



United States Gypsum Company
 125 South Franklin Street
 Chicago, Illinois 60606-4678

Product Safety: 1 (800) 507-8899
 Version Date: October 1, 1999
 Version 3

SECTION I
PRODUCT IDENTIFICATION

PRODUCT(S): USG SHEETROCK® Brand Gypsum Panels FIRECODE® Core (Type X)

CHEMICAL FAMILY: Gypsum (Calcium Sulfate Dihydrate, CaSO₄ •2H₂O)

SECTION II
INGREDIENTS

MATERIAL	WT%	TLV (mg/m ³)	PEL (mg/m ³)	CAS NUMBER
Gypsum	>85	10	15(T)/5(R)	13397-24-5
Or Calcium Sulfate Dihydrate		10	15(T)/5(R)	10101-41-4
Recycled Paper (Cellulose)	<15	10	15(T)/5(R)	9004-34-6
Starch	<3	10	15(T)/5(R)	9005-25-8
Crystalline Silica	<5	0.1(R)	0.1(R)	14808-60-7
May Contain the Following:				
Fibrous Glass (Textile Grade)	<1	(NE)	(NE)	65977-17-3
Boric Acid	<1	(NE)	(NE)	10043-35-3
Potassium Sulfate	<5	(NE)	(NE)	7778-80-5

(T) – Total (R) – Respirable (NE) – Not Established

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings: Health: 0 Fire: 0 Reactivity: 0 Other: N/A
 HMIS Ratings: Health: 0 Fire: 0 Reactivity: 0
 Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.
 0 = Minimal Hazard 1 = Slight Hazard 2 = Moderate Hazard 3 = Serious Hazard 4 = Severe Hazard

SECTION III
PHYSICAL DATA

Appearance and Odor: Paper covered panel with off white core; low odor.
Bulk Density: 28 – 96 lbs/ft³; varies with panel thickness.
Solubility in Water: ~ 0.2%

SECTION IV
FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None
Extinguishing Media: Not Combustible



MATERIAL SAFETY DATA SHEET
SHEETROCK® Brand Lightweight Topping Joint Compound,
Ready-Mixed, Topping Lite

MSDS NO. 06155

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United States Gypsum Company
 125 South Franklin Street
 Chicago, Illinois 60606-4678

Product Safety: 1 (800) 507-8899
 Version Date: October 1, 1999
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SECTION I
PRODUCT IDENTIFICATION

PRODUCT(S): USG SHEETROCK® Brand Lightweight Topping Joint Compound, Ready-Mixed, Topping Lite
CHEMICAL FAMILY: Aqueous mixture of limestone and latex

SECTION II
INGREDIENTS

MATERIAL	WT%	TLV (mg/m ³)	PEL (mg/m ³)	CAS NUMBER
Limestone	<50	10	15(T)/5(R)	1317-65-3
Or Dolomite		10	15(T)/5(R)	16389-88-1
Water	>30	(NE)	(NE)	7732-18-5
Expanded Perlite	<10	10	15(T)/5(R)	93763-70-3
Ethylene-Vinyl Acetate Polymer	<10	(NE)	(NE)	24937-78-8
Or Vinyl Acetate Polymer		(NE)	(NE)	9003-20-7
Attapulgate	<5	(NE)	(NE)	12174-11-7
Vinyl Acetate Monomer	<0.1	10ppm	10ppm	108-05-4
Acetaldehyde	<0.1	100ppm	100ppm	75-07-0
Crystalline Silica	<2	0.1(R)	0.1(R)	14808-60-7

(T) – Total (R) – Respirable (NE) – Not Established

***** **This is a Non-Asbestos Product.** *****

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings: Health: 0 Fire: 0 Reactivity: 0 Other: N/A
 HMIS Ratings: Health: 0 Fire: 0 Reactivity: 0
 Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.
 0 = Minimal Hazard 1 = Slight Hazard 2 = Moderate Hazard 3 = Serious Hazard 4 = Severe Hazard

SECTION III
PHYSICAL DATA

Appearance and Odor: Off white paste; low odor.
Boiling Point: 212°F
Melting/Freezing Point: 32°F
Specific Gravity (H₂O = 1): 1.6
pH Range: 7-8.5
Vapor Pressure: 17 @ 20°F
Volatile Organic Compounds: <2 g/L
Hardening Time: Varies. Check usage and/or product specification data.



SECTION IV
FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	Noncombustible
Extinguishing Media:	Use extinguishing media appropriate for surrounding fire.
Special Fire Fighting Procedures:	None
Unusual Fire and Explosion Hazards:	None
Special Fire Fighting Protective Equipment:	None

SECTION V
HEALTH HAZARD DATA

Nuisance dust can be released during dry sanding of this product. Eye, skin, nose, throat, and upper respiratory irritation can occur with prolonged dust exposure.

EFFECTS OF OVEREXPOSURE:

ACUTE:

EYES: Direct contact can cause mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

SKIN: Direct, prolonged or repeated contact with the skin may cause irritation. May dry skin. Rubbing of this product against the skin can result in abrasions. Rinse with water until free of material to avoid abrasions, then wash skin thoroughly with mild soap and water. If irritation persists, consult physician.

INHALATION: Inhalation of dust from this product may irritate the nose, throat, lungs, and upper respiratory tract. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation from dust. Labored breathing may occur after excessive inhalation. If respiratory symptoms persist, consult physician.

INGESTION: No known effects.

CHRONIC:

EYES: None known.

SKIN: None known.

INHALATION: This product may contain small amounts of vinyl acetate monomer, vapors of which have been shown to cause tumors in the respiratory tract of laboratory animals. Chronic overexposure to vinyl acetate is not expected to occur during normal handling and use of this product. Vinyl acetate has been shown to cause irritation and cancer in inhalation studies with laboratory animals. Test levels of 600ppm over a lifetime cause an increase in tumors in the respiratory tract of the test animals. 200ppm caused irritation. No tumors were observed in the animals exposed at 50ppm or lower. There is no evidence of adverse effects to humans exposed to levels at or below the TLV.

Chronic overexposure to respirable crystalline silica may result in lung disease (i.e., silicosis) and/or lung cancer.

INGESTION: No Known effects.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush thoroughly with plenty of water for 15 minutes to remove particles. If irritation persists, consult physician.

SKIN: Rinse with water, then wash with mild soap and water. A commercially available hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing. If irritation persists, consult physician.

INHALATION: Remove to fresh air. Leave the area of dust exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary, however, if conditions warrant, contact physician.

INGESTION: No harmful effects expected. No specific recommendation. If gastric disturbance occurs, call physician.



MATERIAL SAFETY DATA SHEET

SHEETROCK® Brand Lightweight Topping Joint Compound, Ready-Mixed, Topping Lite

MSDS NO. 06155

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TARGET ORGANS: Eyes, skin, and respiratory system.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma.

PRIMARY ROUTES OF ENTRY: Inhalation; Eye and/or Skin contact.

CARCINOGENICITY OF INGREDIENTS:

MATERIAL	IARC	NTP
Respirable Crystalline Silica	Group 1	Anticipated
Acetaldehyde	2B	Anticipated
Vinyl Acetate Monomer	2B	Not Listed

Vinyl acetate monomer and acetaldehyde, if present, are trace components of the vinyl acetate polymer. Quantities of monomer have not been measured, but would be expected to be less than 0.1 Wt. %.

USG has measured exposure levels of respirable crystalline silica at jobsites during ready-mixed joint compound applications and sanding on joint compounds very similar in composition to this product. Results of this industrial hygiene testing for USG joint compounds showed no detection of respirable crystalline silica following NIOSH Method 7500. Industrial hygiene testing on similar products for formaldehyde exposure during mixing and application of ready-mixed joint compound showed no detection of formaldehyde.

In June, 1997, the International Agency for Research on Cancer (IARC) classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

SECTION VI REACTIVITY DATA

STABILITY:	Stable.
INCOMPATIBILITY:	None known.
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION:	CO ₂ would be produced at high temperatures with the decomposition of limestone (~800°C). Stable under normal temperature and pressure. Product contains low level of organic volatiles which may be emitted or released in application processes involving the use of heat. Vent all ovens and process vessels to the outside atmosphere. Thermal decomposition will produce H ₂ O, CO ₂ , CO, and acetic acid. Could produce vinyl acetate monomers when temperature is above 175°C.

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Use normal clean up procedure. Spilled material can produce slippery conditions, be cautious to avoid falling. Wear appropriate protective equipment. Shovel material from spillage into a waste container for disposal.

WASTE DISPOSAL METHOD:

Dispose of material in accordance with federal, state, and local regulations.



SECTION VIII
SPECIAL PROTECTION INFORMATION

No TLV assigned to this mixture; see Ingredients Section. Minimize dust exposures in accordance with good hygiene practice.

RESPIRATORY PROTECTION:

Not typically necessary under normal conditions of use. Provide general ventilation and local exhaust ventilation to meet TLV requirements of individual ingredients and to control dusting conditions. Wear a NIOSH/MSHA-approved respirator when dusty conditions exist, in poorly ventilated areas, and if TLV is exceeded.

