

Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name • Flexible PVC Compounds – Pellet, All Colors
Synonyms • Polyvinyl chloride compound; Chloroethylene homopolymer compounds.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) • Flexible plastic for forming products
Use(s) advised against • