

# SAFETY DATA SHEET

## 600 Liquid Adhesive Quick Dry

### Section 1. Identification

**GHS product identifier** : 600 Liquid Adhesive Quick Dry  
**Chemical name** : Aromatic hydrocarbon adhesive  
**Other means of identification** : Not available.

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

Adhesive for the metal surface and Polyguard membranes.

**Supplier's details** : Polyguard Products Inc.  
3801 South Interstate 45  
Ennis, TX 75119  
Tel: (800)541-4994

**Emergency telephone number (with hours of operation)** : CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887  
(24/7)

### 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  
SKIN SENSITIZATION - Category 1  
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) - Category 2  
ASPIRATION HAZARD - Category 1

#### GHS label elements

##### **Hazard pictograms**



##### **Signal word**

##### **Hazard statements**

: Danger  
Highly flammable liquid and vapor.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Suspected of damaging the unborn child.  
Suspected of causing cancer.  
May be fatal if swallowed and enters airways.  
May cause drowsiness and dizziness.  
May cause damage to organs through prolonged or repeated exposure.

#### Precautionary statements



## Section 2. Hazards identification

- 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. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
- Response** : 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 or rash 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** : 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.

| Ingredient name                               | %        | CAS number |
|-----------------------------------------------|----------|------------|
| Toluene                                       | 60 - 100 | 108-88-3   |
| Methyl ethyl ketone                           | 1 - 5    | 78-93-3    |
| Solvent naphtha (petroleum), medium aliphatic | 1 - 5    | 64742-88-7 |
| Carbon black                                  | 1 - 5    | 1333-86-4  |
| Magnesium oxide                               | 0.1 - 1  | 1309-48-4  |

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.



## Section 4. First aid measures

- 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 contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure.
- Ingestion** : 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. 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. May cause an allergic skin reaction.
- 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
- 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



## Section 4. First aid measures

- 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. 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 actions for fire-fighters** : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- 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).

### Methods and materials for containment and cleaning up



## Section 6. Accidental release measures

- 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.

## 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 should not be employed in any process in which this product is used. 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. 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.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name     | Exposure limits                                                                                                                                                                                                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Toluene             | <b>NIOSH REL (United States, 6/2009).</b><br>STEL: 560 mg/m <sup>3</sup> 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 375 mg/m <sup>3</sup> 10 hours.<br>TWA: 100 ppm 10 hours.<br><b>OSHA PEL Z2 (United States, 11/2006).</b><br>AMP: 500 ppm 10 minutes.<br>CEIL: 300 ppm<br>TWA: 200 ppm 8 hours.<br><b>ACGIH TLV (United States, 3/2012).</b><br>TWA: 20 ppm 8 hours. |
| Methyl ethyl ketone | <b>ACGIH TLV (United States, 3/2012).</b><br>STEL: 885 mg/m <sup>3</sup> 15 minutes.<br>STEL: 300 ppm 15 minutes.<br>TWA: 590 mg/m <sup>3</sup> 8 hours.                                                                                                                                                                                                                       |



## Section 8. Exposure controls/personal protection

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solvent naphtha (petroleum), medium aliphatic | <p>TWA: 200 ppm 8 hours.<br/> <b>NIOSH REL (United States, 6/2009).</b><br/>         STEL: 885 mg/m<sup>3</sup> 15 minutes.<br/>         STEL: 300 ppm 15 minutes.<br/>         TWA: 590 mg/m<sup>3</sup> 10 hours.<br/>         TWA: 200 ppm 10 hours.<br/> <b>OSHA PEL (United States, 6/2010).</b><br/>         TWA: 590 mg/m<sup>3</sup> 8 hours.<br/>         TWA: 200 ppm 8 hours.</p>                                                                                                                                                                                                                   |
| Carbon black                                  | <p><b>OSHA PEL (United States, 6/2010).</b><br/>         TWA: 100 ppm 8 hours.<br/>         TWA: 400 mg/m<sup>3</sup> 8 hours.<br/> <b>Manufacturer (United States).</b><br/>         TWA: 100 ppm 8 hours. Form: All forms.<br/> <b>ACGIH TLV (United States, 3/2012).</b><br/>         TWA: 3 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction<br/> <b>NIOSH REL (United States, 6/2009).</b><br/>         TWA: 3.5 mg/m<sup>3</sup> 10 hours.<br/>         TWA: 0.1 mg of PAHs/cm<sup>3</sup> 10 hours.<br/> <b>OSHA PEL (United States, 6/2010).</b><br/>         TWA: 3.5 mg/m<sup>3</sup> 8 hours.</p> |
| Magnesium oxide                               | <p><b>ACGIH TLV (United States, 3/2012).</b><br/>         TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction<br/> <b>OSHA PEL (United States, 6/2010).</b><br/>         TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total particulates</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. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### Skin protection

##### Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

##### Body protection

- : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

##### Other skin protection

- : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Respiratory protection

- : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.



