MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name: BAYBLOCK PRIME SG
Material Number: 81230596
Chemical Family: Water-based Acrylic Coating

2. Hazards Identification

Emergency Overview

WARNING! Color: Black  Form: liquid  Odor: Ammonia. May cause eye, skin, and respiratory tract irritation. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. Contains material which can cause cancer.

Potential Health Effects

Primary Routes of Entry: Skin Contact, Eye Contact, Ingestion, Inhalation
Medical Conditions Aggravated by Exposure: Skin disorders, Respiratory disorders, Eye disorders

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Inhalation
Acute Inhalation
For Component: Magnesium aluminum silicate
May cause mechanical irritation.

For Component: Distillates, petroleum, solvent-dewaxed heavy paraffinic
May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

For Component: Crystalline Quartz Silica
May be harmful by inhalation. May cause mechanical irritation.

Chronic Inhalation
For Component: Magnesium aluminum silicate
Prolonged inhalation of excessive levels of dust may cause pneumoconiosis.

**Skin**

**Acute Skin**
For Component: **Magnesium aluminum silicate**
May cause mechanical irritation.

For Component: **Distillates, petroleum, solvent-dewaxed heavy paraffinic**
May cause irritation with symptoms of reddening and itching.

For Component: **Crystalline Quartz Silica**
May cause mechanical irritation.

**Chronic Skin**
For Component: **Distillates, petroleum, solvent-dewaxed heavy paraffinic**
Prolonged or repeated skin contact may cause dermatitis with symptoms of red, itchy, dry skin.

**Eye**

**Acute Eye**
For Component: **Magnesium aluminum silicate**
May cause mechanical irritation.

For Component: **Distillates, petroleum, solvent-dewaxed heavy paraffinic**
May cause irritation with symptoms of reddening, tearing and stinging.

For Component: **Crystalline Quartz Silica**
May cause mechanical irritation.

**Ingestion**

**Acute Ingestion**
For Component: **Magnesium aluminum silicate**
Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea.

For Component: **Distillates, petroleum, solvent-dewaxed heavy paraffinic**
Ingestion of mineral oil may cause aspiration into the lungs resulting in lipoid pneumonia.

For Component: **Crystalline Quartz Silica**
Not expected to be harmful if swallowed.

**General Effects of Exposure**

**Acute Effects of Exposure**
For Component: **Crystalline Quartz Silica**
Exposure to Silica, Quartz can cause a very serious lung disease called Silicosis with cough, shortness of breath, and changes in chest x-ray. The earliest symptoms of silicosis may include: Shortness of breath, coughing, wheezing, fatigue, chest pain, loss of appetite and fever.

**Chronic Effects of Exposure**
For Component: **Crystalline Quartz Silica**
Excessive exposure to airborne crystalline silica can cause fibrotic lung damage, with scarring of the lungs with cough and shortness of breath. This is called "Silicosis". This is generally a slowly developing fibrotic disease as symptoms are usually delayed for 10 years or more. Symptoms are dyspnea, chest pain, breathlessness, and cough. The chronic lung scarring developed from the silica dust causes a progressive massive fibrosis. This may lead to increased susceptibility to tuberculosis.

**Carcinogenicity:**

<table>
<thead>
<tr>
<th>Component</th>
<th>IARC</th>
<th>Overall evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium aluminum silicate</td>
<td>2B</td>
<td>Possible carcinogen</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Classification not possible from</td>
</tr>
</tbody>
</table>

Material Name: BAYBLOCK PRIME SG

Article Number: 81230596

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current data.

Distillates, petroleum, solvent-dewaxed heavy paraffinic
Crystalline Quartz Silica

NTP - Hazard Designation: Known carcinogen.
IARC - Overall evaluation: 1 Human carcinogen.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>Weight %</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium aluminum silicate</td>
<td>1 - 5%</td>
<td>12174-11-7</td>
<td></td>
</tr>
<tr>
<td>Distillates, petroleum, solvent-dewaxed heavy paraffinic</td>
<td>0.1 - 1%</td>
<td>64742-65-0</td>
<td></td>
</tr>
<tr>
<td>Crystalline Quartz Silica</td>
<td>0.1 - 1%</td>
<td>14808-60-7</td>
<td></td>
</tr>
</tbody>
</table>

4. First Aid Measures

**Eye Contact**
In case of contact, flush eyes with plenty of lukewarm water. Get medical attention if irritation develops.

**Skin Contact**
In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention if irritation develops and persists.

**Inhalation**
If inhaled, remove to fresh air. Get medical attention if irritation develops.

**Ingestion**
If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

5. Fire-Fighting Measures

**Suitable Extinguishing Media:**
All extinguishing media are suitable.

**Special Fire Fighting Procedures**
Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

**Unusual Fire/Explosion Hazards**
Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

6. Accidental release measures

**Spill and Leak Procedures**
Cleanup personnel must use appropriate personal protective equipment. Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal.