VENTILATION:

Ventilate to keep exposures below TLV. General ventilation is expected to be satisfactory. Use local exhaust ventilation if necessary to control dust.

PERSONAL PROTECTIVE EQUIPMENT:

Wear eye protection (safety glasses or goggles) to avoid particulate irritation of the eye. Gloves or protective clothing are usually not necessary, but may be desirable in specific work situations. Wear adequate clothing to minimize chafing or drying of skin.

SECTION IX
SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Normal precautions should be followed in handling, storage, and use. During handling and use wear the appropriate respiratory, eye and skin protection of warranted per environmental conditions.

Use wet sanding technique to reduce dust exposure when finishing joints. See "Finishing and Decorating Gypsum Panels – Wet Sanding, J-610/12-87".

Recommended Storage Methods: Keep from freezing. Store at temperatures less than 120°F. Monomer vapors can be evolved when material is heated.

ΔWARNING!

Dust generated from sanding product may cause eye, skin, nose, throat or respiratory irritation. Use wet-sanding to avoid creating dust. Avoid inhalation of dust and eye contact. If dusty, wear a NIOSH/MSHA-approved respirator. Wear eye protection. Provide good general ventilation and local exhaust ventilation to avoid excessive amounts of dust. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. Do not ingest. If ingested, call physician. Product safety information: (800) 507-8899.

KEEP OUT OF REACH OF CHILDREN.

END



Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: None

SECTION V
HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

ACUTE:

EYES: Particles may cause irritation.

SKIN: This material is not toxic. No toxic effects from powdered gypsum are noticed where air contains contaminate to excess. May dry skin. This material exhibits some affinity for moisture, and frequent exposures may have a drying effect on the skin. Possible itching and irritation may be experienced. This may lead to dermatitis. No penetration of intact skin. Absorption of boric acid into blood stream through damaged skin may result in erythema or macular rash.
INHALATION: Inhalation of dusts from this product may irritate the nose, throat, lungs, and upper respiratory tract. Boric acid may be absorbed through mucous membranes. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation from dust. If respiratory symptoms persist, consult physician.

INGESTION: Calcium sulfate is nontoxic, however, ingestion of a sufficient quantity could lead to mechanical obstruction of the gut, especially the pyloric region. Large doses of boric acid absorbed into blood stream from ingestion may result in erythema, macular rash, nausea, diarrhea, dizziness and CNS effects after 36-72 hours. Ingestion of 5 grams or more of boric acid may irritate gastrointestinal tract and affect central nervous system.

CHRONIC:

INHALATION: Prolonged and repeated exposure to respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush thoroughly with water for 15 minutes to remove particles. If irritation persists, consult physician.

SKIN: Wash with mild soap and water. A commercially available hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing.

INHALATION: Leave the area of dust exposure and remain away until coughing and other symptoms subside.

INGESTION: The product contains gypsum and if ingestion of a large quantity occurs it could lead to mechanical obstruction of the gut, especially the pyloric region. If ingested, call physician.

TARGET ORGANS: Eyes, skin, lungs and respiratory system.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung disease such as, but not limited to, bronchitis, emphysema and asthma.

PRIMARY ROUTES OF ENTRY: Inhalation, eyes and skin contact.

CARCINOGENICITY OF INGREDIENTS:

MATERIAL	IARC	NTP
Crystalline Silica	Group 1	Anticipated

The average concentration of respirable crystalline silica measured in USG gypsum bulk samples was less than 0.1 wt.%. Respirable crystalline silica was not detected in air samples taken while cutting USG gypsum panels with a power saw for eight hours.

In June, 1997, the International Agency for Research on Cancer (IARC) classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).



SECTION VI
REACTIVITY DATA

STABILITY:	Stable
INCOMPATIBILITY:	None known.
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION:	Above 1450°C could produce SO ₂ & CaO.

SECTION VII
SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

No special precautions. Wear appropriate protective equipment. Collect material from spillage place in a waste container for disposal, or if not damaged or contaminated by foreign material, gypsum panels may be reclaimed.

WASTE DISPOSAL METHOD:

Dispose of material in accordance with federal, state and local regulations.

SECTION VIII
SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

Not typically necessary under normal conditions of use. Avoid inhalation of dust. Nuisance dust created from product may cause eye, skin, nose, throat or upper respiratory irritation. Provide general ventilation and, if necessary, local exhaust ventilation to meet TLV requirements. Wear a NIOSH/MSHA-approved respirator if TLV is exceeded and/or when dusty conditions exist to guard against nuisance particles.

VENTILATION:

General ventilation should be adequate but if necessary use local exhaust ventilation to keep exposures below the TLV.

PERSONAL PROTECTIVE EQUIPMENT:

Gloves or protective clothing are usually not necessary but may be desirable in specific work situations. Wear safety glasses or goggles for eye protection to avoid particulate irritation of the eye.

SECTION IX
SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

SAFETY FIRST! Follow good safety and industrial hygiene practices during handling and installing of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Store in a dry place. Store all SHEETROCK® brand Gypsum Panels flat. Panels are heavy and can fall over, causing serious injury or death. DO NOT move unless authorized.

END



United States Gypsum Company
 125 South Franklin Street
 Chicago, Illinois 60606-4678

Product Safety: 1 (800) 507-8899
 Version Date: October 1, 1999
 Version 3

SECTION I
PRODUCT IDENTIFICATION

PRODUCT(S): USG SHEETROCK® Brand Gypsum Panels FIRECODE® C Core (Type X)

CHEMICAL FAMILY: Gypsum (Calcium Sulfate Dihydrate, CaSO₄ • 2H₂O)

SECTION II
INGREDIENTS

MATERIAL	WT%	TLV (mg/m ³)	PEL (mg/m ³)	CAS NUMBER
Gypsum	>80	10	15(T)/5(R)	13397-24-5
Or Calcium Sulfate Dihydrate		10	15(T)/5(R)	10101-41-4
Recycled Paper (Cellulose)	<15	10	15(T)/5(R)	9004-34-6
Vermiculite	<10	(NE)	(NE)	1318-00-9
Starch	<3	10	15(T)/5(R)	9005-25-8
Crystalline Silica	<5	0.1(R)	0.1(R)	14808-60-7
May Contain the Following:				
Fibrous Glass (Textile Grade)	<1	(NE)	(NE)	65977-17-3
Boric Acid	<1	(NE)	(NE)	10043-35-3
Potassium Sulfate	<5	(NE)	(NE)	7778-80-5

(T) – Total (R) – Respirable (NE) – Not Established

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings: Health: 0 Fire: 0 Reactivity: 0 Other: N/A
 HMIS Ratings: Health: 0 Fire: 0 Reactivity: 0
 Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.
 0 = Minimal Hazard 1 = Slight Hazard 2 = Moderate Hazard 3 = Serious Hazard 4 = Severe Hazard

SECTION III
PHYSICAL DATA

Appearance and Odor: Paper covered panel with off white core; low odor.
Bulk Density: 28 – 96 lbs/ft³; varies with panel thickness.
Solubility in Water: ~ 0.2%

SECTION IV
FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None



Extinguishing Media: Not Combustible
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: None

SECTION V
HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

ACUTE:

EYES: Particles may cause irritation.

SKIN: This material is not toxic. No toxic effects from powdered gypsum are noticed where air contains contaminate to excess. May dry skin. This material exhibits some affinity for moisture, and frequent exposures may have a drying effect on the skin. Possible itching and irritation may be experienced. This may lead to dermatitis. No penetration of intact skin. Absorption of boric acid into blood stream through damaged skin may result in erythema or macular rash.

INHALATION: Inhalation of dusts from this product may irritate the nose, throat, lungs, and upper respiratory tract. Boric acid may be absorbed through mucous membranes. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation from dust. If respiratory symptoms persist, consult physician.

INGESTION: Calcium sulfate is nontoxic, however, ingestion of a sufficient quantity could lead to mechanical obstruction of the gut, especially the pyloric region. Large doses of boric acid absorbed into blood stream from ingestion may result in erythema, macular rash, nausea, diarrhea, dizziness and CNS effects after 36-72 hours. Ingestion of 5 grams or more of boric acid may irritate gastrointestinal tract and affect central nervous system.

CHRONIC:

INHALATION: Prolonged and repeated exposure to respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush thoroughly with water for 15 minutes to remove particles. If irritation persists, consult physician.

SKIN: Wash with mild soap and water. A commercially available hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing.

INHALATION: Leave the area of dust exposure and remain away until coughing and other symptoms subside.

INGESTION: The product contains gypsum and if ingestion of a large quantity occurs it could lead to mechanical obstruction of the gut, especially the pyloric region. If ingested, call physician.

TARGET ORGANS: Eyes, skin, lungs and respiratory system.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung disease such as, but not limited to, bronchitis, emphysema and asthma.

PRIMARY ROUTES OF ENTRY: Inhalation, eyes and skin contact.

CARCINOGENICITY OF INGREDIENTS:

MATERIAL	IARC	NTP
Crystalline Silica	Group 1	Anticipated

The average concentration of respirable crystalline silica measured in USG gypsum bulk samples was less than 0.1 wt.%. Respirable crystalline silica was not detected in air samples taken while cutting USG gypsum panels with a power saw for eight hours.

