

N84W13480 LEON RD. MENOMONEE FALLS, WI 53051 (262) 255-2320 FAX 262-255-2528

SAFETY DATA SHEET (1)

May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200. Standard must be consulted for specific requirements.

SECTION 1 - IDENTIFICATION

PRODUCT (As Used on Label and List)

GEM 200, GEM 301

MANUFACTURER: Scan-Pac Mfg. Inc.

ADDRESS: N84W13480 Leon Rd., Menomonee Falls, WI 53051.

TELEPHONE NUMBER: (262) 255-2320

EMERGENCY TEL. NUMBER: (262) 506-4853

RECOMMENDED USE: As Friction Material

RESTRICTIONS ON USE: None

SECTION 2 – HAZARD(S) IDENTIFICATION

Under normal handling conditions solid friction materials (identified in Section 1) as shipped are considered non- hazardous. However, processing operations (machining, riveting, drilling, or over- heating, etc.,) can produce airborne particles or fumes. Over exposure to these dusts should be considered hazardous.

HMIS RATINGS (0-4)*: Health Hazard= 1

Flammability = 0

Physical Hazard= 0

Personal Protection Index = E

*(0=Low Hazard, 4=High Hazard)

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

All products identified in Section 1 are mixtures of the following Asbestoses free ingredients in a resin bonded form. Hazards normally associated with pure dusts of the

listed ingredients should be reduced significantly in normal use and service of the product. Some products do not contain all the components listed.

INGREDIENT	CAS#	%WEIGHT [@]	OSHA PEL	ACGIH TLV
Aluminum Oxide	1344-28-1	0 - 2	5*-15** mg/m ³	10.0 mg/m ³
Barium Sulfate	7727-43-7	20-35	5*-15* mg/m ³	10.0 mg/m^3
Calcium carbonate	471-34-1	25-35	5*-15** mg/m ³	5.0 mg/M^3
Iron Oxide	1309-37-1	1-3	10.0 mg/m ³	5 mg/m ³
Magnesium Oxide	1309-48-4	1-3	15* mg/m ³	10.0 mg/m^3
Nitrile Rubber	9003-18-3	1-2	None Established	None Established
Phenolic Resin Cured	9003-35-4	10-20	None Established	None Established

^{*} Respirable fraction, ** Total Dust

SECTION 4 – FIRST AID MEASURERS

Emergency and First Aid Procedures: Should not be required in normal handling of product. However, processing operations (machining, riveting, drilling, or over heating etc) can produce airborne particles or fumes. Over exposure to these dusts should be considered hazardous

Inhalation: Dust may cause irritation. Move to fresh air. Seek medical attention if irritation persists.

Skin: Prolonged skin contact may cause skin sensitization, irritation and/or dermatitis.

Wash thoroughly with soap and water. If irritation persists, seek medical attention

Eye: Dust may cause irritation and redness. Particles may scratch the eye. Flush with water to remove particulate. Seek immediate medical attention if symptoms persist.

Ingestion: Ingestion may cause irritation, nausea, vomiting and diarrhea. Seek medical attention.

Chronic: Repeated inhalation of dust over time may cause fibrotic lung disease and increased risk of sinus and respiratory cancer. Long-term dust inhalation may also harm the nervous, gastrointestinal, renal and hematological systems.

Medical Conditions Generally Aggravated By Exposure: NK/NA

[®] Exact Percentage (concentration) of composition withheld as a trade secret is required.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point: N/A Flammable Limits: N/A

Extinguishing Media: Water

Unusual Fire and Explosion Hazards: None

Special Fire Fighting Procedures: Positive pressure, self contained breathing apparatus.

Auto ignition temperature: This product is inherently flame resistant, but may ignite at

temperatures exceeding 1112^{0} F (600^{0} C) in an oxygen-enriched atmosphere.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Grinding, drilling, milling, etc. can result in the release of airborne dust. Remove the dust by vacuuming or wet mopping. Vacuums used for this purpose should be equipped with HEPA filters. Do not use compressed air to blow dust in the workplace.

SECTION 7 - HANDLING AND STORAGE

Store the materials in a dry place. Avoid creating dust or airborne particulate. Use approved vacuum or wet methods to remove dust. Vacuums used for this purpose should be equipped with HEPA filters. Do not use compressed air to blow dust. Avoid breathing dust. Use respirator if dust becomes airborne. After handling, wash with mild soap and cold water. Wash clothes separately. Protective sleeves and creams may be necessary for employees with sensitive skin.

SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respiratory Protection (Specify Type): NIOSH approved for pneumoconiosis-fibrosis producing dusts and dusts with TLV not less than 0.05 mg/m³

Ventilation:

Local Exhaust: For Dust exposure exceeding TLV.

Mechanical (General): Remove dust with HEPA vacuum system

Special: NA/NK

Other: NA/NK

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Protective Gloves: Suggested for sensitive persons.

Eye Protection: Should not be needed for normal handling of product but is good

practice where dust is propelled.

Protective Clothing or Equipment: Long sleeved shirts or other protective clothing may

be beneficial to prevent skin contact of sensitive persons.

Work/Hygienic Practices: Employees should be properly instructed in the use of control measures as indicated above when there is a need for it. If dust from this product is produced, unnecessary accumulation of dust should be avoided.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: NAP Specific Gravity (H₂O-1): 1.8 to 2.0

Vapor Pressure (mm Hg.): NAP Melting Point: NK/NA

Vapor Density (Air - 1): NAP Evaporation Rate (Butyl Acetate-1): 0

Solubility in Water: NO

Appearance: Rigid hard Solid Odor: light phenolic odor

Color: brown and black

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and storage conditions

Condition to Avoid: NA/NK

Incompatibility (Materials to Avoid): NK

Conditions to Avoid: NA/NK

Hazardous Polymerization: Will not occur. This product is fully cured.

