

57419F

MATERIAL SAFETY DATA SHEET

Ashland

Page 001  
Date Prepared: 10/07/04  
Date Printed: 02/15/05  
MSDS No: 304.0402018-001.001

CG470009 CL ASCC GC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: CG470009 CL ASCC GC  
SAP Material No: 5013013 600 01S  
General or Generic ID: GEL COAT

Company

Ashland  
Ashland Distribution Co. &  
Ashland Specialty Chemical Co.  
P. O. Box 2219  
Columbus, OH 43216  
614-790-3333

Emergency Telephone Number:

1-800-ASHLAND (1-800-274-5263)  
24 hours everyday

Regulatory Information Number:  
1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
STYRENE	100-42-5	38.0- 42.0
POLYMER (S)	Trade Secret	1.0- 60.0
TALC	14807-96-6	0.0- 25.0
KAOLIN	1332-58-7	0.0- 25.0
SILICON DIOXIDE, MICROCRYSTALLINE	7631-86-9	0.0- 25.0
CALCIUM CARBONATE	1317-65-3	0.0- 25.0
CRYSTALLINE FREE SILICA	112945-52-5	0.0- 25.0
SILICA GEL PRECIPITATED CRYSTALLINE-FREE	112926-00-8	0.0- 25.0
METHYL METHACRYLATE	80-62-6	4.6- 5.0

This product may contain silica gel, precipitated, crystalline-free (CASRN 112926-00-8) and/or silica, amorphous, fumed, crystalline-free (CASRN 112945-52-5). For the purposes of TSCA, the EPA considers CASRN 112926-00-8 to be equivalent to CASRN 63231-67-4 (Silica gel) and CASRN 112945-52-5 to be equivalent to CASRN 7631-86-9 (Silica). The EPA does not consider these different physical forms of silica to be separately reportable under TSCA because the chemical composition of these various physical forms is the same.

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Additional symptoms of eye exposure may include: blurred vision.

Skin

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects), peeling of the skin, Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use. Individuals with direct skin contact with methyl methacrylate have experienced temporary loss of feeling and mild nerve damage in the fingers.

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### Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

### Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8). Prolonged or repeated breathing of dust may result in progressive and permanent lung disease (fibrosis) which may cause death from respiratory and/or heart failure. Symptoms include coughing and difficult breathing which becomes worse with physical activity.

### Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: metallic taste, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, irritability, effects on memory, loss of appetite, sleep disturbances, low blood pressure, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, pain in the hands and feet, difficult breathing, kidney damage, liver damage, Exposure to this product (or a component) may cause an allergic reaction (narrowing of the air passages of the lungs resulting in difficult breathing, tightness in the chest, coughing and wheezing) in some sensitive individuals. Other symptoms of an allergic reaction may include itchy and watery eyes, runny and stuffy nose, sweating, flushing, hives, rapid heart rate, and lowered blood pressure.

### Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: effects on hearing, respiratory tract damage (nose, throat, and airways), testis damage, nasal damage, kidney damage, liver damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: mild effects on color vision, effects on hearing, respiratory tract damage (nose, throat, and airways), central nervous system effects.

### Developmental Information

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

### Cancer Information

There was no increase in cancer in rats exposed to styrene by inhalation. However, there was an increase in lung cancer in styrene-exposed mice. The relevance of the mouse lung cancer to humans is uncertain. Styrene did not cause cancer in mice in studies in which the chemical was placed in the stomachs through a feeding tube, or in a study in which styrene was given by injection. Epidemiological studies do not provide a basis for concluding that styrene causes cancer. Styrene is listed as a carcinogen by the International Agency for Research on Cancer (IARC). This product may contain non-asbestiform talc. Inhalation of non-asbestiform talc has been shown to cause lung and adrenal cancer in female rats and adrenal gland cancer in male rats. It did not cause cancer in male or female mice similarly exposed. Talc is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health

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Administration.

**Other Health Effects**

Styrene readily reacts with low concentrations of halogens (for example, fluorine, chlorine, bromine, or iodine) to form a tear-producing substance.

**Primary Route(s) of Entry**

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

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**4. FIRST AID MEASURES**

**Eyes**

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**Skin**

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

**Swallowing**

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**Inhalation**

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Note to Physicians**

This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract, skin, lung (for example, asthma-like conditions), liver, kidney, central nervous system, male reproductive system, auditory system.

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**5. FIRE FIGHTING MEASURES**

**Flash Point**

65.0 - 72.0 F (18.3 - 22.2 C) SETA

**Explosive Limit**

(for component) Lower 1.1 Upper 12.5 %

**Autoignition Temperature**

No data

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### Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, toxic fumes, various hydrocarbons.

### Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. During a fire, irritating or toxic decomposition products may be generated.

### Extinguishing Media

regular foam, water fog, carbon dioxide, dry chemical.

### Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS. Polymerization will take place under fire conditions. If polymerization occurs in a closed container, there is a possibility it will rupture violently. Cool storage container with water, if exposed to fire.

### NFPA Rating

Health - 2, Flammability - 3, Reactivity - 2

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## 6. ACCIDENTAL RELEASE MEASURES

### Small Spill

Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Absorb liquid on vermiculite, floor absorbent or other absorbent material. Persons not wearing proper personal protective equipment should be excluded from area of spill.

### Large Spill

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks).

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## 7. HANDLING AND STORAGE

### Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when material is transferred. Precautions during use: avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing impervious protective gloves. As with all products of this nature, good personal hygiene is essential. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or smoking. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material.

Warning. Sudden release of hot organic chemical vapors or mists from process

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equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

**Storage**

Store in closed containers in a dry, well-ventilated area. Do not store near extreme heat, open flame, or sources of ignition.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Eye Protection**

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

**Skin Protection**

Wear resistant gloves such as: polyvinyl alcohol, To prevent repeated or prolonged skin contact, wear impervious clothing and boots. Wear normal work clothing covering arms and legs.

**Respiratory Protections**

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

**Engineering Controls**

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

**Exposure Guidelines**

Component

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STYRENE (100-42-5)  
OSHA PEL 100.000 ppm - TWA  
OSHA PEL 200.000 ppm - Ceiling  
OSHA VPEL 50.000 ppm - TWA  
OSHA VPEL 100.000 ppm - STEL  
ACGIH TLV 20.000 ppm - TWA (Skin)  
ACGIH TLV 40.000 ppm - STEL (Skin)

POLYMER (S)  
No exposure limits established

TALC (14807-96-6)  
OSHA PEL 20.000 mppcf - TWA  
OSHA VPEL 2.000 mg/m3 - TWA respirable dust (less than 1% crystalline silica)  
ACGIH TLV 2.000 mg/m3 - TWA

KAOLIN (1332-58-7)  
OSHA PEL 5.000 mg/m3 - TWA respirable fraction  
OSHA PEL 15.000 mg/m3 - TWA total dust  
OSHA VPEL 5.000 mg/m3 - TWA respirable fraction

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OSHA VPEL 10.000 mg/m3 - TWA total dust  
ACGIH TLV 2.000 mg/m3 - TWA respirable dust

SILICON DIOXIDE, MICROCRYSTALLINE (7631-86-9)  
No exposure limits established

CALCIUM CARBONATE (1317-65-3)  
OSHA PEL 5.000 mg/m3 - TWA respirable fraction  
OSHA PEL 15.000 mg/m3 - TWA total dust  
OSHA VPEL 5.000 mg/m3 - TWA respirable fraction  
OSHA VPEL 15.000 mg/m3 - TWA total dust  
ACGIH TLV 10.000 mg/m3 - TWA

CRYSTALLINE FREE SILICA (112945-52-5)  
No exposure limits established

SILICA GEL PRECIPITATED CRYSTALLINE-FREE (112926-00-8 )  
OSHA PEL 20.000 mppcf - TWA  
OSHA VPEL 6.000 mg/m3 - TWA  
ACGIH TLV 10.000 mg/m3 - TWA

METHYL METHACRYLATE (80-62-6)  
OSHA PEL 100.000 ppm - TWA  
OSHA VPEL 100.000 ppm - TWA  
ACGIH TLV 50.000 ppm - TWA  
ACGIH TLV 100.000 ppm - STEL

OSHA has formally endorsed a styrene industry proposal for a voluntary 50 ppm workplace limit on styrene. Members of the Styrene Information and Research Council (SIRC), Composites Institute (CI), Composite Fabricators Association (CFA), International Cast Polymers Association (ICPA) and National Marine Manufacturers Association (NMMA) have agreed to use either engineering controls, work practices or respiratory protection to achieve this voluntary limit for styrene.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Boiling Point

(for component) 207.0 - 217.0 F (97.2 - 102.7 C)

### Vapor Pressure

(for component) 29.000 mmHg

### Specific Vapor Density

> 1.000 @ AIR=1

### Specific Gravity

No data

### Liquid Density

> 8.300 lbs/gal @ 77.00 F  
> 8.300 lbs/gal @ 77.00 F

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**Percent Volatiles**

No data

**Evaporation Rate**

SLOWER THAN ETHYL ETHER

**Appearance**

VISCOUS

**State**

LIQUID

**Physical Form**

HOMOGENEOUS

**Color**

No data

**Odor**

PUNGENT

**pH**

No data

**Solubility in Water**

INSOLUBLE

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**10. STABILITY AND REACTIVITY**

**Hazardous Polymerization**

Product can undergo hazardous polymerization. Avoid exposure to excessive heat, peroxides and polymerization catalysts.