In June, 1997, the International Agency for Research on Cancer (IARC) classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).



SECTION VI
REACTIVITY DATA

STABILITY:	Stable
INCOMPATIBILITY:	None known.
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION:	Above 1450°C could produce SO ₂ & CaO.

SECTION VII
SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

No special precautions. Wear appropriate protective equipment. Collect material from spillage place in a waste container for disposal, or if not damaged or contaminated by foreign material, gypsum panels may be reclaimed.

WASTE DISPOSAL METHOD:

Dispose of material in accordance with federal, state and local regulations.

SECTION VIII
SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

Not typically necessary under normal conditions of use. Avoid inhalation of dust. Nuisance dust created from product may cause eye, skin, nose, throat or upper respiratory irritation. Provide general ventilation and, if necessary, local exhaust ventilation to meet TLV requirements. Wear a NIOSH/MSHA-approved respirator if TLV is exceeded and/or when dusty conditions exist to guard against nuisance particles.

VENTILATION:

General ventilation should be adequate but if necessary use local exhaust ventilation to keep exposures below the TLV.

PERSONAL PROTECTIVE EQUIPMENT:

Gloves or protective clothing are usually not necessary but may be desirable in specific work situations. Wear safety glasses or goggles for eye protection to avoid particulate irritation of the eye.

SECTION IX
SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

SAFETY FIRST! Follow good safety and industrial hygiene practices during handling and installing of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Store in a dry place. Store all SHEETROCK® brand Gypsum Panels flat. Panels are heavy and can fall over, causing serious injury or death. DO NOT move unless authorized.

END



MATERIAL SAFETY DATA SHEET

MSDS NO. 06215

SHEETROCK® Brand Lightweight Setting-Type Joint Compounds
– EASY SAND™ 20, EASY SAND™ 30, EASY SAND™ 45, EASY SAND™ 90, EASY SAND™ 210, EASY SAND™ 300

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United States Gypsum Company
125 South Franklin Street
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Product Safety: 1 (800) 507-8899
Version Date: October 1, 1999
Version 3

SECTION I PRODUCT IDENTIFICATION

PRODUCT(S): USG SHEETROCK® Brand Lightweight Setting-Type Joint Compounds

EASY SAND™ 20	EASY SAND™ 90
EASY SAND™ 30	EASY SAND™ 210
EASY SAND™ 45	EASY SAND™ 300

CHEMICAL FAMILY: Mixture of Calcium Sulfate Hemihydrate (Plaster of Paris, CaSO₄•_{1/2}H₂O), and minerals

SECTION II INGREDIENTS

MATERIAL	WT%	TLV (mg/m ³)	PEL (mg/m ³)	CAS NUMBER
Plaster of Paris	>60	10	15(T)/5(R)	26499-65-0
Limestone	<10	10	15(T)/5(R)	1317-65-3
Or Dolomite		10	15(T)/5(R)	16389-88-1
Expanded Perlite	<10	10	15(T)/5(R)	93763-70-3
Mica	<10	3(R)	3(R)	12001-26-2
Vinyl Alcohol Polymer	<5	(NE)	(NE)	9002-89-5
Attapulgite	<5	(NE)	(NE)	12174-11-7
Crystalline Silica	<5	0.1(R)	0.1(R)	14808-60-7

(T) – Total (R) – Respirable (NE) – Not Established

***** This is a Non-Asbestos Product. *****

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings: Health: 0 Fire: 0 Reactivity: 0 Other: N/A

HMIS Ratings: Health: 0 Fire: 0 Reactivity: 0

Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.

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

SECTION III PHYSICAL DATA

Appearance and Odor: Off white to gray powder; low odor.

Melting Point: 1450°C – decomposes

Solubility In Water: 0.15%

Specific Gravity (H₂O = 1): 2.3-2.6

pH Range: 7-8.5



MATERIAL SAFETY DATA SHEET

MSDS NO. 06215

SHEETROCK® Brand Lightweight Setting-Type Joint Compounds
– EASY SAND™ 20, EASY SAND™ 30, EASY SAND™ 45, EASY
SAND™ 90, EASY SAND™ 210, EASY SAND™ 300

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Coating Voc: 0 g/l
Material Voc. 0 g/l
Hardening Time: Varies. Check usage and/or product specification data for each product.

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): Noncombustible
Extinguishing Media: Use extinguishing media appropriate for surrounding fire.
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: None
Special Fire Fighting Protective Equipment: None

SECTION V HEALTH HAZARD DATA

Nuisance dust can be released during dry sanding of this product. Eye, skin, nose, throat, and upper respiratory irritation can occur with prolonged dust exposure.

EFFECTS OF OVEREXPOSURE:

ACUTE:

EYES: Direct contact can cause mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

SKIN: When mixed with water, this material hardens and then slowly becomes hot. **DO NOT** attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue or amputation of limb. Direct, prolonged or repeated contact with the skin may cause irritation. Rubbing of this product against the skin can result in abrasions. Rinse with water until free of material to avoid abrasions, then wash skin thoroughly with mild soap and water. May dry skin. If irritation persists, consult physician.

INHALATION: Inhalation of dust from this product may irritate the nose, throat, lungs, and upper respiratory tract. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation from dust. Labored breathing may occur after excessive inhalation. If respiratory symptoms persist, consult physician.

INGESTION: Unlikely to occur, but may cause gastric disturbances if swallowed. Plaster of paris is nontoxic, however, ingestion of a sufficient quantity could lead to mechanical obstruction of the gut, especially the pyloric region. See Emergency and First Aid – Ingestion below.

CHRONIC: This material displays no specific toxic properties.

EYES: None known.

SKIN: None known.

INHALATION: Prolonged and repeated exposure to respirable crystalline silica may result in lung disease (i.e. silicosis) and/or lung cancer. Long-term breathing of large amounts of respirable mica may cause lung disease.

INGESTION: No known effects.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Immediately flush thoroughly with water for 15 minutes. If irritation persists, consult physician.

SKIN: Rinse with water, then wash with mild soap and water. A commercially available hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing. If irritation persists, consult physician.

INHALATION: Remove to fresh air. Leave the area of dust exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary, however, if conditions warrant, contact physician.



MATERIAL SAFETY DATA SHEET

MSDS NO. 06215

SHEETROCK® Brand Lightweight Setting-Type Joint Compounds
– EASY SAND™ 20, EASY SAND™ 30, EASY SAND™ 45, EASY SAND™ 90, EASY SAND™ 210, EASY SAND™ 300

Page 3 of 4

INGESTION: No harmful effects expected. No specific recommendation. If gastric disturbance occurs, call physician. This product contains gypsum plaster. Plaster of paris hardens when wetted and, if ingested, may result in obstruction of the gut, especially the pyloric region.

TARGET ORGANS: Eyes, skin, and respiratory system.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma.

PRIMARY ROUTES OF ENTRY: Inhalation; Eye and/or Skin contact.

CARCINOGENICITY OF INGREDIENTS:

MATERIAL

Crystalline Silica

IARC

Group 1

NTP

Anticipated

The average concentration of respirable crystalline silica measured in USG plaster of paris was less than 0.1 Wt. %. However, the quantity of respirable crystalline silica in this product has not been determined.

In June, 1997, the International Agency for Research on Cancer (IARC) classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

SECTION VI REACTIVITY DATA

STABILITY:

Stable.

INCOMPATIBILITY:

Acids.

HAZARDOUS POLYMERIZATION:

Will not occur.

HAZARDOUS DECOMPOSITION:

Stable under normal temperature and pressure. Thermal decomposition will produce H₂O, CO₂, CO, and acetic acid. Product will decompose at temperatures above 1450°C to CaO and SO₂.

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Use normal clean up procedure. Shovel material from spillage into a waste container for disposal, avoid creating excessive dust and minimize airborne dust. If already mixed with water, scoop up and place in disposable container. Wear appropriate protection equipment. If washed down, may plug drains.

WASTE DISPOSAL METHOD:

Dispose of material in accordance with federal, state, and local regulations. Slurry may plug drains.

SECTION VIII SPECIAL PROTECTION INFORMATION

No TLV assigned to this mixture; see Ingredients Section. Minimize dust exposures in accordance with good hygiene practice.



MATERIAL SAFETY DATA SHEET

MSDS NO. 06215

**SHEETROCK® Brand Lightweight Setting-Type Joint Compounds
– EASY SAND™ 20, EASY SAND™ 30, EASY SAND™ 45, EASY
SAND™ 90, EASY SAND™ 210, EASY SAND™ 300**

Page 4 of 4

RESPIRATORY PROTECTION:

Not typically necessary under normal conditions of use. Provide general ventilation and local exhaust ventilation to meet TLV requirements of individual ingredients and to control dusting conditions. Avoid creating dust. Wear a NIOSH/MSHA-approved respirator when dusty conditions exist, in poorly ventilated areas, and if TLV is exceeded.

