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To Our Valued Customers:

The following documents are the Material Safety Data Sheets (MSDS's) of our various product lines for your reference. They have been prepared with information from our suppliers to comply with the Federal Hazard Communication Standard, 29 CFR 1910.1200. The MSDS contains important safety, health and regulatory information that is important to you, your employees and customers who are exposed to these materials.

In addition, some of the components may be subject to the reporting requirements of Section 313, Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), 40 CFR Part 372, as well as to the Comprehensive Environmental Response, Conservation and Liability Act of 1980 (CERCLA), 40 CFR Part 302. If you are unsure as to your reporting requirements, or need more information, call the USEPA SARA Hotline: (800) 424-9346, or the Emergency Planning and Community Right-to-Know Act Hotline: (800) 535-0202.

The MSDS is supplied to provide safety, health and environmental information only and must not be used for material specifications.

Please contact your sales person or call us directly if you require further assistance.

Sincerely,

AMICO

IMPORTANT
Liability Disclaimer

The information contained in the referenced Material Safety Data Sheet (MSDS) is believed to be correct as it was obtained from sources we believe are reliable. However, no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications, hazards connected with the use of the material, variations in methods, conditions and equipment used to store, handle, or process the material and hazards connected with the use of the material are solely the responsibility of the user and remain at his/her sole discretion.

Compliance with all applicable federal, state, and local laws and regulations remains the responsibility of the user, and the user has the responsibility to provide a safe work place to examine all aspects of its operation and to determine if or where precautions, in addition to those described herein, are required.

MATERIAL SAFETY DATA SHEET



A GIBRALTAR INDUSTRIES COMPANY

3245 Fayette Avenue • Birmingham, AL 35208

Revision Date: 2/22/07

SECTION I. MATERIAL IDENTIFICATION

Trade Name: PVC Compounds

Products: Used in all Plastic Products

Emergency Phone Number: CHEMTREC® (800) 424-9300

Chemical Formula: (C₂H₂Cl)_n plus functional additives

SECTION II. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	WT%
Polyvinyl Chloride Resin	9002-86-2	>30%
Organotin or Calcium-zinc	Mixture	<5%
Proprietary Additives	Mixture	<70%

SECTION III. HAZARDS IDENTIFICATION

PRECAUTIONARY INFORMATION

Caution: If proper procedures for processing PVC compounds are not followed; processing fumes and vapors can be liberated at elevated temperatures. The presence of these fumes or vapors may result in exposure. Additionally, the composition of these fumes or vapors may vary widely according to the individual processing procedures and materials used. Processors must determine for themselves the appropriate equipment and procedures for their use.

POTENTIAL HEALTH EFFECTS

Primary Routes of Exposure: Inhalation of process emissions during periods of elevated temperature.

Eye: Vapors or fumes emitted during processes involving elevated temperatures may cause eye irritation. Dust resulting from the handling of powder may be irritating to the eyes.

Skin Contact: Vapors or fumes emitted during processes involving elevated temperatures may cause skin irritation. Dust resulting from the handling of powder may be irritating to the skin.

Skin Absorption: This material is initially a dry solid pellet or powder; no absorption is likely to occur in its initial form. Vapors or fumes emitted during processes involving elevated temperatures may absorb through the skin at low levels.

Ingestion: Slightly toxic by ingestion. Powder form may become airborne during handling, resulting in the potential for incidental ingestion. Vapors or fumes emitted during processes involving elevated temperatures may be ingested at low levels. Adequate ventilation should be provided.

Inhalation: Powder form may become airborne during handling, resulting in potential inhalation exposure. Vapors or fumes emitted during processes involving elevated temperatures may be inhaled if not adequately ventilated.

HAZARD CLASSIFICATION

Acute Effects:

Dust associated with the handling of PVC powder as well as fumes or vapors liberated from both PVC powder and pellets at high temperatures may be irritating to the eyes, skin and respiratory tract if not adequately ventilated.

Chronic Effects:

Chronic exposure to fumes and vapors from heated or thermally decomposed plastics may cause an asthma-like syndrome due to the inhalation of process vapors or fumes. The onset of irritation may be delayed for several hours. Fumes or vapors may accumulate within the facility during normal operating procedures that involve elevated temperatures. Exposure to these elevated concentrations, if not adequately ventilated, may have significant health effects.

Carcinogenic:

IARC has determined that there is inadequate evidence of carcinogenicity of a polyvinyl chloride resin in both animals and humans. The overall evaluation of polyvinyl chloride is Group 3, meaning that it is not classifiable as a carcinogen (IARC Vol. 19, 1979). Polyvinyl chloride is not listed as a carcinogen by OSHA, NIOSH, NTP, IARC, or EPA.

Some pigments used to color PVC compounds may contain metals, which in some of their chemical forms are suspected or confirmed carcinogens. These metals are bound in the crystalline structure of the pigment, and to the best of the supplier's knowledge, do not present a significant health risk. Additionally, the low levels of pigments used in PVC pellet compounds are also bound in the polymer matrix and to the best of our knowledge do not present a significant health risk.

SECTION IV. FIRST AID MEASURES

Inhalation

No adverse effects anticipated under normal conditions if adequately ventilated. However, if exposure occurs, remove victim to fresh air. Obtain medical attention if irritation persists.

