3-Tetramethylbutyl)phenol	≤0.3	140-66-9

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** : 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. Loosen tight clothing such as a collar, tie, belt or waistband. In the event of any complaints or symptoms, avoid further exposure.
- Skin contact** : Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. 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

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- 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
- Inhalation** : Adverse symptoms may include the following:  
wheezing and breathing difficulties  
asthma  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness

## Section 4. First aid measures

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

### 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. 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 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** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. 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, 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".

## Section 6. Accidental release measures

**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

**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). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. 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. 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. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### United States

##### Occupational exposure limits

Ingredient name	Exposure limits
Naphtha (petroleum), hydrotreated light Rubber, natural	None. <b>ACGIH TLV (United States, 3/2017). Absorbed through skin. Skin sensitizer. Inhalation sensitizer.</b> TWA: 0.0001 mg/m <sup>3</sup> , (as inhalable allergenic proteins) 8 hours. Form: Inhalable fraction
Carbon black, non-respirable	<b>NIOSH REL (United States, 10/2016).</b> TWA: 3.5 mg/m <sup>3</sup> 10 hours. TWA: 0.1 mg of PAHs/cm <sup>3</sup> 10 hours. <b>OSHA PEL (United States, 6/2016).</b> TWA: 3.5 mg/m <sup>3</sup> 8 hours.
Heptane	<b>ACGIH TLV (United States, 3/2017).</b> TWA: 3 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction <b>ACGIH TLV (United States, 3/2017).</b> TWA: 400 ppm 8 hours. TWA: 1640 mg/m <sup>3</sup> 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m <sup>3</sup> 15 minutes. <b>NIOSH REL (United States, 10/2016).</b> TWA: 85 ppm 10 hours. TWA: 350 mg/m <sup>3</sup> 10 hours. CEIL: 440 ppm 15 minutes. CEIL: 1800 mg/m <sup>3</sup> 15 minutes. <b>OSHA PEL (United States, 6/2016).</b> TWA: 500 ppm 8 hours. TWA: 2000 mg/m <sup>3</sup> 8 hours.
Zinc oxide	<b>NIOSH REL (United States, 10/2016).</b> CEIL: 15 mg/m <sup>3</sup> Form: Dust TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Dust and fumes STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Fertilizer and/or industrial use. <b>OSHA PEL (United States, 6/2016).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Fertilizer and/or industrial use. TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust <b>ACGIH TLV (United States, 3/2017).</b> TWA: 2 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Respirable fraction
Rosin	<b>ACGIH TLV (United States, 3/2017). Skin sensitizer. Inhalation sensitizer.</b>
di(Benzothiazol-2-yl) Disulphide 4-(1,1,3,3-Tetramethylbutyl)phenol	None. None.

#### Canada

##### Occupational exposure limits

Ingredient name	Exposure limits
Rubber, natural	<b>CA British Columbia Provincial (Canada, 7/2016). Absorbed through skin. Skin sensitizer.</b> TWA: 0.001 mg/m <sup>3</sup> , (as total proteins) 8 hours. Form: Inhalable <b>CA Ontario Provincial (Canada, 7/2015). Absorbed through skin.</b> TWA: 0.0001 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction <b>CA Alberta Provincial (Canada, 4/2009). Absorbed through skin.</b> 8 hrs OEL: 0.001 mg/m <sup>3</sup> , (as total proteins) 8 hours. <b>CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin. Skin sensitizer.</b> STEL: 0.003 mg/m <sup>3</sup> , (measured as total proteins) 15 minutes. Form: Inhalable fraction TWA: 0.001 mg/m <sup>3</sup> , (measured as total proteins) 8 hours. Form: Inhalable fraction
Carbon black, non-respirable	<b>CA British Columbia Provincial (Canada, 7/2016).</b> TWA: 3 mg/m <sup>3</sup> 8 hours. Form: Inhalable <b>CA Alberta Provincial (Canada, 4/2009).</b> 8 hrs OEL: 3.5 mg/m <sup>3</sup> 8 hours.