VENTILATION:

General ventilation is expected to be adequate, but if necessary use local exhaust ventilation to keep exposures below TLV.

PERSONAL PROTECTIVE EQUIPMENT:

Wear eye protection (safety glasses or goggles) to avoid particulate irritation of the eye. Gloves or protective clothing are usually not necessary, but may be desirable in specific work situations. Wear adequate clothing to minimize chafing or drying of skin.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Normal precautions should be followed in handling, storage, and use. During handling and use wear the appropriate respiratory, eye and skin protection of warranted per environmental conditions.

Use wet sanding technique to reduce dust exposure when finishing joints. See “Finishing and Decorating Gypsum Panels – Wet Sanding, J-610/12-87”.

Recommended Storage Methods: Keep dry. Dew point conditions or other conditions causing presence of liquid will harden this material during storage.

⚠WARNING!

When mixed with water, this material hardens and then slowly becomes hot. **DO NOT** attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue or amputation of limb. Dust generated from sanding product may cause eye, skin, nose, throat or respiratory irritation. Use wet-sanding to avoid creating dust. Avoid inhalation of dust and eye contact. If dusty, wear a NIOSH/MSHA-approved respirator. Prolonged and repeated exposure to respirable mica may cause lung disease. Wear eye protection. Provide good general ventilation and local exhaust ventilation to avoid excessive amounts of dust. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. Do not ingest. If ingested, call physician. Product safety information: (800) 507-8899.

KEEP OUT OF REACH OF CHILDREN.

END



MATERIAL SAFETY DATA SHEET

MSDS NO. 06200

SHEETROCK® Brand Setting-Type Joint Compounds –
DURABOND® 20, DURABOND® 45, DURABOND® 90,
DURABOND® 210, DURABOND® 300

Page 1 of 4

United States Gypsum Company
125 South Franklin Street
Chicago, Illinois 60606-4678

Product Safety: 1 (800) 507-8899
Version Date: October 1, 1999
Version 3

SECTION I PRODUCT IDENTIFICATION

PRODUCT(S): USG SHEETROCK® Brand Setting-Type Joint Compounds
DURABOND® 20 DURABOND® 210
DURABOND® 45 DURABOND® 300
DURABOND® 90

CHEMICAL FAMILY: Mixture of Calcium Sulfate Hemihydrate (Plaster of Paris, CaSO₄•_{1/2}H₂O), and minerals.

SECTION II INGREDIENTS

MATERIAL	WT%	TLV (mg/m ³)	PEL (mg/m ³)	CAS NUMBER
Plaster of Paris	>60	10	15(T)/5(R)	26499-65-0
Limestone	<20	10	15(T)/5(R)	1317-65-3
Or Dolomite		10	15(T)/5(R)	16389-88-1
Mica	<10	3(R)	3(R)	12001-26-2
Vinyl Alcohol Polymer	<5	(NE)	(NE)	9002-89-5
Attapulgate	<5	(NE)	(NE)	12174-11-7
Crystalline Silica	<5	0.1(R)	0.1(R)	14808-60-7

May contain the following

Ethylene Vinyl Acetate Polymer	<3	(NE)	(NE)	24937-78-8
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(T) – Total (R) – Respirable (NE) – Not Established

***** This is a Non-Asbestos Product. *****

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings: Health: 0 Fire: 0 Reactivity: 0 Other: N/A

HMIS Ratings: Health: 0 Fire: 0 Reactivity: 0

Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.

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

SECTION III PHYSICAL DATA

Appearance and Odor: Off white to gray powder; low odor.

Melting Point: 1450°C – decomposes

Solubility In Water: 0.15%



MATERIAL SAFETY DATA SHEET

MSDS NO. 06200

SHEETROCK® Brand Setting-Type Joint Compounds –
DURABOND® 20, DURABOND® 45, DURABOND® 90,
DURABOND® 210, DURABOND® 300

Page 2 of 4

Specific Gravity (H ₂ O = 1):	2.3-2.6
pH Range:	7-8.5
Coating Voc:	0 g/l
Material Voc:	0 g/l
Hardening Time:	Varies. Check usage and/or product specification data for each product.

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	Noncombustible
Extinguishing Media:	Use extinguishing media appropriate for surrounding fire.
Special Fire Fighting Procedures:	None
Unusual Fire and Explosion Hazards:	None
Special Fire Fighting Protective Equipment:	None

SECTION V HEALTH HAZARD DATA

Nuisance dust can be released during dry sanding of this product. Eye, skin, nose, throat, and upper respiratory irritation can occur with prolonged dust exposure.

EFFECTS OF OVEREXPOSURE:

ACUTE:

EYES: Direct contact can cause mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

SKIN: When mixed with water, this material hardens and then slowly becomes hot. **DO NOT** attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue or amputation of limb. Direct, prolonged or repeated contact with the skin may cause irritation. Rubbing of this product against the skin can result in abrasions. Rinse with water until free of material to avoid abrasions, then wash skin thoroughly with mild soap and water. May dry skin. If irritation persists, consult physician.

INHALATION: Inhalation of dust from this product may irritate the nose, throat, lungs, and upper respiratory tract. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation from dust. Labored breathing may occur after excessive inhalation. If respiratory symptoms persist, consult physician.

INGESTION: Unlikely to occur, but may cause gastric disturbances if swallowed. Plaster of paris is nontoxic, however, ingestion of a sufficient quantity could lead to mechanical obstruction of the gut, especially the pyloric region. See Emergency and First Aid – Ingestion below.

CHRONIC: This material displays no specific toxic properties.

EYES: None known.

SKIN: None known.

INHALATION: Prolonged and repeated exposure to respirable crystalline silica may result in lung disease (i.e. silicosis) and/or lung cancer. Long-term breathing of large amounts of respirable mica may cause lung disease.

INGESTION: No known effects.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Immediately flush thoroughly with water for 15 minutes. If irritation persists, consult physician.

SKIN: Rinse with water, then wash with mild soap and water. A commercially available hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing. If irritation persists, consult physician.



MATERIAL SAFETY DATA SHEET

MSDS NO. 06200

**SHEETROCK® Brand Setting-Type Joint Compounds –
DURABOND® 20, DURABOND® 45, DURABOND® 90,
DURABOND® 210, DURABOND® 300**

Page 3 of 4

INHALATION: Remove to fresh air. Leave the area of dust exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary, however, if conditions warrant, contact physician.

INGESTION: No harmful effects expected. No specific recommendation. If gastric disturbance occurs, call physician. This product contains gypsum plaster. Plaster of paris hardens when wetted and, if ingested, may result in obstruction of the gut, especially the pyloric region.

TARGET ORGANS: Eyes, skin, and respiratory system.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma.

PRIMARY ROUTES OF ENTRY: Inhalation; Eye and/or Skin contact.

CARCINOGENICITY OF INGREDIENTS:

MATERIAL	IARC	NTP
Crystalline Silica	Group 1	Anticipated

The average concentration of respirable crystalline silica measured in USG plaster of paris was less than 0.1 Wt. %. However, the quantity of respirable crystalline silica in this product has not been determined.

In June, 1997, the International Agency for Research on Cancer (IARC) classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

SECTION VI REACTIVITY DATA

STABILITY:	Stable.
INCOMPATIBILITY:	Acids.
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION:	CO ₂ would be produced at high temperatures with the decomposition of limestone (~800°C). Stable under normal temperature and pressure. Thermal decomposition will produce H ₂ O, CO ₂ , CO, and acetic acid. Product will decompose at temperatures above 1450°C to CaO and SO ₂ .

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Use normal clean up procedure. Shovel material from spillage into a waste container for disposal, avoid creating excessive dust and minimize airborne dust. If already mixed with water, scoop up and place in disposable container. Wear appropriate protection equipment. If washed down, may plug drains.

WASTE DISPOSAL METHOD:

Dispose of material in accordance with federal, state, and local regulations. Slurry may plug drains.



MATERIAL SAFETY DATA SHEET

MSDS NO. 06200

SHEETROCK® Brand Setting-Type Joint Compounds –
DURABOND® 20, DURABOND® 45, DURABOND® 90,
DURABOND® 210, DURABOND® 300

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SECTION VIII SPECIAL PROTECTION INFORMATION

No TLV assigned to this mixture; see Ingredients Section. Minimize dust exposures in accordance with good hygiene practice.

RESPIRATORY PROTECTION:

Not typically necessary under normal conditions of use. Provide general ventilation and local exhaust ventilation to meet TLV requirements of individual ingredients and to control dusting conditions. Avoid creating dust. Wear a NIOSH/MSHA-approved respirator when dusty conditions exist, in poorly ventilated areas, and if TLV is exceeded.

VENTILATION:

General ventilation is expected to be adequate, but if necessary use local exhaust ventilation to keep exposures below TLV.

PERSONAL PROTECTIVE EQUIPMENT:

Wear eye protection (safety glasses or goggles) to avoid particulate irritation of the eye. Gloves or protective clothing are usually not necessary, but may be desirable in specific work situations. Wear adequate clothing to minimize chafing or drying of skin.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Normal precautions should be followed in handling, storage, and use. During handling and use wear the appropriate respiratory, eye and skin protection of warranted per environmental conditions.