## Section 9. Physical and chemical properties

### Appearance

|                                              |                                                                           |
|----------------------------------------------|---------------------------------------------------------------------------|
| Physical state                               | : Liquid.                                                                 |
| Color                                        | : Black.                                                                  |
| Odor                                         | : Hydrocarbon. [Strong]                                                   |
| Odor threshold                               | : Not applicable.                                                         |
| pH                                           | : Not applicable.                                                         |
| Melting point                                | : Not available.                                                          |
| Boiling point                                | : 41°C (105.8°F)                                                          |
| Flash point                                  | : Open cup: -8.33°C (17°F) [Cleveland.]                                   |
| 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%<br>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 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                                          | : 754 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  |
|                         | LD50 Oral             | Rat     | 636 mg/kg           | -        |
| Methyl ethyl ketone     | LD50 Dermal           | Rabbit  | 6480 mg/kg          | -        |
|                         | LD50 Oral             | Rat     | 2737 mg/kg          | -        |
| Carbon black            | LD50 Oral             | Rat     | >15400 mg/kg        | -        |

#### Irritation/Corrosion

| Product/ingredient name | Result                   | Species | Score | Exposure           | Observation |
|-------------------------|--------------------------|---------|-------|--------------------|-------------|
| Toluene                 | Eyes - Mild irritant     | Rabbit  | -     | 0.5 minutes 100 mg | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 20 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  | -     | 500 mg             | -           |
| Methyl ethyl ketone     | Skin - Mild irritant     | Rabbit  | -     | 24 hours 14 mg     | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500 mg    | -           |

#### Sensitization

**Skin** : There is no data available.

**Respiratory** : There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

##### Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| Toluene                 | -    | 3    | -   |
| Carbon black            | -    | 2B   | -   |

#### 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 |
| Methyl ethyl ketone | 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 |

#### Aspiration hazard

| Name                                          | Result                         |
|-----------------------------------------------|--------------------------------|
| Toluene                                       | ASPIRATION HAZARD - Category 1 |
| Solvent naphtha (petroleum), medium aliphatic | ASPIRATION HAZARD - Category 1 |

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



## Section 11. Toxicological information

### 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. May cause an allergic skin reaction.
- 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
- 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** : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- 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.

## Section 11. Toxicological information

**Target organs** : Contains material which may cause damage to the following organs: kidneys, lungs, the reproductive system, liver, peripheral nervous system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

### 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 433 ppm Marine water      | Algae - Skeletonema costatum                                             | 96 hours |
|                         | Acute EC50 12500 µg/l Fresh water    | Algae - Pseudokirchneriella subcapitata                                  | 72 hours |
|                         | 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 |
| Methyl ethyl ketone     | Acute LC50 5500 µg/l Fresh water     | Fish - Oncorhynchus kisutch - Fry                                        | 96 hours |
|                         | Chronic NOEC 500000 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata                                  | 96 hours |
|                         | Chronic NOEC 1000 µg/l Fresh water   | Daphnia - Daphnia magna                                                  | 21 days  |
|                         | Acute EC50 >500000 µg/l Marine water | Algae - Skeletonema costatum                                             | 96 hours |
|                         | Acute LC50 520000 µg/l Fresh water   | Daphnia - Daphnia magna                                                  | 48 hours |
|                         | Acute LC50 400 ppm Marine water      | Fish - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF         | Potential |
|-------------------------|--------------------|-------------|-----------|
| Toluene                 | 2.69               | 8.317637711 | low       |
| Methyl ethyl ketone     | 0.29               | -           | 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 should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor



## Section 13. Disposal considerations

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.