### 7. Handling and Storage

**Storage Temperature:**
- **minimum:** 1 °C (33.8 °F)
- **maximum:** 49 °C (120.2 °F)

**Storage Period**
12 Months

**Handling/Storage Precautions**
Avoid breathing dust, vapor, or mist. Avoid contact with skin or clothing. Avoid contact with eyes. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use. Protect from freezing.

**Further Info on Storage Conditions**
None known.

### 8. Exposure Controls / Personal Protection

**Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)**
- US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
  - PEL: 500 ppm, 2,000 mg/m3
- US. ACGIH Threshold Limit Values
  - Time Weighted Average (TWA): 5 mg/m3 (Mist.)
- US. ACGIH Threshold Limit Values
  - Short Term Exposure Limit (STEL): 10 mg/m3 (Mist.)

**Crystalline Quartz Silica (14808-60-7)**
- US. ACGIH Threshold Limit Values
  - Time Weighted Average (TWA): 0.025 mg/m3 (Respirable fraction.)

**Industrial Hygiene/Ventilation Measures**
General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines.

**Respiratory Protection**
In case of insufficient ventilation wear suitable respiratory equipment.

**Hand Protection**
Permeation resistant gloves.

**Eye Protection**
splash proof goggles.

**Skin and body protection**
Wear cloth work clothing including long pants and long-sleeved shirts.

**Additional Protective Measures**
Employers should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form:</strong></td>
<td>liquid</td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>Black</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Ammonia</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>Not Established</td>
</tr>
<tr>
<td><strong>Freezing Point:</strong></td>
<td>0 °C (32 °F) similar to water</td>
</tr>
<tr>
<td><strong>Boiling Point/Range:</strong></td>
<td>100 °C (212 °F) similar to water</td>
</tr>
<tr>
<td><strong>Flash Point:</strong></td>
<td>Not applicable (water based product), however, solid material will support combustion if water has been evaporated.</td>
</tr>
<tr>
<td><strong>Lower Explosion Limit:</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Upper Explosion Limit:</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Vapor Pressure:</strong></td>
<td>17 mmHg @ 20 °C (68 °F) similar to water</td>
</tr>
<tr>
<td><strong>Specific Gravity:</strong></td>
<td>Not Established</td>
</tr>
</tbody>
</table>

### 10. Stability and Reactivity

**Hazardous Reactions**
Hazardous polymerization does not occur.

**Stability**
Stable

**Materials to avoid**
None known.

**Hazardous decomposition products**
By Thermal Decomposition: Acrylic monomers, other potentially toxic fumes

### 11. Toxicological Information

**Toxicity Data for Magnesium aluminum silicate**

**Mutagenicity**
Genetic Toxicity in Vitro:
Unscheduled DNA synthesis: Negative results were reported in various in vitro studies. (other mammalian cell line)

**Carcinogenicity**
rat,
positive

**Toxicity Data for Distillates, petroleum, solvent-dewaxed heavy paraffinic**

**Acute Oral Toxicity**
LD50: > 5,000 mg/kg (Rat)
**Acute Inhalation Toxicity**
LC50: 2.18 mg/l, 4 hrs (Rat)
LC50: > 4 mg/l, 4 hrs (Rat)

**Acute dermal toxicity**
LD50: > 5,000 mg/kg (rabbit)
LD50: > 2,000 mg/kg (rabbit)

**Skin Irritation**
rabbit, OECD Guideline for Testing of Chemicals, No. 404, Slightly irritating
rabbit, Acute Dermal Irritation, Slightly irritating

**Eye Irritation**
rabbit, Acute Eye Irritation Study, Non-irritating
rabbit, Acute Eye Irritation Study, Slightly irritating

**Sensitization**
dermal: non-sensitizer (Guinea pig, Maximization Test)
dermal: non-sensitizer (Guinea pig, Patch Test)

**Repeated Dose Toxicity**
28 Days, inhalation: NOAEL: 0.21 mg/l, (Rat)
28 Days, dermal: NOAEL: 200 mg/kg, (rabbit)

**Mutagenicity**
Genetic Toxicity in Vitro:
Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)
Genetic Toxicity in Vivo:
Positive and negative results were seen in various in vitro and in vivo studies.