## Section 8. Exposure controls/personal protection

Heptane	<p><b>CA Quebec Provincial (Canada, 1/2014).</b> TWA<sub>EV</sub>: 3.5 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 7/2015).</b> TWA: 3 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 7 mg/m<sup>3</sup> 15 minutes. TWA: 3.5 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Alberta Provincial (Canada, 4/2009).</b> 15 min OEL: 2050 mg/m<sup>3</sup> 15 minutes. 8 hrs OEL: 1640 mg/m<sup>3</sup> 8 hours. 8 hrs OEL: 400 ppm 8 hours. 15 min OEL: 500 ppm 15 minutes.</p> <p><b>CA British Columbia Provincial (Canada, 7/2016).</b> TWA: 400 ppm 8 hours. STEL: 500 ppm 15 minutes.</p> <p><b>CA Ontario Provincial (Canada, 7/2015).</b> TWA: 400 ppm 8 hours. STEL: 500 ppm 15 minutes.</p> <p><b>CA Quebec Provincial (Canada, 1/2014).</b> TWA<sub>EV</sub>: 400 ppm 8 hours. TWA<sub>EV</sub>: 1640 mg/m<sup>3</sup> 8 hours. STEV: 500 ppm 15 minutes. STEV: 2050 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 500 ppm 15 minutes. TWA: 400 ppm 8 hours.</p>
Zinc oxide	<p><b>CA Quebec Provincial (Canada, 1/2014).</b> TWA<sub>EV</sub>: 5 mg/m<sup>3</sup> 8 hours. Form: Fertilizer and/or industrial use. STEV: 10 mg/m<sup>3</sup> 15 minutes. Form: Fertilizer and/or industrial use.</p> <p><b>CA Alberta Provincial (Canada, 4/2009).</b> 8 hrs OEL: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable 15 min OEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Respirable</p> <p><b>CA British Columbia Provincial (Canada, 7/2016).</b> TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Respirable</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Respirable dust and fume. TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable dust and fume.</p> <p><b>CA Ontario Provincial (Canada, 7/2015).</b> TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Respirable fraction</p> <p><b>CA Quebec Provincial (Canada, 1/2014). Skin sensitizer.</b> TWA<sub>EV</sub>: 0.1 mg/m<sup>3</sup>, (formaldehyde) 8 hours.</p>
Rosin	

### 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. Contaminated work clothing should not be allowed out of the workplace. 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.

## Section 8. Exposure controls/personal protection

### 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**

- : 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

<b>Physical state</b>	: Liquid.
<b>Color</b>	: Black.
<b>Odor</b>	: Hydrocarbon.
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: Not available.
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: 93 to 99°C (199.4 to 210.2°F)
<b>Flash point</b>	: Closed cup: -9°C (15.8°F)
<b>Evaporation rate</b>	: 4.5 (Butyl acetate = 1)
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Lower: 1% Upper: 6.7%
<b>Vapor pressure</b>	: 6 kPa (45 mm Hg) [room temperature]
<b>Vapor density</b>	: 3 [Air = 1]
<b>Relative density</b>	: 0.7
<b>Solubility</b>	: Insoluble in water.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: 246°C (474.8°F)
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Flow time (ISO 2431)</b>	: 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. Do not allow vapor to accumulate in low or confined areas.
- Incompatible materials** : Highly reactive or incompatible with the following materials: oxidizing materials.
- 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
Carbon black, non-respirable	LD50 Oral	Rat	>15400 mg/kg	-
Heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	103 g/m <sup>3</sup>	4 hours
Rosin	LD50 Oral	Rat	7600 mg/kg	-
di(Benzothiazol-2-yl) Disulphide	LD50 Dermal	Rabbit	>7940 mg/kg	-
	LD50 Oral	Rat	>12 g/kg	-
4-(1,1,3,3-Tetramethylbutyl)phenol	LD50 Dermal	Rabbit	1880 mg/kg	-
	LD50 Oral	Rat	4600 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
4-(1,1,3,3-Tetramethylbutyl)phenol	Eyes - Severe irritant	Rabbit	-	24 hours 50 µg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-

#### Sensitization

There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

There is no data available.

#### Reproductive toxicity

There is no data available.

#### Teratogenicity

There is no data available.

#### Specific target organ toxicity (single exposure)

Name	Category	Target organs
Naphtha (petroleum), hydrotreated light	Category 3	Narcotic effects
Heptane	Category 3	Narcotic effects

#### Specific target organ toxicity (repeated exposure)

There is no data available.

## Section 11. Toxicological information

### Aspiration hazard

Name	Result
Naphtha (petroleum), hydrotreated light Heptane	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

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

### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- 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
- Inhalation** : Adverse symptoms may include the following:  
wheezing and breathing difficulties  
asthma  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