Use wet sanding technique to reduce dust exposure when finishing joints. See “Finishing and Decorating Gypsum Panels – Wet Sanding, J-610/12-87”.

Recommended Storage Methods: Keep dry. Dew point conditions or other conditions causing presence of liquid will harden this material during storage.

⚠WARNING!

When mixed with water, this material hardens and then slowly becomes hot. **DO NOT** attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue or amputation of limb. Dust generated from sanding product may cause eye, skin, nose, throat or respiratory irritation. Use wet-sanding to avoid creating dust. Avoid inhalation of dust and eye contact. If dusty, wear a NIOSH/MSHA-approved respirator. Prolonged and repeated exposure to respirable mica may cause lung disease. Wear eye protection. Provide good general ventilation and local exhaust ventilation to avoid excessive amounts of dust. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. Do not ingest. If ingested, call physician. Product safety information: (800) 507-8899.

KEEP OUT OF REACH OF CHILDREN.

END



MATERIAL SAFETY DATA SHEET

DUROCK® Brand Cement Board, DUROCK® Brand Exterior Cement Board,
DUROCK® Brand Underlayment Board & Concrete Utility Board

NO. 01400

Page 1 of 4

United States Gypsum Company
125 South Franklin Street
Chicago, Illinois 60606-4678

Product Safety: 1 (800) 507-8899
Version Date: April 3, 1998
Version 2

SECTION I PRODUCT IDENTIFICATION

PRODUCT(S): DUROCK® Brand Cement Board, DUROCK® Brand Exterior Cement Board, DUROCK® Brand Underlayment Board & Concrete Utility Board

CHEMICAL FAMILY: Cement Panel

SECTION II INGREDIENTS

MATERIAL	WT%	TLV (mg/m ³)	PEL (mg/m ³)	CAS NUMBER
Portland Cement	10-30	10(T)	10(T)/5(R)	65997-15-1
Expanded Clay Aggregate Or Expanded Shale	30-50	(NE)	(NE)	68334-37-2 68476-95-9
High Alumina Cement	0-10	10(T)	10(T)/5(R)	65997-16-2
Fly Ash	10-20	5(R)	(NE)	68131-74-8
Gypsum	0-10	10	15(T)/5(R)	13397-24-5*
Fiber Glass Scrim	1-5	10	15(T)/5(R)	65997-17-3
Cellulose Fiber	0-2	10	15/5(R)	9004-34-6
Crystalline Silica	<5	0.1 (R)	0.1 (R)	14808-60-7

(T) – Total (R) – Respirable (NE) – Not Established

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0 Other: N/A

HIMS Ratings: Health: 1 Fire: 0 Reactivity: 0

Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.

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

SECTION III PHYSICAL DATA

Appearance and Odor: Gray board; mild odor.

Solubility in Water: None.

Specific Gravity (H₂O = 1): 1.2 (Apparent bulk density).

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): Not combustible.



MATERIAL SAFETY DATA SHEET

SHEETROCK® Brand Gypsum Sheathing Panels

MSDS NO. 01055

Page 1 of 3

United States Gypsum Company
125 South Franklin Street
Chicago, Illinois 60606-4678

Product Safety: 1 (800) 507-8899
Version Date: October 1, 1999
Version 3

SECTION I PRODUCT IDENTIFICATION

PRODUCT(S): USG SHEETROCK® Brand Gypsum Sheathing Panels

CHEMICAL FAMILY: Gypsum (Calcium Sulfate Dihydrate, CaSO₄ •2H₂O)

SECTION II INGREDIENTS

MATERIAL	WT%	TLV (mg/m ³)	PEL (mg/m ³)	CAS NUMBER
Gypsum	>80	10	15(T)/5(R)	13397-24-5
Or Calcium Sulfate Dihydrate		10	15(T)/5(R)	10101-41-4
Recycled Paper (Cellulose)	<15	10	15(T)/5(R)	9004-34-6
Starch	<3	10	15(T)/5(R)	9005-25-8
Potassium Sulfate	<5	(NE)	(NE)	7778-80-5
Asphalt	<3	5	(NE)	8052-42-4
Parrafin Wax	<2	2(fume)	2(fume)	8002-74-2
Crystalline Silica	<5	0.1(R)	0.1(R)	14808-60-7
May Contain the Following:				
Fibrous Glass (Textile Grade)	<1	(NE)	(NE)	65977-17-3

(T) – Total (R) – Respirable (NE) – Not Established

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings: Health: 0 Fire: 0 Reactivity: 0 Other: N/A

HMIS Ratings: Health: 0 Fire: 0 Reactivity: 0

Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.

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

SECTION III PHYSICAL DATA

Appearance and Odor: Paper covered panel with off white core; low odor.

Bulk Density: 28 – 96 lbs/ft³; varies with panel thickness.

Solubility in Water: ~ 0.2%

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None



Extinguishing Media: Not Combustible
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: None

SECTION V
HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

ACUTE:

EYES: Particles may cause irritation.

SKIN: This material is not toxic. No toxic effects from powdered gypsum are noticed where air contains contaminate to excess. May dry skin. This material exhibits some affinity for moisture, and frequent exposures may have a drying effect on the skin. Possible itching and irritation may be experienced. This may lead to dermatitis. No penetration of intact skin. Absorption of boric acid into blood stream through damaged skin may result in erythema or macular rash.

INHALATION: Inhalation of dusts from this product may irritate the nose, throat, lungs, and upper respiratory tract. Boric acid may be absorbed through mucous membranes. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation from dust. If respiratory symptoms persist, consult physician.

INGESTION: Calcium sulfate is nontoxic, however, ingestion of a sufficient quantity could lead to mechanical obstruction of the gut, especially the pyloric region.

CHRONIC:

INHALATION: Prolonged and repeated exposure to respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush thoroughly with water for 15 minutes to remove particles. If irritation persists, consult physician.

SKIN: Wash with mild soap and water. A commercially available hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing.

INHALATION: Leave the area of dust exposure and remain away until coughing and other symptoms subside.

INGESTION: The product contains gypsum and if ingestion of a large quantity occurs it could lead to mechanical obstruction of the gut, especially the pyloric region. If ingested, call physician.

TARGET ORGANS: Eyes, skin, lungs and respiratory system.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung disease such as, but not limited to, bronchitis, emphysema and asthma.

PRIMARY ROUTES OF ENTRY: Inhalation, eyes and skin contact.

CARCINOGENICITY OF INGREDIENTS:

MATERIAL	IARC	NTP
Crystalline Silica	Group 1	Anticipated

The average concentration of respirable crystalline silica measured in USG gypsum bulk samples was less than 0.1 wt.%. Respirable crystalline silica was not detected in air samples taken while cutting USG gypsum panels with a power saw for eight hours.

In June, 1997, the International Agency for Research on Cancer (IARC) classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).



SECTION VI
REACTIVITY DATA

STABILITY:	Stable
INCOMPATIBILITY:	None known.
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION:	Above 1450°C could produce SO ₂ & CaO.

SECTION VII
SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

No special precautions. Wear appropriate protective equipment. Collect material from spillage place in a waste container for disposal, or if not damaged or contaminated by foreign material, gypsum panels may be reclaimed.

WASTE DISPOSAL METHOD:

Dispose of material in accordance with federal, state and local regulations.

SECTION VIII
SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

Not typically necessary under normal conditions of use. Avoid inhalation of dust. Nuisance dust created from product may cause eye, skin, nose, throat or upper respiratory irritation. Provide general ventilation and, if necessary, local exhaust ventilation to meet TLV requirements. Wear a NIOSH/MSHA-approved respirator if TLV is exceeded and/or when dusty conditions exist to guard against nuisance particles.

VENTILATION:

General ventilation should be adequate but if necessary use local exhaust ventilation to keep exposures below the TLV.

PERSONAL PROTECTIVE EQUIPMENT:

Gloves or protective clothing are usually not necessary but may be desirable in specific work situations. Wear safety glasses or goggles for eye protection to avoid particulate irritation of the eye.

SECTION IX
SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

SAFETY FIRST! Follow good safety and industrial hygiene practices during handling and installing of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Store in a dry place. Store all SHEETROCK® brand Gypsum Panels flat. Panels are heavy and can fall over, causing serious injury or death. DO NOT move unless authorized.

END

MATERIAL SAFETY DATA SHEET 01201

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211

For emergency product safety information call, Director of Quality Services at 704-365-7543.

I PRODUCT IDENTIFICATION

This material safety data sheet is applicable to the following Gold Bond[®] brand products:

Gypsum Land Plaster
Accelerator Cement Rock
Agricultural Gypsum

Chemical Family: Chemical Salt Formula: CaSO₄ · 2H₂O
Chemical Name: Calcium Sulfate Dihydrate

II HAZARDOUS INGREDIENTS

Contains:		OSHA	ACGIH
<u>Chemical Identity</u>	<u>CAS-NO</u>	<u>PEL</u>	<u>TLV</u>
		(mg/m ³)	(mg/m ³)
Gypsum	10101-41-4	5	10 ^A
Quartz ^B	14808-60-7	^C	0.1

Contains no asbestos. HMIS Hazard Class No. 1, 0, 0

^A Total dust, all others are respirable dust.