Hazardous Decomposition or By-Products: Oxides of carbon, nitrogen, hydrocarbons,

ammonia and other trace organic compounds.

SECTION 11 - TOXICOLOGICAL INFORMATION

Route(s) of Entry:

Inhalation: Yes Skin: NK/NA Ingestion: NK/NA

Health Hazards (Acute and Chronic):

Synthetic Vitreous fiber may cause mechanical irritation of mouth, nose, throat, eye, and skin. Graphite may cause pneumoconiosis, other lung damage and/or irritation of the eye. Dust of autoclaved lime may cause irritations or injury to eyes, skin or respiratory tract.

Carcinogenicity (3):

NTP: No

IRAC Regulated: No

OSHA Regulated: No

Signs and symptoms of Exposure:

Synthetic Vitreous Fibers: Itching and possible irritation of upper respiratory

tract.

Calcium Hydroxide: Irritation or burning sensations and burns to wet skin.

Mineral Wool Fiber: Skin, eyes or respiratory tract.

Graphite Dust: Eye irritation and coughing, wheezing, shortness of breath,

impaired pulmonary functions.

Medical Conditions Generally Aggravated By Exposure: NK/NA

SECTION 12 - ECOLOGICAL INFORMATION

No ecological data available for this product

SECTION 13 - DISPOSAL CONSIDERATIONS

Comply with applicable Federal, State and Local regulations. Waste should be placed in airtight containers. Properly mark all containers with appropriate labeling and dispose in

landfill in compliance with 49CFR261, 40CFR262 and applicable state and local regulations.

SECTION 14 - TRANSPORTATION INFORMATION

Proper Shipping Name: Not regulated

Hazard Class: N/A

Identification Number: N/A

Packing Group: N/A

Shipping Label: None

Additional Marking Requirement: None

SECTION 15 - REGULATORY INFORMATION

U.S. TSCA: All chemicals used in the manufacture of this product are listed on the U.S. Toxic Substances Control Act (TSCA) Inventory.

RCRA Hazardous Waste Code: N/A

CERCLA Hazardous Substances: This product contains chemicals which in the raw state are classified as CERCLA Hazardous Substances.

OSHA: OSHA has not developed standards other than PELs specific to its constituents.

WHMIS Classification: Not Available.

SECTION 16 - OTHER INFORMATION

Abbreviations:

CAS #: Chemical Abstract Services Number

OSHA PEL: U.S. Occupational Safety and Health Administration Permissible

Exposure Limits

ACGIH TLV: American Conference of Governmental Industrial Hygienists Threshold

Limit Value (2005)

Fibers/cc: Fibers per cubic centimeter of sampled air.

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Mg/m³: Milligrams of contaminant per cubic meter of sampled air, on a weight-to-

volume basis

N/A: Not Applicable

NAP - Not Applicable

N/K: Not Known

Mppcf: Millions of particles per cubic foot of sampled air

A3: ACGIH has classified the compound as a confirmed animal carcinogen

with unknown relevance to humans

NIOSH: National Institute of Occupational Safety and Health

IARC: International Agency for Research on Cancer

NTP: National Toxicology Program

HEPA: High-efficiency particulate air

HMIS: Hazardous Materials Identification System

RCRA: Resource Conservation and Recovery Act

ISSUED BY: SCAN-PAC MANUFACTURING INC.

ISSUE DATE: 6/14/2016

Notes:

(1) Notwithstanding the preparation and delivery of this Material Safety Data Sheet, Scan-Pac Mfg., Inc's position is that the [products identified herein meet the definition of an "article" and are exempt from the Hazard Communication Standard, 29 C.F.R. 191031200.

Exact formulations of the product identified herein are considered proprietary and confidential and will not be revealed except in accordance with the Hazard Communication Standard.

This Safety Data Sheet has been prepared solely for the purpose of complying with 29 C.F.R. 1910.1200, if deemed necessary be the recipient hereof. The information given herein is based, in part, on data supplied by various chemical manufacturers. While the information set forth herein is believed to be accurate, Scan-Pac Mfg., Inc. makes no representation or warranty as to its accuracy or completeness and said information is furnished independently of any sale of the products identified herein. Scan-Pac Mfg., Inc. shall in no event be responsible for any damages of whatever nature, directly or indirectly, resulting from the publication or use or reliance upon data contained herein. No express or implied warranties of merchantability or fitness for use, with respect to the products or data herein, is made hereunder.

This section lists the ingredients which have been determined, for the purpose of 29 C.F.R. 1910.1200, to be health hazards and which comprise 1% or greater of the composition (except that chemicals identified as carcinogens are listed if the concentrations are 0.1% or greater). In addition, this section lists the ingredients, which have been determined for purpose of 29 C.F.R. 1910.1200, to present a physical hazard when present in the mixture. The ingredients in the products identified should be resin bonded and hazards normally associated with pure dusts of the listed ingredients should be reduced significantly in normal use and service of the product. All products identified herein contain asbestos free material and some products will not contain all hazardous components listed.

(3) Indicates whether the chemical is listed in the National Toxicology Program (NTP) Annual Report
on Carcinogens or has been found to be a potential carcinogen in the International Agency for Research on
Cancer (IARC) Monographs or by OSHA.