### 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** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.

## Section 11. Toxicological information

**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

There is no data available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Carbon black, non-respirable	Acute EC50 37.563 mg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
Heptane	Acute LC50 375000 µg/L Fresh water	Fish - Oreochromis mossambicus	96 hours
Zinc oxide	Acute IC50 1.85 mg/L Marine water	Algae - Skeletonema costatum	96 hours
	Acute IC50 46 µg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 98 µg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
4-(1,1,3,3-Tetramethylbutyl)phenol	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute EC50 140 µg/L Marine water	Algae - Skeletonema costatum	72 hours
	Acute LC50 0.42 mg/L Marine water	Crustaceans - Acartia tonsa - Adult	48 hours
	Acute LC50 0.011 mg/L Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 370 µg/L Fresh water	Fish - Danio rerio	96 hours
	Chronic NOEC 10 µg/L Marine water	Crustaceans - Tigriopus japonicus - Nauplii	21 days
	Chronic NOEC 12 µg/L Fresh water	Fish - Danio rerio - Egg	78 days

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Naphtha (petroleum), hydrotreated light	2.2 to 5.2	10 to 2500	high
Heptane	4.66	552	high
Zinc oxide	-	60960	high
Rosin	1.9 to 7.7	-	high
di(Benzothiazol-2-yl) Disulphide	4.5	1.4 to 51	low
4-(1,1,3,3-Tetramethylbutyl)phenol	4.8	740	high

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : 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

## Section 13. Disposal considerations

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

	DOT Classification	TDG Classification	IMDG	IATA
<b>UN number</b>	UN1133	UN1133	UN1133	UN1133
<b>UN proper shipping name</b>	ADHESIVES (Containing a flammable liquid)	ADHESIVES (Containing a flammable liquid)	ADHESIVES (Containing a flammable liquid). Marine pollutant (Naphtha (petroleum), hydrotreated light, Heptane)	ADHESIVES (Containing a flammable liquid)
<b>Transport hazard class(es)</b>	3 	3  	3  	3 
<b>Packing group</b>	II	II	II	II
<b>Environmental hazards</b>	No.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

**AERG : 128**

### Additional information

- DOT Classification** : **Special provisions** 383
- TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Emergency schedules** F-E, S-D
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

**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

- U.S. Federal regulations** : **TSCA 8(a) PAIR:** Heptane; Naphthalene; 4-(1,1,3,3-Tetramethylbutyl)phenol  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 307:** Toluene; Ethylbenzene; Benzene; Naphthalene; Zinc oxide  
**Clean Water Act (CWA) 311:** Toluene; Ethylbenzene; Benzene; Naphthalene; Formaldehyde

## Section 15. Regulatory information

**Clean Air Act Section 112** : Listed  
**(b) Hazardous Air Pollutants (HAPs)**  
**Clean Air Act Section 602** : Not listed  
**Class I Substances**  
**Clean Air Act Section 602** : Not listed  
**Class II Substances**  
**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		SARA 304 RQ	
		(lbs)	(gallons)	(lbs)	(gallons)
Formaldehyde	Yes.	500	73.9	100	14.8

**SARA 304 RQ** : 63071586.3 lbs / 28634500.2 kg [8595948.5 gal / 32539204.7 L]

### SARA 311/312

**Classification** : FLAMMABLE LIQUIDS - Category 2  
 SKIN CORROSION/IRRITATION - Category 2  
 RESPIRATORY SENSITIZATION - Category 1  
 SKIN SENSITIZATION - Category 1  
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
 ASPIRATION HAZARD - Category 1

#### Composition/information on ingredients

Name	Classification
Naphtha (petroleum), hydrotreated light	FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Rubber, natural	ASPIRATION HAZARD - Category 1 RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1
Heptane	FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Rosin	ASPIRATION HAZARD - Category 1 SKIN SENSITIZATION - Category 1
di(Benzothiazol-2-yl) Disulphide	SKIN SENSITIZATION - Category 1

### SARA 313

There is no data available.

#### State regulations

**Massachusetts** : The following components are listed: Heptane; Carbon black, non-respirable  
**New York** : None of the components are listed.  
**New Jersey** : The following components are listed: Heptane; Carbon black, non-respirable  
**Pennsylvania** : The following components are listed: Heptane; Carbon black, non-respirable

#### California Prop. 65

## Section 15. Regulatory information

**⚠ WARNING:** This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Ethylbenzene, Cumene, Naphthalene, Formaldehyde, which are known to the State of California to cause cancer, and Toluene, Methanol, 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](http://www.P65Warnings.ca.gov).

### Canada

#### Canadian lists

**Canadian NPRI** : The following components are listed: Heptane

**CEPA Toxic substances** : None of the components are listed.

**Canada inventory (DSL NDSL)** : All components are listed or exempted.

## Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
SKIN CORROSION/IRRITATION - Category 2	Calculation method
RESPIRATORY SENSITIZATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method
AQUATIC HAZARD (ACUTE) - Category 2	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 2	Calculation method

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**Prepared by** : KMK Regulatory Services Inc.

### Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.