^B Present as a naturally occurring component of minerals. See Sec. III HEALTH HAZARD DATA

^C Respirable dust, use the formula: $\frac{10 \text{ mg/m}^3}{\% \text{ SiO}_2 + 2}$

Appearance and Odor

A white solid/powder with no odor.

Fire Hazard Data - Not combustible. NFPA Hazard Class No. 1, 0, 0

Extinguishing Media

Dry chemical, foam, water, fog or spray.

Special Firefighting Procedures

Wear full protective equipment and an approved pressure demand self-contained breathing apparatus.

Reactivity Data

Gold Bond[®] Gypsum is stable and hazardous polymerization will not occur. When heated to decomposition oxides of sulfur will be released.

MATERIAL SAFETY DATA SHEET 01201

III HEALTH HAZARD DATA

Quartz (crystalline silica) - The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

It is recommended that a NIOSH approved respirator, for toxic dusts, be worn whenever working with product results in airborne dust exposure exceeding the prescribed limits.

Skin Contact

Continued and prolonged contact may result in dry skin.

Eye Contact

Direct contact may cause mechanical irritation.

Inhalation

Target Organ: respiratory system

Signs and Symptoms of Exposure to Airborne Dust

Continued and prolonged exposure to airborne dust concentrations in excess of the PEL/TLV may result in cough, dyspnea, wheezing, and impaired pulmonary function.

Medical Conditions Generally Aggravated by Exposure

Overexposure would generally aggravate respiratory system dysfunctions.

First Aid Procedures

Eye: Immediately flush eyes with water for 15 minutes and get medical attention.

Skin: Flush and wash skin with soap and water. Get medical attention if irritation persists.

Breathing: Move the exposed person to fresh air at once. If not breathing initiate pulmonary resuscitation. Get medical attention.

IV PRECAUTIONS for SAFE HANDLING

Steps to be Taken in Case Material is Released or Spilled

Shovel or scoop up back into container for use if possible or disposal.

Waste Disposal Method

Not a hazardous waste. Dispose of in accordance with applicable federal, state, and local regulations.

MATERIAL SAFETY DATA SHEET 01201

Precautions to be Taken in Handling and Storing

Keep dry to preserve usefulness.

V CONTROL MEASURES

Work/Hygiene Practices

Avoid creating dust.

Ventilation

Provide ventilation to maintain a dust level below the PEL/TLV.

Respiratory Protection

A NIOSH approved respirator for toxic dusts is recommended if the PEL/TLV is exceeded.

Eye Protection

Safety glasses or goggles.

VI REGULATORY INFORMATION

SARA Title III Section 313 Ingredients

None at or above the de minimus level.

Effective Date: January 26, 2001

Prepared by: Norbert W. Kaleta

Disclaimer of Liability:

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MATERIAL SAFETY DATA SHEET 01204

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211

For emergency product safety information call, Director, Quality Services at 704-365-7543.

I PRODUCT IDENTIFICATION

This material safety data sheet is applicable to the following Gold Bond² brand products:

Wallboard Paper
Joint Tape

Chemical family: Polysaccharide
Chemical Name: Cellulose (Paper Fibers)
Formula: $[C_6H_{10}O_5]_n$

II HAZARDOUS INGREDIENTS

Contains:		OSHA	ACGIH
<u>Chemical Identity</u>	<u>CAS-NO</u>	<u>PEL</u> (mg/m ³)	<u>TLV</u> (mg/m ³)
Cellulose	9004-34-6	5	10 ^A

^A Total Dust. All others are respirable.
Contains no asbestos. HMIS Hazard Class No. 0, 0, 0

Fire Hazard Data NFPA Hazard Class No. 1, 0, 0

Extinguishing Media
Dry chemical, foam, water fog or spray.

Special Firefighting Procedures
Wear full protective equipment and an approved pressure demand self-contained breathing apparatus.

Reactivity Data
Gold Bond[®] Wallboard Papers and Joint Tape are stable and hazardous polymerization will not occur. When heated to decomposition, oxides of carbon will be released.

III HEALTH HAZARD DATA

<u>Carcinogenicity</u>			
<u>Substance</u>	<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
Cellulose	NO	NO	NO

MATERIAL SAFETY DATA SHEET 01204

Medical Conditions Generally Aggravated By Exposure

Overexposure would generally aggravate respiratory system dysfunctions.

IV PRECAUTIONS for SAFE HANDLING

Steps to be Taken in Case Material is Released or Spilled

Pick up to avoid tripping hazard.

Waste Disposal Method

Not a hazardous waste. Dispose of in accordance with applicable federal, state, and local regulations.

Precautions to be Taken in Handling and Storing

Keep dry to preserve usefulness.

V CONTROL MEASURES

Work/Hygiene Practices

Avoid creating dust.

Ventilation

Provide ventilation to maintain a dust level below the PEL/TLV.

Respiratory Protection

A NIOSH approved respirator for toxic dusts is recommended if the PEL/TLV is exceeded.

Eye Protection

Safety glasses or goggles.

VI REGULATORY INFORMATION

SARA Title III Section 313 Ingredients

None at or above the de minimus level.

Effective Date: January 26, 2001

Prepared by: Norbert W. Kaleta

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MATERIAL SAFETY DATA SHEET 01501

National Gypsum Company
 2001 Rexford Road
 Charlotte, NC 28211

For emergency product safety information call, Director Quality Services at 704-365-7543.

I PRODUCT IDENTIFICATION

This material safety data sheet is applicable to the following Gold Bond® brand wallboard products:

Durasan® Armor Wall	Seaspray® Panels
Durasan® Fabric-Surfaced	Seaspray® MVR Ceiling Panels
Durasan® Vinyl-Surfaced	Exterior Soffit Board
1” Fire-Shield® Shaftliner Board	Fire-Shield® (includes “G”)
Fire-Shield® Kal-Kore® (includes “G”) Foil Back Lath	
Foil Back Wallboard	Furnace Room Wallboard
Gridstone® Fire-Shield® G Base Board Lath, Fire-Shield® and Plain	
Regular and Sta-Smooth® Wallboard	High Strength Ceiling Board
Kal-Kore®	MR® (Moisture Resistant) Regular and Fire-Shield®
Jumbo Sheathing Regular and Fire-Shield®	Regular Sheathing
Hi-Impact® Wallboard	¼” High Flex® Wallboard
Gypsum Board Reclaim	Durabase® Wallboard
Gridstone® Ceiling Panels	Hi-Abuse™ Wallboard

Chemical Family: Mixture

II HAZARDOUS INGREDIENTS

Contains:		OSHA	ACGIH
<u>Chemical Identity</u>	<u>CAS-NO</u>	<u>PEL</u>	<u>TLV</u>
		(mg/m ³)	(mg/m ³)
Gypsum	10101-41-4	5	10 ^A
Quartz ^B	14808-60-7	^C	0.1
Cellulose (paper fiber)	9004-34-6	5	10 ^A

Contains no asbestos. HMIS Hazard Class No. 1, 0, 0.

^A Total dust. All others are respirable dust.

^B Present as a naturally occurring component of minerals. See Sec. III HEALTH HAZARD DATA.

^C Respirable dust. Use the formula: $\frac{10 \text{ mg/m}^3}{\% \text{ SiO}_2 + 2}$

Appearance and Odor

A gypsum core wrapped with paper. Surface finish will vary with product, no odor.

Fire Hazard Data - Not combustible, NFPA Hazard Class No. 1, 0, 0

Extinguishing Media

Dry chemical, foam, water fog or spray.

MATERIAL SAFETY DATA SHEET 01501

Special Firefighting Procedures

Wear full protective equipment and an approved pressure demand self-contained breathing apparatus.

Reactivity Data

Gold Bond[®] brand wallboard products are stable and hazardous polymerization will not occur. When heated to decomposition, oxides of sulfur and carbon will be released.

III HEALTH HAZARD DATA

Gold Bond[®] brand wallboard products do not present an inhalation, ingestion or contact health hazard unless subjected to operations such as sawing, sanding or machining which result in the generation of airborne particulate.

Quartz (crystalline silica) - The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Skin Contact

Continued and prolonged contact may result in dry skin.

Eye Contact

Direct contact may cause mechanical irritation.

Inhalation

Target Organ: respiratory system

Signs and Symptoms of Exposure to Airborne Dust

Continued and prolonged exposure to airborne dust concentrations in excess of the PEL/TLV may result in cough, dyspnea, wheezing, and impaired pulmonary function.

Medical Conditions Generally Aggravated by Exposure

Overexposure would generally aggravate respiratory system dysfunctions.

First Aid Procedures

Eye: Immediately flush eyes with water for 15 minutes and get medical attention.

Skin: Flush and wash skin with soap and water. Get medical attention if irritation persists.

Breathing: Move the exposed person to fresh air at once. If not breathing initiate pulmonary resuscitation. Get medical attention.

