

# Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 07/08/2009

Reviewed on 07/08/2009

## 1 Identification of substance

**Trade name:** 010301 BLACK SILICONE COATING  
**Manufacturer/Supplier:** Design Engineering  
 604 Moore Road  
 Cleveland, OH 44012  
 phone: 800.264.9472 fax: 440.930.7967  
 www.DesignEngineering.com  
**Emergency information:** CHEMTEL 1-800-255-3924, 813-248-0585 \*if located outside the U.S.\*



**Design Engineering, Inc.**

## 2 Composition/Data on components

**Chemical Description:** This product is a mixture of the substances listed below with nonhazardous additions.

### Dangerous components:

|            |                            |        |
|------------|----------------------------|--------|
| 108-88-3   | Toluene                    | 25.01% |
| 74-98-6    | propane                    | 18.92% |
| 67-64-1    | Acetone                    | 17.2%  |
| 106-97-8   | n-butane                   | 11.11% |
| 14808-60-7 | Silicon Dioxide            | 5.71%  |
| 64742-89-8 | VM&P Naphtha               | 4.6%   |
| 68186-94-7 | Iron Manganese Oxide Black | 3.67%  |
| 1330-20-7  | xylene (mix)               | 2.01%  |

## 3 Hazards identification

### Hazard description:



Harmful  
Extremely flammable

### Physical dangers:

Extremely flammable liquid and vapor in a pressurized container. Keep away from heat, sparks, and flame.  
 Has narcotizing effect.  
 Extremely flammable.  
 Irritating to respiratory system and skin.  
 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
 Keep out of the reach of children.

### Effects of chronic overexposure:

May cause permanent brain and nervous system damage. Repeated overexposure can also damage kidneys, lungs, liver, heart, and blood. Intentional misuse by deliberately inhaling the contents may be harmful or fatal.

### NFPA ratings (0 - 4):

Health = 1  
 Fire = 4  
 Reactivity = 3

### HMIS-ratings (0 - 4):

Health= 1  
 Fire= 4  
 Physical Hazard= 3

## 4 First aid measures

**After inhalation:** Supply fresh air; consult doctor in case of complaints.  
**After skin contact:** Immediately wash with water and soap and rinse thoroughly.  
**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.  
**After swallowing:** Contact physician or poison control center.

## 5 Fire fighting measures

**Extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder, or water spray. Fight larger fires with water spray or alcohol resistant foam.  
**Protective equipment:** No special measures required.

## 6 Accidental release measures

**Personal safety:** Wear protective equipment. Keep unprotected persons away.  
**Environmental safety:** Do not allow product to reach sewage systems or ground water.  
**Clean-up/collection:** Ensure adequate ventilation.

## 7 Handling and storage

**Fire/explosion protection:** Do not spray on a naked flame or any incandescent material. Do not smoke. Protect from electrostatic discharges.  
**Storage requirements:** Observe pressurized container storage regulations. Consult with your local authorities.

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## 8 Exposure controls and personal protection:

### Components with limit values that require monitoring at the workplace:

#### 108-88-3 Toluene

|     |   |
|-----|---|
| PEL | Short-term value: C 300; 500* ppm<br>Long-term value: 200 ppm<br>*10-min peak per 8-hr shift          |
| REL | Short-term value: 560 mg/m <sup>3</sup> , 150 ppm<br>Long-term value: 375 mg/m <sup>3</sup> , 100 ppm |
| TLV | 75 mg/m <sup>3</sup> , 20 ppm   |

#### 74-98-6 propane

|     |                                     |
|-----|-------------------------------------|
| PEL | 1800 mg/m <sup>3</sup> , 1000 ppm   |
| REL | 1800 mg/m <sup>3</sup> , 1000 ppm   |
| TLV | Varies mg/m <sup>3</sup> , 1000 ppm |

