



## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100

Page 1 of 11

Maxxon® Corporation  
920 Hamel Road, PO Box 253  
Hamel, MN 55340

Issue date: February, 2006  
Revision date: November, 2007

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

**Material Name:** Maxxon Underlayments

<b>Trade Name:</b>	Rapid Floor® Underlayment	43B-14690
	Rapid Floor® Plus and Rapid Floor® Plus Green	43B-14691
	Rapid Floor® Ultra and Rapid Floor® Ultra Green	43B-14692
	Rapid Radiant® and Rapid Radiant® Green	43B-14693
	Commercial Topping® and Commercial Topping® Green	43B-14268

**Description:** Industrial Plasters

Chemical Emergency or information, call: Maxxon Corporation, 763-478-9600 (Q.A. Department) or Chem-Trec at 1-800-424-9300

### SECTION 2 HAZARDS IDENTIFICATION

#### Emergency Overview

CAUTION! A natural chemical reaction during hardening (rehydration) develops sufficient heat that may cause severe burns in the event of contact with skin. These burns may possibly result in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Crushing, mixing, sanding or otherwise working with this product may generate large amounts of dust. Dust can be irritating to the eyes, skin and respiratory system.

#### Potential health effects

**Routes of exposure:** Inhalation. Skin contact. Eye contact.

**Eyes:** Dust can cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

**Skin:** Skin contact during hardening (rehydration) may slowly develop sufficient heat to cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with the skin. Handling can cause dry skin.



## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100  
Page 2 of 11

**Ingestion:** Not applicable under normal conditions of use. May result in obstruction and temporary irritation of the digestive tract.

**Inhalation:** Dust may cause respiratory tract irritation.

### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS#	Percent
Gypsum (Calcium Sulfate)	7778-18-9	60-100
Portland Cement	65997-15-1	5-10
Calcium Oxide	1305-78-8	3-7
Amorphous Silica	7631-86-9	3-7
Crystalline Silica (Quartz)	14808-60-7	1-5
Aluminum Oxide	1344-28-1	1-5
Magnesium Oxide	1309-48-4	1-5
Ferric Oxide	1309-37-1	0.5-1.5
Sulfur Trioxide	7446-11-9	0.5-1.5
Titanium Dioxide	13463-67-7	0.1-1

**Composition comments:** Gypsum (calcium sulfate), Portland cement, and fly ash contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. This product also contains titanium dioxide, which is listed as a possible lung carcinogen. See Section 8 for exposure information.

### SECTION 4 FIRST AID MEASURES

**First Aid procedures:**

- Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
- Skin contact** For skin contact, wash immediately with soap and water. Get medical attention if irritation develops or persists.
- Inhalation** Remove to fresh air. If symptoms persist, obtain medical attention
- Ingestion** May result in obstruction and irritation if ingested. Get medical attention.



## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100  
Page 3 of 11

### SECTION 5 FIRE FIGHTING MEASURES

<b>Flammable properties</b>	Not flammable by OSHA/WHMIS criteria
<b>Extinguishing media</b> <b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
<b>Protection of firefighters</b> <b>Protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self-contained breathing apparatus.
<b>Explosion data</b> <b>Sensitivity to static discharge</b> <b>Sensitivity to mechanical impact</b>	Not applicable Not applicable
<b>Hazardous combustion products</b>	May include, and are not limited to: calcium dioxide, sulfur dioxide, magnesium dioxide, magnesium oxide, and sulfur trioxide.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Use personal protection recommended in Section 8. Keep unnecessary personnel away from the release.
<b>Environmental precautions</b>	Keep out of drains, sewers, ditches, and waterways.
<b>Methods of containment</b>	Contain the spill, then place in a suitable container. Minimize dust generation.
<b>Methods of clean up</b>	Sweep up or gather material and place in appropriate container for disposal.

### SECTION 7 HANDLING AND STORAGE

<b>Handling</b>	Avoid contact with skin and eyes. Use only in well-ventilated areas. Handle and open container with care. Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated. When using, do not eat or drink. Wash hands before eating, drinking or smoking.
<b>Storage</b>	Keep the container tightly closed and dry. Store in a covered, dry, climate controlled area, away from incompatibles.



## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100  
Page 4 of 11

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Gypsum (calcium sulfate) (CAS# 7778-18-9)**

	<b>TWA</b>	<b>STEL</b>	<b>Ceiling</b>
<b>ACGIH</b>	10 mg/m <sup>3</sup> TWA inhalable fraction; 3 mg/m <sup>3</sup> TWA respirable fraction	Not established	Not established
<b>OSHA</b>	15 mg/m <sup>3</sup> TWA total dust; 5 mg/m <sup>3</sup> TWA respirable fraction	Not established	Not established

**Portland Cement (CAS# 65997-15-1)**

	<b>TWA</b>	<b>STEL</b>	<b>Ceiling</b>
<b>ACGIH</b>	10 mg/m <sup>3</sup> TWA particulate matter containing no asbestos and <1% crystalline silica	Not established	Not established
<b>OSHA</b>	15 mg/m <sup>3</sup> TWA total dust; 5 mg/m <sup>3</sup> TWA respirable fraction	Not established	Not established

**Calcium Oxide (CAS# 1305-78-8)**

	<b>TWA</b>	<b>STEL</b>	<b>Ceiling</b>
<b>ACGIH</b>	2 mg/m <sup>3</sup> TWA	Not established	Not established
<b>OSHA</b>	5 mg/m <sup>3</sup> TWA	Not established	Not established

**Amorphous Silica (CAS# 7631-86-9)**

	<b>TWA</b>	<b>STEL</b>	<b>Ceiling</b>
<b>ACGIH</b>	10 mg/m <sup>3</sup> TWA inhalable fraction; 3 mg/m <sup>3</sup> TWA respirable fraction	Not established	Not established
<b>OSHA</b>	15 mg/m <sup>3</sup> TWA total dust; 5 mg/m <sup>3</sup> TWA respirable fraction	Not established	Not established

**Crystalline silica (quartz) (CAS# 14808-60-7)**

	<b>TWA</b>	<b>STEL</b>	<b>Ceiling</b>
<b>ACGIH</b>	0.025 mg/m <sup>3</sup> TWA respirable fraction	Not established	Not established
<b>OSHA</b>	((10)/( %SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA (respirable)); ((30)/( %SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA (total dust)); ((250)/( %SiO <sub>2</sub> + 5) mppcf TWA (respirable))	Not established	Not established



## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100  
Page 5 of 11

**Aluminum Oxide (CAS# 1344-28-1)**

	TWA	STEL	Ceiling
<b>ACGIH</b>	10 mg/m <sup>3</sup> TWA particulate matter containing no asbestos and <1% crystalline silica	Not established	Not established
<b>OSHA</b>	15 mg/m <sup>3</sup> TWA total dust; 5 mg/m <sup>3</sup> TWA respirable fraction	Not established	Not established

**Magnesium Oxide (CAS# 1309-48-4)**

	TWA	STEL	Ceiling
<b>ACGIH</b>	10 mg/m <sup>3</sup> TWA inhalable fraction	Not established	Not established
<b>OSHA</b>	15 mg/m <sup>3</sup> TWA total particulate	Not established	Not established

**Ferric Oxide (CAS# 1309-37-1)**

	TWA	STEL	Ceiling
<b>ACGIH</b>	5 mg/m <sup>3</sup> TWA respirable fraction	Not established	Not established
<b>OSHA</b>	10 mg/m <sup>3</sup> TWA	Not established	Not established

**Sulfur Trioxide (CAS# 7446-11-9)**

	TWA	STEL	Ceiling
<b>ACGIH</b>	Not established	Not established	Not established
<b>OSHA</b>	Not established	Not established	Not established

**Titanium Dioxide (CAS# 13463-67-7)**

	TWA	STEL	Ceiling
<b>ACGIH</b>	10 mg/m <sup>3</sup> TWA	Not established	Not established
<b>OSHA</b>	15 mg/m <sup>3</sup> TWA total dust	Not established	Not established

**Engineering Controls**      When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits.

**Personal protective equipment**

**Eye protection**      Safety glasses or goggles are recommended when using product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1010.151 (c)).

**Skin and body protection**      Impervious protective clothing and gloves recommended to prevent drying or irritation of hands. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and .138 (hand protection)). Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151 (c)).



## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100  
Page 6 of 11

### Respiratory protection

A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Powder  
**Color:** Grey  
**Form:** Solid  
**Odor:** Odorless  
**Odor threshold:** Not available  
**Physical state:** Solid  
**pH:** 10-12  
**Melting point:** Not available  
**Freezing point:** Not available  
**Boiling point:** Not available  
**Flash point:** Not available  
**Evaporation rate:** Not available  
**Flammability:** Not available

**Flammability limits in air, upper, % by volume:** Not available  
**Flammability limits in air, lower % by volume:** Not available  
**Vapor pressure:** Not available  
**Vapor density:** Not available  
**Specific gravity:** 2.3  
**Relative density:** Not available  
**Solubility (water):** Insoluble  
**Partition coefficient (n-octanol/water):** Not available  
**Auto-ignition temperature:** Not available  
**Decomposition temperature:** Not available

### SECTION 10 CHEMICAL STABILITY & REACTIVITY INFORMATION

**Chemical Stability:** Stable at normal conditions  
**Conditions of reactivity:** Reacts with water (normal condition of use)  
**Incompatible materials:** Acids  
**Hazardous decomposition products:** May include, and are not limited to: calcium oxide, sulfur dioxide, magnesium oxide, aluminum oxide, and sulfur trioxide.

### SECTION 11 TOXICOLOGICAL INFORMATION

#### Component analysis - LD50

##### ALUMINUM OXIDE (CAS# 1344-28-1)

Toxicology Data – Selected LD50s and LC50s

Oral LD50 Rat: >5000 mg/kg

##### AMORPHOUS SILICA (CAS# 7631-86-9)

Toxicology Data – Selected LD50s and LC50s

Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg



## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100  
Page 7 of 11

**CALCIUM OXIDE (CAS# 1305-78-8)**

Toxicology Data – Selected LD50s and LC50s

Oral LD50 Rat: 500 mg/kg

**CRYSTALLINE SILICA (QUARTZ) (CAS# 14808-60-7)**

Toxicology Data – Selected LD50s and LC50s

Oral LD 50 Rat: 500 mg/kg

**FERRIC OXIDE (CAS# 1309-37-1)**

Toxicology Data – Selected LD50s and LC50s

Oral LD50 Rat: >10000 mg/kg

**GYPSUM (CALCIUM SULFATE) (CAS# 7778-18-9)**

Toxicology Data – Selected LD50s and LC50s

Oral LD50 Rat: >3000 mg/kg

**SULFUR TRIOXIDE (CAS# 7446-11-9)**

Toxicology Data – Selected LD50s and LC50s

Inhalation LC 50 Rat: 0.375 mg/L/4H;  
Inhalation LC50 Rat: 1.2 mg/L/1H

**TITANIUM DIOXIDE (CAS# 13463-67-7)**

Toxicology Data – Selected LD50s and LC50s

Oral LD50 Rat: >10000 mg/kg

**Routes of exposure:** Inhalation. Skin contact. Eye contact

**Sensitization:** Not expected to be hazardous by OSHA/WHMIS criteria

**Chronic effects:** Hazardous by OSHA/WHMIS criteria

Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen.

Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.

Respirable titanium dioxide from occupational sources has been classified by IARC as a possible lung carcinogen to humans. Evidence showed that high concentrations of pigment-grade (powdered) and ultrafine titanium dioxide dust caused respiratory tract cancer in rats exposed by inhalation and intratracheal instillation. The series of biological events or steps that produce rat lung cancer (e.g. particle deposition, impaired lung clearance, cell injury, fibrosis, mutations and ultimately cancer) have also been seen in people working in dusty environments. Therefore, the observations of cancer in animals were considered, by IARC, as relevant to people doing jobs with exposures to titanium dioxide dust. For example, titanium dioxide production workers may be exposed to high dust concentrations during packing, milling, site cleaning and maintenance, if there are insufficient dust control measures in place. However, it should be noted that the human studies conducted so far do not suggest an association between occupational exposure to titanium dioxide and an increased risk for cancer.



## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100  
Page 8 of 11

Sulfur trioxide has not been classified for carcinogenic effects. However, IARC concluded that occupational exposure to strong inorganic mists containing sulfuric acid, formed from sulfur trioxide reacted with water, is carcinogenic to humans. The ACGIH has classified strong inorganic acid mist containing sulfuric acid as a suspected human carcinogen. Exposure to inorganic acid mist (sulfuric acid mist) in this product will not occur because inorganic acid is not generated under normal conditions of use of this material.

