

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: 010302 ALUMINUM HT 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	19.87%
74-98-6	propane	18.82%
67-64-1	Acetone	18.09%
106-97-8	n-butane	11.05%
14808-60-7	Silicon Dioxide	10.84%
64742-89-8	VM&P Naphtha	5.64%
7429-90-5	aluminium powder (stabilised)	2.54%
1330-20-7	xylene (mix)	2.38%

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.
 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: CO₂, 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 Long-term value: 200 ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm
TLV	75 mg/m ³ , 20 ppm

74-98-6 propane

PEL	1800 mg/m ³ , 1000 ppm
REL	1800 mg/m ³ , 1000 ppm
TLV	Varies mg/m ³ , 1000 ppm

67-64-1 Acetone

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

106-97-8 n-butane

REL	1900 mg/m ³ , 800 ppm
TLV	Varies mg/m ³ , 1000 ppm

7429-90-5 aluminium powder (stabilised)

PEL	15* 5** mg/m ³ Metal dust *total dust **respirable fraction
REL	10* 5** mg/m ³ Metal dust *total dust **respirable fraction
TLV	1* mg/m ³ *as respirable fraction

1330-20-7 xylene (mix)

PEL	435 mg/m ³ , 100 ppm
REL	Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV	Short-term value: 651 mg/m ³ , 150 ppm Long-term value: 434 mg/m ³ , 100 ppm 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:

Odor:	Aromatic
Boiling point:	-44°C
Flash point:	-19°C
Ignition temperature:	365°C
Auto igniting:	Product is not self-igniting.
Danger of explosion:	Stable at normal temperatures. Can may burst when exposed to temperatures exceeding 120 degrees fahrenheit. In use, may form flammable/explosive vapour-air mixture.
Lower Explosion Limit:	1.5 Vol %
Upper Explosion Limit:	10.9 Vol %
Vapor Pressure:	40 PSI, 2750 hPa
Density:	
Specific Gravity:	Between 0.77 and 0.85 (Water equals 1.00)
VOC content:	763.6 g/l / 6.37 lb/gl
VOC content (less exempt solvents):	58.9 %
Solids content:	24.3 %

10 Stability and reactivity:

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

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Hazardous Reactions: No dangerous reactions known.

11 Toxicological information:

Skin effects: Irritant to skin and mucous membranes.
Eye effects: No irritating effect.
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
Propper 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
7429-90-5	aluminium powder (stabilised)
1330-20-7	xylene (mix)

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

California Proposition 65 chemicals known to cause developmental toxicity:

108-88-3 Toluene

WHMIS Symbols for Canada:

A - Compressed gas
B6 - Reactive flammable material
D2B - 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
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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".

108-88-3	Toluene	A4
67-64-1	Acetone	A4
14808-60-7	Silicon Dioxide	A2
7429-90-5	aluminium powder (stabilised)	A4
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
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Risk phrases: Extremely flammable.
 Irritating to respiratory system and skin.

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.
 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.
 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

USA