**Hazardous Decomposition**

May form: carbon dioxide and carbon monoxide, toxic fumes, various hydrocarbons.

**Chemical Stability**

Stable. Avoid heat, open flame, and prolonged storage at elevated temperatures. This material is unstable at elevated temperatures and pressures.

**Incompatibility**

Avoid contact with: acids, aluminum chloride, amines, excessive heat, halogenated hydrocarbons, halogens, iron chloride, metal salts, peroxides, strong alkalis, strong oxidizing agents, UV light.

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**11. TOXICOLOGICAL INFORMATION**

**LD 50 and LC 50 Data**

STYRENE (CAS# 100-42-5)  
Oral LD50 (rat): 2650 mg/kg  
Dermal LD50: Not available  
Inhalation LC50 (rat, 4 hour): 2800 ppm  
METHYL METHACRYLATE (CAS# 80-62-6)  
Oral LD50 (rat): 7872 mg/kg  
Dermal LD50 (rabbit): >5000 mg/kg  
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Inhalation LC50 (rat, 4 hour): 7094 ppm

**12. ECOLOGICAL INFORMATION**

No data

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**13. DISPOSAL CONSIDERATION**

**Waste Management Information**

Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution Company, IC&S Environmental Services Group at 800-637-7922.

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**14. TRANSPORT INFORMATION**

DOT Information - 49 CFR 172.101

DOT Description:

RESIN SOLUTION,3,UN1866,II

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

None

RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity (lbs) Component

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2500	STYRENE
20833	METHYL METHACRYLATE

**Other Transportation Information**

The Transport Information may vary with the container and mode of shipment.

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**15. REGULATORY INFORMATION**

**US Federal Regulations**

**TSCA (Toxic Substances Control Act) Status**

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

**CERCLA RQ - 40 CFR 302.4(a)**

Component	RQ (lbs)
STYRENE	1000
METHYL METHACRYLATE	1000

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**SARA 302 Components - 40 CFR 355 Appendix A**

None

**Section 311/312 Hazard Class - 40 CFR 370.2**

Immediate(X)    Delayed(X)    Fire(X)    Reactive(X)    Sudden Release of Pressure( )

**SARA 313 Components - 40 CFR 372.65**

Section 313 Component(s)	CAS Number	%
STYRENE	100-42-5	42.00
METHYL METHACRYLATE	80-62-6	5.00

**OSHA Process Safety Management 29 CFR 1910**

None listed

**EPA Accidental Release Prevention 40 CFR 68**

None listed

**Organic Hazardous Air Pollutants (HAPs)  
 40 CFR Part 63 Subpart WWWW and VVVV**

HAP Component(s)	CAS Number	% (by weight)
STYRENE, MONOMER	100-42-5	42.00
METHYL METHACRYLATE	80-62-6	5.00
Total		47.00

**Volatile Organic Compound (VOC) Content**

Not determined

**International Regulations**

**Inventory Status**

Not determined

**State and Local Regulations**

**California Proposition 65**

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer.  
 BENZENE

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause reproductive harm.  
 BENZENE

Styrene, in the presence of air and high temperature or prolonged exposure to styrene/air mixture to sunlight, can react to form styrene oxide. Styrene oxide is a chemical known to the state of California to cause cancer.

**New Jersey RTK Label Information**

STYRENE MONOMER	100-42-5
TALC	14807-96-6
SILICA, AMORPHOUS	7631-86-9
METHYL METHACRYLATE	80-62-6

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**Pennsylvania RTK Label Information**

BENZENE, ETHENYL-	100-42-5
TALC (MG3H2(SIO3)4)	14807-96-6
KAOLIN	1332-58-7
SILICA	7631-86-9
LIMESTONE	1317-65-3
PRECIPITATED SILICA	112926-00-8
2-PROPENOIC ACID, 2-METHYL-, METHYL ESTE	80-62-6

**Heavy Metal Content Information**

No heavy metals are intentionally added to this product or any component of this product. However, a component(s) of this product may contain naturally occurring trace impurities of heavy metals such as lead, chromium, arsenic, nickel, mercury, cadmium, or beryllium in a sum concentration less than 100 ppm.

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**16. OTHER INFORMATION**

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.