**Carcinogenicity:** Hazardous by OSHA/WHMIS criteria.

**ALUMINUM OXIDE (CAS# 1344-28-1)**

ACGIH – Threshold Limits Values – Carcinogens A4 – Not classifiable as a human carcinogen

**CRYSTALLINE SILICA (QUARTZ) (CAS# 14808-60-7)**

ACGIH – Threshold Limits Values – Carcinogens A2 – Suspected human carcinogen  
IARC – Group 1 (Carcinogenic to humans) Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources)

NTP (National Toxicology Program) – Report on Carcinogens – Known Carcinogens Known Carcinogen  
U.S. – OSHA – Hazard Communications Carcinogens Present

**FERRIC OXIDE (CAS# 1309-37 -1)**

ACGIH – Threshold Limits Values – Carcinogens A4 – Not classifiable as a human carcinogen

**MAGNESIUM OXIDE (CAS# 1309-48-4)**

ACGIH – Threshold Limits Values – Carcinogens A4 – Not classifiable as a human carcinogen

**SULFUR TRIOXIDE (CAS# 7446-11-9)**

IARC – Group 1 (Carcinogenic to humans) Monograph 54 [1992] (listed under occupational exposures to mists and vapours from sulfuric acid and other strong inorganic acids)

U.S. – OSHA – Hazard Communications Carcinogens Present

**TITANIUM DIOXIDE (CAS# 13463-67-7)**

ACGIH – Threshold Limits Values – Carcinogens A4 – Not classifiable as a human carcinogen  
IARC – Group 2B (Possibly Carcinogenic to Humans) Monograph 93 posted, Monograph 47 [1998]  
U.S. – OSHA – Hazard Communications Carcinogens Present

**Mutagenicity** Not expected to be hazardous by OSHA/WHMIS criteria.  
**Reproductive effects** Not expected to be hazardous by OSHA/WHMIS criteria.  
**Teratogenicity** Not expected to be hazardous by OSHA/WHMIS criteria.  
**Synergistic materials** Not available



## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100  
Page 9 of 11

### SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity:** Large quantities of this product may be harmful to aquatic life due to high pH.

### SECTION 13 DISPOSAL CONSIDERATIONS

**Disposal Instructions:**

This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

### SECTION 14 TRANSPORTATION INFORMATION

**Department of Transportation (DOT) Requirements:**

This product is not regulated as a hazardous material by the United States (DOT) transportation regulations.

**Canadian Transportation of Dangerous Goods (TDG) Requirements:**

Not regulated as dangerous goods.

### SECTION 15 REGULATORY INFORMATION

**US Federal Regulations**

**ALUMINUM OXIDE (CAS# 1344-28-1)**

U.S. – CERCLA/SARA – Section 313 – Emission Reporting 1.0% de minimus concentration (fibrous forms)

**SULFUR TRIOXIDE (CAS# 7446-11-9)**

U.S. – CERCLA/SARA – Section 302 Extremely Hazardous Substances 100 lb EPCRA RQ

**CERCLA (Superfund) reportable quantity**

None



## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100  
Page 10 of 11

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<b>Hazard categories</b>	Immediate Hazard – No. Delayed Hazard – Yes Fire Hazard – No. Pressure Hazard – No Reactivity Hazard – No
<b>Section 302 extremely hazardous substance</b>	Yes
<b>Section 311 hazardous chemical</b>	Yes
<b>Section 313 hazardous chemical</b>	Yes

### Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

<b>ALUMINUM OXIDE (CAS# 1344-28-1)</b> Canada – WHMIS – Ingredient Disclosure List	1%
<b>AMORPHOUS SILICA (CAS# 7631-86-9)</b> Canada – WHMIS – Ingredient Disclosure List	1%
<b>CALCIUM OXIDE (CAS# 1305-78-8)</b> Canada – WHMIS – Ingredient Disclosure List	1%
<b>CRYSTALLINE SILICA (QUARZ) (CAS# 14808-60-7)</b> Canada – WHMIS – Ingredient Disclosure List	1%
<b>FERRIC OXIDE (CAS# 1309-37-1)</b> Canada – WHMIS – Ingredient Disclosure List	1%
<b>MAGNESIUM OXIDE (CAS# 1309-48-4)</b> Canada – WHMIS – Ingredient Disclosure List	1%
<b>SULFUR TRIOXIDE (CAS# 7446-11-9)</b> Canada – WHMIS – Ingredient Disclosure List	1%

**WHMIS classification** D2A – Other Effects – VERY TOXIC

**WHMIS labeling**





## MATERIAL SAFETY DATA SHEET RAPID FLOOR UNDERLAYMENTS

MSDS No. 100  
Page 11 of 11

Inventory status	Inventory name	On inventory (yes/no)*
Country(s) or region		
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substance Control Act (TSCA) inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

### SECTION 16 OTHER INFORMATION

<b>HMIS® ratings</b>	Health: 1* Flammability: 0 Physical hazard: 1
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0

Hazard Scale: 0 = minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

#### Disclaimer

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Maxxon Corporation makes no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Maxxon Corporation will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.

**Other information** Products on this MSDS do not contain asbestos