

**MATERIAL SAFETY DATA SHEET
FLEXIBLE PVC COMPOUND
(NON LEAD-NON ANTIMONY)**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	Flexible Polyvinyl Chloride (PVC) Compound
DATE:	MAY 2013
SYNONYMS:	Chloroethylene Homopolymer Compound
CHEMICAL FORMULA:	(C ₂ H ₃ Cl) _n
MANUFACTURER'S NAME AND ADDRESS:	DEVA PLASTİK PVC GRANÜL SAN. TİC. LTD. ŞTİ. Veliköy Organize Sanayi Bölgesi 28. Cadde, No:6/1, Çerkezköy-Tekirdağ – Turkey
CONTACT:	TEL: +90 282 746 12 51 (pbx) FAX: +90 282 746 15 49 E-mail: info@devapvcgranul.com Web: www.devepvcgranul.com

2. COMPOSITION/INFORMATION ON INGREDIENTS:

Component:	CAS No.	Wt. %	
Polyvinyl Chloride Resin	9002-86-2	45 - 80	
Plasticizer	Mixture	20 - 60	High molecular weight esters
Filler	Mixture	0 - 40	Calcium carbonate
Heat Stabilizer	Mixture	3 - 5	Organometallic compounds of calcium-zinc
Colorant	Mixture	0 - 2,5	Organic and inorganic colorants

Compounded PVC is an inert material in its normal usage. All the components listed are encapsulated in the PVC matrix.

3. HAZARDS IDENTIFICATION

PRECAUTIONARY INFORMATION

Caution: If proper procedures for processing PVC compounds are not followed, processing vapors can be liberated at elevated temperatures. The presence of these 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 operation.

POTENTIAL HEALTH EFFECTS:

Primary Routes of Exposure: Inhalation of processing 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; 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. Dust may become airborne during handling, resulting in the potential for incidental ingestion. Vapors or fumes emitted during processes involving elevated temperature may be ingested at low levels. Adequate ventilation should be provided.

Inhalation: Dust 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 vapors or fumes liberated from PVC compound at high temperatures may be irritating to the eyes, skin and respiratory tract if not adequately ventilated.

Chronic Effects: Chronic exposure to vapors or fumes from thermally decomposed or decomposing plastics or plastics that are otherwise exposed to elevated temperatures or are processed at elevated temperatures may cause an asthma-like syndrome due to the inhalation of processing vapors or fumes. The onset of irritation may be delayed for several hours. Vapors or fumes 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 additives used to make PVC compound may contain metals, which in some chemical forms are suspected or confirmed carcinogens. These metals, if present, are bound in the crystalline structure of the additive, and to the supplier's best knowledge, do not present a significant health risk. Additionally, the low levels of additives used in PVC pellet compounds are also bound in the polymer matrix and to the best of the supplier's knowledge; do not present a significant health risk.

4. FIRST AID MEASURES

Inhalation: No adverse effects anticipated under normal conditions if adequately ventilated. However, if exposure occurs, remove the exposed individual to fresh air. Obtain medical attention immediately if irritation persists.

Skin Contact: No adverse effects anticipated under normal conditions. Flush with water to remove material from skin. Obtain medical attention if irritation persists.

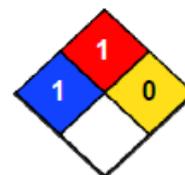
Eye Contact: In the event of eye irritation, flush eyes with water for at least 15 minutes. Do not rub eyes. Obtain medical attention if irritation persists.

Ingestion: No effect expected. If large amounts are ingested, seek medical attention. Only induce vomiting at the instructions of a physician.

5. FIRE FIGHTING MEASURES

Flash Ignition Temperature >315oc

It is not flammable or explosive material. But if it is exposed to intense flame, it starts to burn and when flame is withdrawn, the product goes out. PVC Compounds will not normally continue to burn after ignition without an external fire source.



Fire-Fighting Equipment

Veliköy Organize San. Bölgesi 28. Cadde No: 6/1 Çerkezköy - TEKİRDAĞ

Tel: (0282) 746 12 51 (pbx) Fax: (0282) 746 15 49

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

6. ACCIDENTAL RELEASE MEASURES

Protect People:

Remove unnecessary personnel from the release area. Wear appropriate personal protective equipment during clean up.