#### 67-64-1 Acetone

|     |  |
|-----|--|
| PEL | 2400 mg/m <sup>3</sup> , 1000 ppm  |
| REL | 590 mg/m <sup>3</sup> , 250 ppm  |
| TLV | Short-term value: 1782 mg/m <sup>3</sup> , 750 ppm<br>Long-term value: 1188 mg/m <sup>3</sup> , 500 ppm<br>BEI |

#### 106-97-8 n-butane

|     |                                     |
|-----|-------------------------------------|
| REL | 1900 mg/m <sup>3</sup> , 800 ppm    |
| TLV | Varies mg/m <sup>3</sup> , 1000 ppm |

#### 1330-20-7 xylene (mix)

|     |  |
|-----|--|
| PEL | 435 mg/m <sup>3</sup> , 100 ppm  |
| REL | Short-term value: 655 mg/m <sup>3</sup> , 150 ppm<br>Long-term value: 435 mg/m <sup>3</sup> , 100 ppm        |
| TLV | Short-term value: 651 mg/m <sup>3</sup> , 150 ppm<br>Long-term value: 434 mg/m <sup>3</sup> , 100 ppm<br>BEI |

**Hygienic protection:** Keep away from foodstuffs and animal feed. Wash hands after use. Avoid contact with the skin.

**Breathing equipment:** A respirator is generally not necessary when using this product outdoors or in large open areas. In cases where short and/or long term overexposure exists, a charcoal filter respirator should be worn. If you suspect overexposure conditions exist, please consult an authority on chemical hygiene.

**Hand protection:** Protective gloves. The glove material has to be impermeable and resistant to the substance. No glove recommendation can be given.

**Eye protection:** Tightly sealed goggles

## 9 Physical and chemical properties:

### General Information:

|  |   |
|--|---|
| <b>Odor:</b>                               | Aromatic  |
| <b>Boiling point:</b>                      | -44°C   |
| <b>Flash point:</b>                        | -19°C   |
| <b>Ignition temperature:</b>               | 365°C   |
| <b>Auto igniting:</b>                      | Product is not self-igniting.   |
| <b>Danger of explosion:</b>                | Stable at normal temperatures. Can may burst when exposed to temperatures exceeding 120 degrees fahrenheit.<br>In use, may form flammable/explosive vapour-air mixture. |
| <b>Lower Explosion Limit:</b>              | 1.5 Vol %   |
| <b>Upper Explosion Limit:</b>              | 10.9 Vol %  |
| <b>Vapor Pressure:</b>                     | 40 PSI, 2750 hPa  |
| <b>Density:</b>                            |   |
| <b>Specific Gravity:</b>                   | Between 0.77 and 0.85 (Water equals 1.00)   |
| <b>VOC content:</b>                        | 800.5 g/l / 6.68 lb/gl  |
| <b>VOC content (less exempt solvents):</b> | 62.6 %  |
| <b>Solids content:</b>                     | 20.0 %  |

## 10 Stability and reactivity:

**Conditions to avoid:** Do not allow the can to exceed 120 degrees Fahrenheit. Stable at normal temperatures.

**Hazardous Reactions:** No dangerous reactions known.

## 11 Toxicological information:

**Skin effects:** Irritant to skin and mucous membranes.

**Eye effects:** No irritating effect.

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**Sensitization:** No sensitizing effects known.

**12 Ecological information**

**Other information:** This product does not contain any chlorofluorocarbons (CFC's) or chlorinated solvents.  
**Aquatic toxicity:** Hazardous for water, do not empty into drains.

**13 Disposal considerations**

**DISPOSAL METHOD:** Dispose of in accordance with local, state, and federal regulations. Do not puncture, incinerate, or compact. Partially empty cans must be disposed of responsibly. Do not heat or cut empty containers with electric or gas torches.  
**Recommendation:** Completely empty cans should be recycled.