Skin Contact

No adverse effects anticipated under normal conditions. However, if vapor or fume exposure occurs, wash skin thoroughly with soap and water. Obtain medical attention if irritation persists.

Eye Contact

In the event of eye irritation, flush eyes with water for at least 15 minutes. Obtain medical attention if irritation persists.

Ingestion

If ingestion occurs, vomiting can be induced after diluting with water or milk. Call a physician for additional medical advice.

SECTION V. FIRE FIGHTING MEASURES

Flash Ignition Temperature	>600°F
Flammable Limits (% By Vol.)	
Lower Explosive Limit (LEL)	Not Applicable
Upper Explosive Limit (UEL)	Not Applicable
Autoignition Temperature	Not Applicable

Fire Fighting Procedures/Fire Extinguishing Media

Carbon dioxide or water.

Unusual Fire and Explosion Hazards

Dense smoke may be emitted when burned.

Rigid PVC Compounds will not normally continue to burn after ignition without an external fire source.

Do not allow fire fighting runoff water to enter streams, rivers or lakes. The water may collect HCl and other combustion products. **See Section X. for additional information.**

Fire-Fighting Equipment

Wear full bunker gear including a positive pressure self-contained breathing apparatus in any closed space.

SECTION VI. ACCIDENTAL RELEASE MEASURES

Sweep or vacuum material and place in a disposal container. See Section XI.

SECTION VII. HANDLING AND STORAGE

Handling and Storage

Store in protected area.

SECTION VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls

Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Adequate ventilation should be provided as conditions warrant.

Respiratory Protection

For most conditions, no respiratory protection should be needed. However, in cases of dust formation, respiratory protection meeting the requirements of 29 CFR 1910.134 may be needed. If the material is over heated and starts smoldering, wear a positive pressure self-contained breathing apparatus for respiratory protection.

Eye Protection

Use safety glasses. If there is a potential for exposure to particles which could cause mechanical injury to the eye, wear chemical goggles.

Skin Protection

Normally clean clothing should be sufficient. However, skin protection meeting the requirements of 29 CFR 1910.132 may be needed. Wash skin if contacted by PVC powder or pellets. Wash contaminated clothing before reusing.

Exposure Guidelines

None established for PVC Compounds. The OSHA 8-hour time-weighted average PEL is 0.1 mg/m³ for organotin and 50 ppm for carbon monoxide. The OSHA Ceiling Limit for HCl is 5.0 ppm. Additional hazardous constituents may be released during processes involving elevated temperatures. These constituents are dependent on processing conditions and should be verified by processor.

It is recommended that exposure to the powder form be kept below the limits set for nuisance dust:

PEL - Total 15 mg/m³; Respirable 5 mg/m³ TWA

TLV - Total 10 mg/m³; Respirable 3 mg/m³ TWA

Local and state regulations regarding the handling and storage of chemicals may vary widely. The user should acquire knowledge of these and other appropriate federal and state laws and regulations as well as consult with the proper authority for guidance in developing adequate handling procedures and constructing appropriate storage facilities.

SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Pellets or Powder
Odor	Odorless to Mild
Boiling Point, Melting Point, Freezing Point	Not Applicable
Specific Gravity (Water = 1)	1.25 - 1.55
Vapor Pressure (mm of Mercury)	< 0.1
pH	Not Applicable - Solid

SECTION X. STABILITY AND REACTIVITY

Stability

Stable xx Unstable _____

Polymerization

Hazardous polymerization will not occur.

Hazardous Decomposition Products

Overheating may cause thermal degradation of PVC compound. Fumes and vapors (including CO, CO₂, and HCl) may be generated during this thermal degradation. Emissions are also possible during normal operating conditions, and may accumulate within an inadequately ventilated facility.

Incompatible Materials

Polyvinyl chloride compounds should not come into contact with acetal or acetal copolymers in elevated temperature processing equipment. The two materials are not compatible and will react in a violent decomposition when mixed under conditions of heat and pressure.

SECTION XI. DISPOSAL CONSIDERATIONS

Waste Management Information: All disposal practices must be in compliance with local, state and federal laws and regulations (contact local and state environmental agencies for specific rules).

SECTION XII. TRANSPORTATION INFORMATION

Proper Shipping Name	Polyvinyl Chloride
DOT - Hazard Class	None
DOT - Shipping ID No.	None
DOT - Labeling	None

SECTION XIII. REGULATORY INFORMATION

OSHA 29 CFR 1910.1017 ----: This compound may contain trace levels, < 0.0005% of VCM. Under normal working conditions with adequate ventilation, OSHA's 8-hour TWA PEL, (1 ppm) nor the 8-hour TWA action level (0.5 ppm) nor the Ceiling limit (5.0 ppm) should be exceeded. The workplace should be monitored and if the level exceeds any of the PELs or action levels, refer to 29 CFR 1910.1017.

SECTION XIV. OTHER INFORMATION

IMPORTANT: The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage, handling and disposal of the product in compliance with applicable federal, state, and local laws and regulations. **AMICO MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, CONCERNING THE ACCURACY OR COMPLETENESS OF THE INFORMATION AND DATA HEREIN.**

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