**Carcinogenicity**
mouse, Female, dermal, > 1 Years,
ambiguous
mouse, Male, dermal, 2 Years,
ambiguous

**Toxicity Data for Crystalline Quartz Silica**

**Mutagenicity**
Genetic Toxicity in Vitro:
Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic Activation: with/without)
Genetic Toxicity in Vivo:
Sister Chromatid Exchange: ambiguous (hamster)

**Carcinogenicity**
rat, Male/Female, inhalation, 2 years, 6 hrs/day 5 days/week
positive

**12. Ecological Information**

**Ecological Data for Distillates, petroleum, solvent-dewaxed heavy paraffinic**

**Biodegradation**
Aerobic, 22 %, Exposure time: 28 Days
Inherently biodegradable.
Aerobic, 51 %, Exposure time: 21 Days

**Acute and Prolonged Toxicity to Fish**
LC50: > 5,000 mg/l (Rainbow (Donaldson)Trout (Oncorhynchus mykiss), 96 hrs)
LC50: > 1,000 mg/l (Rainbow trout (Salmo gairdneri), 96 hrs)

**Acute Toxicity to Aquatic Invertebrates**
EC50: > 1,000 mg/l (Water flea (Daphnia magna), 48 hrs)
EC50: > 10,000 mg/l (Water flea (Daphnia magna), 48 hrs)

**Toxicity to Aquatic Plants**
EC50: > 1,000 mg/l, (Green algae (Scenedesmus subspicatus), 96 hrs)

**Toxicity to Microorganisms**
> 1,000 mg/l, (Pseudomonas fluorescens, 6 hrs)

### 13. Disposal considerations

**Waste Disposal Method**
Waste disposal should be in accordance with existing federal, state and local environmental control laws.

**Empty Container Precautions**
Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning.

### 14. Transportation information

**Land transport (DOT)**
Non-Regulated

**Sea transport (IMDG)**
Non-Regulated

**Air transport (ICAO/IATA)**
Non-Regulated

### 15. Regulatory Information

**United States Federal Regulations**

**OSHA Hazcom Standard Rating:** Hazardous

**US. Toxic Substances Control Act:** Listed on the TSCA Inventory.

**US. EPA CERCLA Hazardous Substances (40 CFR 302): Components**
None
SARA Section 311/312 Hazard Categories:
Acute Health Hazard, Chronic Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):
Components
None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III
Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:
Components
None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes
and Appendix VIII Hazardous Constituents (40 CFR 261):
Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a
material containing the product or derived from the product, should be classified as a hazardous waste. (40
CFR 261.20-24)

State Right-To-Know Information
The following chemicals are specifically listed by individual states; other product specific health and safety
data in other sections of the MSDS may also be applicable for state requirements. For details on your
regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

<table>
<thead>
<tr>
<th>Weight %</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;=1%</td>
<td>Water</td>
<td>7732-18-5</td>
</tr>
<tr>
<td>&gt;=1%</td>
<td>Acrylic Polymer</td>
<td></td>
</tr>
<tr>
<td>1 - 5%</td>
<td>Magnesium aluminum silicate</td>
<td>12174-11-7</td>
</tr>
<tr>
<td>&gt;=1%</td>
<td>Proprietary Non-Hazardous Ingredients</td>
<td></td>
</tr>
</tbody>
</table>

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous
Substances Lists:

<table>
<thead>
<tr>
<th>Weight %</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 - 1%</td>
<td>Ammonia</td>
<td>7664-41-7</td>
</tr>
<tr>
<td>0.1 - 1%</td>
<td>Ammonium Hydroxide</td>
<td>1336-21-6</td>
</tr>
</tbody>
</table>

MA Right to Know Extraordinarily Hazardous Substance List:

<table>
<thead>
<tr>
<th>Weight %</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 - 1%</td>
<td>Ammonia</td>
<td>7664-41-7</td>
</tr>
<tr>
<td>0.1 - 1%</td>
<td>Crystalline Quartz Silica</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>&lt;10 ppm</td>
<td>Formaldehyde</td>
<td>50-00-0</td>
</tr>
</tbody>
</table>

California Prop. 65:
Warning! This product contains chemical(s) known to the State of California to be Carcinogenic.

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<th>CAS-No.</th>
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<td>Magnesium aluminum silicate</td>
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<tr>
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<td>Crystalline Quartz Silica</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>&lt;10 ppm</td>
<td>Formaldehyde</td>
<td>50-00-0</td>
</tr>
</tbody>
</table>
16. Other Information

NFPA 704M Rating

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

Other

0=Insignificant  1=Slight  2=Moderate  3=High  4=Extreme

HMIS Rating

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1*</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

0=Minimal  1=Slight  2=Moderate  3=Serious  4=Severe

* = Chronic Health Hazard

The method of hazard communication for Bayer MaterialScience LLC is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by Bayer MaterialScience LLC as a customer service.

Contact Person:  Product Safety Department
Telephone:  (412) 777-2835
MSDS Number:  000000009809
Version Date:  09/13/2008
Report Version:  1.1

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