Protect the Environment:

Contain material to prevent contamination of the soil, surface water or ground water.

Clean Up:

Cleanup uncontaminated material and recycle into process. Sweep or vacuum material and place in a disposal container. Place unusable material into a closed, properly labeled container compatible with the product.

7. HANDLING AND STORAGE

Protective measures:

Use methods to minimize accumulation and generation of dust.

Product should not mixed with any other chemicals and not be exposed to moisture

Handling:

Wash thoroughly after handling. Use only in well-ventilated areas.

Storage:

Store in a dry place away from direct sunlight, heat, and incompatible materials. Store away from food and beverages. Reseal containers immediately after use. Store in a well-ventilated, cool area

Each package has 30 kg bags and transported in the form of shrinked pallets

8. EXPOSURE CONTROL/PERSONAL 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 or dust proof goggles.

Skin Protection

Skin protection meeting the requirements of 29 CFR 1910.132 may be needed. Under normal conditions, work clothing should be sufficient. Wash skin if contacted by PVC powder or pellets. Wash contaminated clothing before reusing. Gloves for thermal protection may be necessary when handling hot or molten compound.

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. Local exhaust ventilation should comply with OSHA regulations and the American Conference of Industrial Hygienists, Industrial Ventilation - A Manual of Recommended Practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Pellets of varying size, hardness, and color
Odor	No distinct odor
Boiling Point	Solid
Melting Point	Varies

Solubility	None
Specific Gravity	1.15 – 1.7 (g/cm ³)
Vapor Density	Not Applicable
Vapor Pressure	Not Applicable
pH	Not Applicable

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Polymerization: Hazardous polymerization does not occur.

Conditions to Avoid: Instantaneous temperatures above 2350C prolonged heating at processing temperatures, or excessive shear/heat combinations during processing can generate hazardous decomposition products.

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: Do not allow this product to come in contact with acetal or acetal copolymers within the extruder or molding machine. At processing conditions, the two materials are mutually destructive and involve rapid degradation of the products. Equipment should be purged with acrylic, ABS, polystyrene, or other purge compound to avoid even trace amounts of this product and acetals from coming in contact with each other.

11. TOXICOLOGICAL INFORMATION

The following information on polyvinyl chloride is extracted from both the HSDB and NTP databases.

Animal Toxicity

Oral:	Rat, TD _{Lo}	210 gm/kg
Inhalation:	Mouse, LC ₅₀	140 mg/M ₃ /10M

TD_{Lo} = Lowest toxic dose in a given species by a given route of exposure.

LC₅₀ = Concentration that is lethal to 50% of a given species by a given route of exposure.

Rodents exposed to PVC by dietary or inhalation routes for 6 to 24 months have shown no significant toxicological effects. While PVC is generally considered an inert polymer, exposure to PVC dust has been reported to cause lung changes in animals and humans, including decreased respiratory capacity and inflammation. However, exposures approaching the nuisance dust exposure limits are not anticipated to pose a significant health risk.

12. ECOLOGICAL INFORMATION

Environmental Fate:

Aquatic:	No data available
Biodegradation:	Not subject to biodegradation

Ecotoxicity: Based on the high molecular weight of this polymeric material, transport of this compound across biological membranes is unlikely. Accordingly, the probability of environmental toxicity or bioaccumulation in organisms is remote. Due caution should be exercised to prevent the accidental release of this material to the environment.

13. DISPOSAL CONSIDERATIONS

Waste Management Information: Do not dump into any sewers, on the ground, or into any body of water. Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environmental agency for specific rules). Waste characterization and compliance with applicable laws are the responsibility of the waste generator.

14. TRANSPORTATION INFORMATION

Proper Shipping Name	Polyvinyl Chloride
DOT Hazard Class	Non-hazardous
DOT Shipping I.D. No.	None

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations : Generally not hazardous for water.

German water hazard class : Non-hazardous for waters.

National regulations :

Chemical safety assessment : A Chemical Safety Assessment has not been carried out

16. 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 and handling of the product in compliance with applicable federal, state, and local laws and regulations. This information relates to the material designated and may not be valid for such material used in combination with any other materials nor in any process.