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

| Ingredient          | CAS #    | Status | Reference number |
|---------------------|----------|--------|------------------|
| Toluene             | 108-88-3 | Listed | U220             |
| Methyl ethyl ketone | 78-93-3  | Listed | U159             |

## Section 14. Transport information

|                            | DOT Classification                                                                                                                                                                                                                         | IMDG                                                                                   | IATA                                                                                     |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| UN number                  | UN1139                                                                                                                                                                                                                                     | UN1139                                                                                 | UN1139                                                                                   |
| UN proper shipping name    | COATING SOLUTION RQ(Toluene)                                                                                                                                                                                                               | COATING SOLUTION                                                                       | COATING SOLUTION                                                                         |
| Transport hazard class(es) | 3<br>                                                                                                                                                     | 3<br> | 3<br> |
| Packing group              | II                                                                                                                                                                                                                                         | II                                                                                     | II                                                                                       |
| Environmental hazards      | No.                                                                                                                                                                                                                                        | No.                                                                                    | No.                                                                                      |
| Additional information     | <b>Reportable quantity</b><br>1241.3 lbs / 563.56 kg [165.42 gal / 626.17 L]<br>Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. | <b>Emergency schedules (EmS)</b><br>F-E, S-E                                           | -                                                                                        |

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

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

## Section 15. Regulatory information

**U.S. Federal regulations :** **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  
**Clean Water Act (CWA) 311:** Toluene

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) :** Listed



## Section 15. Regulatory information

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Fire hazard  
Immediate (acute) health hazard  
Delayed (chronic) health hazard

#### Composition/information on ingredients

| Name                | %        | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|---------------------|----------|-------------|----------------------------|----------|---------------------------------|---------------------------------|
| Toluene             | 60 - 100 | Yes.        | No.                        | No.      | Yes.                            | Yes.                            |
| Methyl ethyl ketone | 1 - 5    | Yes.        | No.                        | No.      | Yes.                            | No.                             |
| Carbon black        | 1 - 5    | No.         | No.                        | No.      | No.                             | Yes.                            |
| Magnesium oxide     | 0.1 - 1  | No.         | No.                        | No.      | Yes.                            | No.                             |

### SARA 313

|                                        | Product name                   | CAS number          | %                 |
|----------------------------------------|--------------------------------|---------------------|-------------------|
| <b>Form R - Reporting requirements</b> | Toluene<br>Methyl ethyl ketone | 108-88-3<br>78-93-3 | 60 - 100<br>1 - 5 |
| <b>Supplier notification</b>           | Toluene<br>Methyl ethyl ketone | 108-88-3<br>78-93-3 | 60 - 100<br>1 - 5 |

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

### State regulations

**Massachusetts** : The following components are listed: Toluene; Methyl ethyl ketone; Carbon black

**New York** : The following components are listed: Toluene; Methyl ethyl ketone

**New Jersey** : The following components are listed: Toluene; Methyl ethyl ketone; Carbon black

**Pennsylvania** : The following components are listed: Toluene; Methyl ethyl ketone; Carbon black

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

| Ingredient name | Cancer | Reproductive | No significant risk level | Maximum acceptable dosage level                      |
|-----------------|--------|--------------|---------------------------|------------------------------------------------------|
| Toluene         | No.    | Yes.         | No.                       | 7000 µg/day (ingestion)<br>13000 µg/day (inhalation) |
| Carbon black    | Yes.   | No.          | No.                       | No.                                                  |
| Quartz          | Yes.   | No.          | No.                       | No.                                                  |

### International regulations



## Section 15. Regulatory information

|                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>International lists</b>                                     | : <b>Australia inventory (AICS):</b> All components are listed or exempted.<br><b>China inventory (IECSC):</b> All components are listed or exempted.<br><b>Japan inventory:</b> Not determined.<br><b>Korea inventory:</b> All components are listed or exempted.<br><b>Malaysia Inventory (EHS Register):</b> Not determined.<br><b>New Zealand Inventory of Chemicals (NZIoC):</b> All components are listed or exempted.<br><b>Philippines inventory (PICCS):</b> All components are listed or exempted.<br><b>Taiwan inventory (CSNN):</b> Not determined. |
| <b>Chemical Weapons Convention List Schedule I Chemicals</b>   | : Not listed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Chemical Weapons Convention List Schedule II Chemicals</b>  | : Not listed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Chemical Weapons Convention List Schedule III Chemicals</b> | : Not listed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Section 16. Other information

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

**Health :** 2 \* **Flammability :** 3 **Physical hazards :** 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

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

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

**Health :** 2 **Flammability :** 3 **Instability :** 0

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

### History

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Date of issue mm/dd/yyyy</b> | : 04/15/2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Date of previous issue</b>   | : 05/15/2011                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Version</b>                  | : 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Revised Section(s)</b>       | : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Prepared by</b>              | : KMK Regulatory Services Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Key to abbreviations</b>     | : ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = Intermediate Bulk Container<br>IMDG = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>UN = United Nations |



## Section 16. Other information

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

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.