MATERIAL SAFETY DATA SHEET 01501

IV PRECAUTIONS for SAFE HANDLING

Steps to be Taken in Case Material is Released or Spilled

Pickup to avoid tripping hazard. .

Waste Disposal Method

Not a hazardous waste. Dispose of in accordance with applicable federal, state, and local regulations.

Precautions to be Taken in Handling and Storing

Keep dry to preserve usefulness.

V CONTROL MEASURES

Work/Hygiene Practices

The score and snap method of cutting is recommended. Sawing, drilling or machining will produce dust.

Ventilation

Provide ventilation to maintain a dust level below the PEL/TLV.

Respiratory Protection

A NIOSH approved respirator for toxic dusts is recommended if the PEL/TLV is exceeded.

Eye Protection

Safety glasses or goggles.

VI REGULATORY INFORMATION

SARA Title III Section 313 Ingredients

None at or above the de minimus level.

Effective Date: January 26, 2001

Prepared by: Norbert W. Kaleta

Disclaimer of Liability:

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MATERIAL SAFETY DATA SHEET 05001

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211

For emergency product safety information call the Director of Quality Services at 704-365-7543.

I PRODUCT IDENTIFICATION

This material safety data sheet is applicable to the following Gold Bond® brand products:

Sta-Smooth® FS 90 Fire-Shield ² Compound	Sta-Smooth® Lite™
Sta-Smooth® Joint Compound	Sta-Smooth® HS Compound
Triple-T® Joint Compound	

Chemical Family: Mixture

II HAZARDOUS INGREDIENTS

Contains:		OSHA	ACGIH
<u>Chemical Identity</u>	<u>CAS-NO</u>	<u>PEL</u> (mg/m ³)	<u>TLV</u> (mg/m ³)
Quartz ^A	14808-60-7	B	0.1

and may contain one or more of the following:

Calcium Carbonate	1317-65-3	5	10 ^C
Mica	12001-26-2	20 mppcf	3
Talc (non-asbestiform)	14807-96-6	20 mppcf	2
Perlite	93763-70-3	5	10 ^C
Attapulgitte Clay	12174-11-7	NL	NL
Plaster of Paris	10034-76-1	5	10 ^C
Bentonite Clay	1302-78-9	NL	NL
Polyvinyl Alcohol	25213-24-5	NL	NL
Gypsum	10101-41-4	5	10 ^C

Contains no asbestos. HMIS Hazard Class No. 1, 0, 0

^A Present as a naturally occurring component of minerals. See Sec. III HEALTH HAZARD DATA

^B Respirable dust, use the formula: $\frac{10 \text{ mg/m}^3}{\% \text{ SiO}_2 + 2}$

^C Total dust, all others are respirable dust.

NL - not listed.

Appearance and Odor

A white powder with no odor.

Fire Hazard Data - Not combustible. NFPA Hazard Class No. 1, 0, 0

MATERIAL SAFETY DATA SHEET 05001

Extinguishing Media

Dry chemical, foam, water, fog or spray.

Special Firefighting Procedures

Wear full protective equipment and an approved pressure demand self-contained breathing apparatus

Reactivity Data

Gold Bond[®] Joint Compound Products are stable and hazardous polymerization will not occur. When heated to decomposition oxides of sulfur or carbon will be released.

III HEALTH HAZARD DATA

Quartz (crystalline silica) - The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

It is recommended that a NIOSH approved respirator, for toxic dusts, be worn whenever working with this product results in airborne dust exposure exceeding the prescribed limits.

Attapulgite clay - IARC classifies attapulgite (long fiber) carcinogenic to humans, Group 2B. Attapulgite is not classified as a carcinogen by NTP or OSHA.

Skin Contact

Continued and prolonged contact may result in irritation to the skin.

Eye Contact

Direct contact may cause eye irritation.

Inhalation (Exposure occurs when mixing or sanding the dried product)

Target Organ: respiratory system

Signs and Symptoms of Exposure to Airborne Dust

Continued and prolonged exposure to airborne dust concentrations in excess of the PEL/TLV may result in cough, dyspnea, wheezing, and impaired pulmonary function.

Medical Conditions Generally Aggravated by Exposure

Overexposure would generally aggravate respiratory system dysfunctions.

First Aid Procedures

Eye: Immediately flush eyes with water for 15 minutes and get medical attention.

Skin: Flush and wash skin with soap and water. Get medical attention if irritation persists.

MATERIAL SAFETY DATA SHEET 05001

Breathing: Move the exposed person to fresh air at once. If not breathing initiate pulmonary resuscitation. Get medical attention.

IV PRECAUTIONS for SAFE HANDLING

Steps to be Taken in Case Material is Released or Spilled

Shovel or scoop up back into container for use if possible or disposal.

Waste Disposal Method

Dispose of in accordance with applicable federal, state, and local regulations.

Precautions to be Taken in Handling and Storing

Keep from freezing to preserve usefulness.

V CONTROL MEASURES

Work/Hygiene Practices

Avoid creating dust. Wet sanding is recommended whenever possible.

Ventilation

Provide ventilation to maintain a dust level below the PEL/TLV.

Respiratory Protection

A NIOSH approved respirator for toxic dusts is recommended if the PEL/TLV is exceeded.

Eye Protection

Safety glasses or goggles when applying product. Goggles if sanding dried product.

VI REGULATORY INFORMATION

SARA Title III Section 313 Ingredients

None at or above the de minimus level.

Effective Date: January 26, 2001

Prepared by: Norbert W. Kaleta

Disclaimer of Liability:

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MATERIAL SAFETY DATA SHEET 05002

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211

For emergency product safety information call, Director of Quality Services at 704-365-7543.

I PRODUCT IDENTIFICATION

This material safety data sheet is applicable to the following Gold Bond[®] brand ready mix products:

Easy Finish [®] Light Weight	ProForm [®] All Purpose
Easy Finish [®] Patch Kit	ProForm [®] Lite [™]
Easy Finish [®] Topping	ProForm [®] Topping
Easy Finish [®] All Purpose	ProForm [®] Level 5
Acabado Facil Multi Uso	ProForm [®] All Purpose Setting
ProForm [®] All Purpose Export	ProForm [®] Multi-Use

Chemical Family: Mixture

II HAZARDOUS INGREDIENTS

Contains:		OSHA	ACGIH
<u>Chemical Identity</u>	<u>CAS-NO</u>	<u>PEL</u>	<u>TLV</u>
		(mg/m ³)	(mg/m ³)
Calcium Carbonate	1317-65-3	5	10 ^A
Quartz ^B	14808-60-7	C	0.1

and may contain one or more of the following:

Mica	12001-26-2	20 mppcf	3
Talc (non-asbestiform)	14807-96-6	20 mppcf	2
Perlite	93763-70-3	5	10 ^A
Attapulgite Clay	12174-11-7	NL	NL
Plaster of Paris	10034-76-1	5	10 ^A
Sepiolite Clay	63800-37-3	NE	NE
Smectite Clay	1302-78-9	NE	NE
Propylene Glycol	57-55-6	NE	NE
Diethylene Glycol	111-46-6	NE	NE
Polyvinyl Acetate Latex	NE	NE	NE
Ethylene Vinyl Acetate Latex	NE	NE	NE

Contains no asbestos. HMIS Hazard Class No. 1, 0, 0

^ATotal dust, all others are respirable dust.

^B Present as a naturally occurring component of minerals. See Sec. III HEALTH HAZARD DATA

^C Respirable dust, use the formula: $\frac{10 \text{ mg/m}^3}{\% \text{ SiO}_2 + 2}$

NL - not listed. NE - not established.

MATERIAL SAFETY DATA SHEET 05002

Appearance and Odor

A white to gray paste with mild latex odor.

Fire Hazard Data - Not combustible. NFPA Hazard Class No. 1, 0, 0

Extinguishing Media

Dry chemical, foam, water, fog or spray.

Special Firefighting Procedures

Wear full protective equipment and an approved pressure demand self-contained breathing apparatus

Reactivity Data

Gold Bond Ready Mix Products are stable and hazardous polymerization will not occur. When heated to decomposition, oxides of sulfur or carbon will be released.

III HEALTH HAZARD DATA

Quartz (crystalline silica) - The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

It is recommended that a NIOSH approved respirator, for toxic dusts, be worn whenever working with this product results in airborne dust exposure exceeding the prescribed limits.

Attapulgit clay - IARC classifies attapulgit (long fiber) as possibly carcinogenic to humans, Group 2B. Attapulgit is not classified as a carcinogen by NTP or OSHA.

Skin Contact

Continued and prolonged contact may result in irritation to the skin.

Eye Contact

Direct contact may cause severe irritation.

Inhalation (Exposure occurs when sanding the dried product)

Target Organ: respiratory system

Signs and Symptoms of Exposure to Airborne Dust

Continued and prolonged exposure to airborne dust concentrations in excess of the PEL/TLV may result in cough, dyspnea, wheezing, and impaired pulmonary function.

Medical Conditions Generally Aggravated by Exposure

Overexposure would generally aggravate respiratory system dysfunctions.

First Aid Procedures

Eye: Immediately flush eyes with water for 15 minutes and get medical attention.