**14 Transport information:**

**Hazard class:** 2.1  
**Identification number:** N/A  
**Label:** 2.1  
**ADR/RID class:** 2 5F Gases  
**UN-Number:** 1950  
**IMDG Class:** 2  
**Packaging group:** II  
**EMS Number:** F-D,S-U  
**Marine pollutant:** No  
**ICAO/IATA Class:** 2.1  
**Proper shipping name:** Aerosols, Flammable  
Consumer Commodity ORM-D

**15 Regulations**

**SARA Section 355 (extremely hazardous substances):**

None of the ingredients in this product are listed.

**SARA Section 313 (Specific toxic chemical listings):**

|           |                             |
|-----------|-----------------------------|
| 108-88-3  | Toluene                     |
| 1330-20-7 | xylene (mix)                |
| 7779-90-0 | trizinc bis(orthophosphate) |

**TSCA:** All ingredients are listed.

**CPSC:** This product complies with 16 CFR 1303 and does not contain more than 90 ppm of lead.

**California Proposition 65 chemicals known to cause cancer:**

|            |                 |
|------------|-----------------|
| 14808-60-7 | Silicon Dioxide |
| 100-41-4   | ethyl benzene   |
| 1333-86-4  | Carbon black    |

**California Proposition 65 chemicals known to cause developmental toxicity:**

108-88-3 Toluene

**WHMIS Symbols for Canada:**

A - Compressed gas  
D2A - Very toxic material causing other toxic effects



**EPA:**

A= Known human carcinogen      B= Probable human carcinogen  
C= Possible human carcinogen  
D= Not classifiable as to human carcinogenicity: Inadequate human and animal evidence of carcinogenicity (or no data is available).  
I: 'Data are inadequate for an assessment of human carcinogeni potential.'  
II: 'Inadequate information to assess carcinogenic potential.'

|           |              |    |
|-----------|--------------|----|
| 108-88-3  | Toluene      | II |
| 67-64-1   | Acetone      | I  |
| 1330-20-7 | xylene (mix) | I  |

**IARC:** Group 2B: The ingredient is possibly carcinogenic to humans. There is limited evidence of carcinogenicity.  
Group 3: The ingredient is unclassifiable as to its carcinogenicity to humans.

|            |                 |   |
|------------|-----------------|---|
| 108-88-3   | Toluene         | 3 |
| 14808-60-7 | Silicon Dioxide | 1 |
| 1330-20-7  | xylene (mix)    | 3 |

**ACGIH:**

A1-designates a confirmed human carcinogen.  
A2-designates a suspected human carcinogen.  
A3-designates an animal carcinogen.  
A4-designates "not classifiable as a human carcinogen".

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|            |                            |         |
|------------|----------------------------|---------|
| 108-88-3   | Toluene                    | A4      |
| 67-64-1    | Acetone                    | A4      |
| 14808-60-7 | Silicon Dioxide            | A2      |
| 68186-94-7 | Iron Manganese Oxide Black | 5 mg/m3 |
| 1330-20-7  | xylene (mix)               | A4      |

**NIOSH:** The following substances are regulated in the United States with reference to occupational exposure limits:

|            |                 |
|------------|-----------------|
| 14808-60-7 | Silicon Dioxide |
| 1333-86-4  | Carbon black    |

**Risk phrases:** Extremely flammable.  
Irritating to respiratory system and skin.  
Harmful: danger of serious damage to health by prolonged exposure through inhalation.

**Safety phrases:** Keep out of the reach of children.  
Do not breathe gas/fumes/vapour/spray.  
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point  
Wear suitable protective clothing and gloves.  
If swallowed, seek medical advice immediately and show this container or label.  
Use only in well-ventilated areas.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Contact:** Regulatory Affairs

### Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
PP: Severe Marine Pollutant  
P: Marine Pollutant  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
VOC: Volatile Organic Compounds (USA, EU)  
ISO: International Organization for Standardization  
EPA: Environmental Protection Agency  
IARC: International Agency for the Research of Cancer  
NIOSH: National Institute for Occupational Safety and Health  
TSCA: Toxic Substances Control Act  
CPSC: Consumer Product Safety Commission