MATERIAL SAFETY DATA SHEET 05002

Skin: Flush and wash skin with soap and water. Get medical attention if irritation persists.

Breathing: Move the exposed person to fresh air at once. If not breathing initiate pulmonary resuscitation. Get medical attention.

IV PRECAUTIONS for SAFE HANDLING

Steps to be Taken in Case Material is Released or Spilled

Shovel or scoop up back into container for use if possible or disposal.

Waste Disposal Method

Dispose of in accordance with applicable federal, state, and local regulations.

Precautions to be Taken in Handling and Storing

Keep from freezing to preserve usefulness.

V CONTROL MEASURES

Work/Hygiene Practices

Avoid creating dust. Wet sanding is recommended whenever possible.

Ventilation

Provide ventilation to maintain a dust level below the PEL/TLV.

Respiratory Protection

A NIOSH approved respirator for toxic dusts is recommended if the PEL/TLV is exceeded.

Eye Protection

Safety glasses or goggles when applying product. Goggles if sanding dried product.

VI REGULATORY INFORMATION

SARA Title III Section 313 Ingredients

None at or above the de minimus level.

Effective Date: January 26, 2001

Prepared by: Norbert W. Kaleta

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MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Cordless Fuel Cell
CHEMICAL FAMILY: Hydrocarbons
CHEMICAL NAME: Compressed, extremely flammable, liquified gas
MANUFACTURER: Paslode
888 Forest Edge Drive
Vernon Hills, Illinois 60061-3105
INFORMATION TELEPHONE NUMBER: 847-634-1900
EMERGENCY TELEPHONE NUMBER: 800-424-9300 (CHEMTREC)

2. COMPOSITION / INFORMATION ON INGREDIENTS (fuel and propellant)

HAZARDOUS INGREDIENTS	CAS NUMBER	CONCENTRATION (% by weight)
propylene	115-07-1	60-90
butylene	25167-67-3	10-40
propane	74-98-6	< 3

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Self-pressurized container of extremely flammable, liquified gas.
Storage at temperatures above 120°F may create a fire hazard.

PRIMARY ROUTES OF ENTRY: Respiratory system, eyes and skin.

POTENTIAL HEALTH EFFECTS

EYE CONTACT: Direct contact with liquefied gas can result in frostbite ("cold burn").

SKIN CONTACT: Exposure to expanding gas or vaporizing liquid may cause frostbite.

INGESTION: Exposure to expanding gas or vaporizing liquid may cause frostbite to internal organs and tissue. Ingestion not anticipated since components of fuel gas and propellant are gaseous at ambient pressure and temperature.

INHALATION: May cause asphyxiation in high concentrations. Repeated or prolonged inhalation may cause toxic effects. See MSDS Section 11 for more information.

4. FIRST AID MEASURES

EYE: Immediately flush eyes with plenty of water. Get immediate medical attention.

SKIN: In case of frostbite, do not remove clothes. Get immediate medical attention.

INGESTION: Get immediate medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT: approximately -160°F

FLAMMABILITY LIMITS (% in air by volume): approximately 2 to 10

EXTINGUISHING MEDIA: dry chemical; carbon dioxide; foam; water

SPECIAL FIRE FIGHTING PROCEDURES: Fuel cells may release contents if not sufficiently cooled with water spray. Isolate hazard area and evacuate unprotected personnel. Full emergency equipment with self contained breathing apparatus and full protective clothing should be worn by firefighters.

6. **ACCIDENTAL RELEASE MEASURES**

SPILL OR LEAK PROCEDURES: Eliminate sources of ignition.
Isolate hazard area.
Ventilate hazard area.

7. **HANDLING AND STORAGE**

RECOMMENDED STORAGE TEMPERATURE: Below 120° F

SHELF LIFE: For maximum number of tool cycles, use before date code on fuel cell.

HANDLING AND STORAGE PRECAUTIONS: In addition to limitations on storage temperature, fuel cells should be handled and stored so as to avoid puncture. Even after use, do not puncture fuel cell or expose fuel cell to high temperature. Do not attempt to refill the fuel cell.

8. **EXPOSURE CONTROL/PERSONAL PROTECTION**

EYE PROTECTION REQUIREMENTS:

Eye protection must be worn when handling fuel cells.

SKIN PROTECTION REQUIREMENTS:

Gloves are recommended when handling fuel cells.

RESPIRATORY/VENTILATION REQUIREMENTS:

Use in a well ventilated environment.

EXPOSURE LIMITS:

	OSHA PEL	ACGIH
	(ppm)	(ppm)
propylene	NE	NE
butylene	NE	NE
propane	1000	2500

9. **PHYSICAL AND CHEMICAL PROPERTIES (fuel and propellant)**

PHYSICAL FORM:	liquified gas
COLOR:	colorless
ODOR:	faintly olefinic
BOILING POINT:	approximately -50° F
MELT POINT/FREEZE POINT:	approximately -300° F
pH:	not applicable
SOLUBILITY IN WATER:	slightly
SPECIFIC GRAVITY:	approximately 0.6 for liquefied gas
% VOLATILE BY WEIGHT:	100%
VAPOR PRESSURE:	approximately 100 lb/in ² at 70° F
VAPOR DENSITY:	approximately 1.5 (air = 1)

10. **REACTIVITY**

STABILITY:	Product is stable.
HAZARDOUS POLYMERIZATION:	Will not occur.
INCOMPATIBILITIES:	Oxidizing agents, halogens and acids.
DECOMPOSITION PRODUCTS:	Thermal decomposition or burning may produce carbon monoxide or carbon dioxide from fuel gas combustion.

11. TOXICOLOGICAL INFORMATION

ACUTE INHALATION: Low toxicity - LC50 > 5 mg/L (rat). Components of fuel cell gases and propellant are simple asphyxiants. Exposure to high concentrations of propylene has been associated with irregular heartbeat.

CHRONIC INHALATION: No significant effects have been demonstrated for any components except propylene. Chronic exposure to propylene has been associated with liver damage.

ACUTE EYE OR SKIN CONTACT: Frostbite ("cold burn") can result from exposure to expanding gas or vaporizing liquid. Components of fuel cell gas and propellant at ambient pressure and temperature produce little or no irritation.

CHRONIC EYE OR SKIN CONTACT: No significant effects have been demonstrated for components of fuel cell gas and propellant at ambient pressure and temperature.

CARCINOGENICITY: No components of fuel cell gas or propellant are classified as carcinogens by IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicological and environmental fate data have not been determined specifically for this product. Information is based on International Uniform Chemical Information Database (IUCLID) entries for components of fuel cell gas and propellant.

ECOTOXICOLOGICAL INFORMATION: Anaesthetic to animals and insects at high concentrations. Not expected to pose hazards to aquatic life. Not inhibitory to plant growth at ambient concentrations. Bioaccumulation is not expected.

ENVIRONMENTAL FATE INFORMATION: Volatilization is expected to be primary fate process. Components of fuel cell gas and propellant have photochemical reactivity.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Waste must be disposed of in accordance with federal, state and local environmental regulations. See RCRA discussion in MSDS Section 15.

14. TRANSPORT INFORMATION**U.S. DOT INFORMATION***

PROPER SHIPPING NAME: Consumer Commodity

HAZARD CLASS: ORM-D

PRODUCT RQ (lbs): none

UN NUMBER: none

LABEL: none

* Above description is for domestic (U.S.) ground transportation of fuel cells only. Information must be determined for shipment by any other mode or authority.

15. REGULATORY INFORMATION**TSCA STATUS:** All components are included in the TSCA Chemical Inventory.**CERCLA REPORTABLE QUANTITY:** none**SARA TITLE III:****SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES:** none**SECTION 311/312 HAZARD CATEGORIES:**

Acute Health	yes
Chronic Health	yes
Fire	yes
Reactive	no
Sudden Release of Pressure	yes

SECTION 313 TOXIC CHEMICALS: propylene - CAS Number 115-07-1
60-90% by weight**RCRA STATUS:** If discarded in its purchased form, this product may be classified as a D001 (ignitable) hazardous waste. Even after use, the fuel cell remains pressurized by an extremely flammable propellant and may retain these hazardous waste characteristics. Waste generators must consider federal, state and local hazardous waste regulations to determine a proper disposal method based on their status as a conditionally exempt, small quantity or large quantity generator.**CANADIAN STATUS:** All components listed on Domestic Substances Inventory (DSL).**EUROPEAN UNION:** All components listed on European Inventory of Existing Chemical Substances (EIECS):

<u>Component</u>	<u>EIECS No.</u>
butylene	246-689-3
propane	200-827-9
propylene	204-062-1

STATE REGULATORY INFORMATION: No component of fuel gas or propellant is included on California Proposition 65 lists as a carcinogen or reproductive toxin.**16. OTHER INFORMATION****HMIS CLASSIFICATION:*** To be determined by user
under specific conditions.

Health	1
Flammability	4
Reactivity	0
PPE	*

REASON FOR ISSUE:

Update to new format

PREPARED BY:

Ken Brown, CHMM

ISSUE DATE:

5/21/2004

SUPERCEDES VERSION DATED:

NA

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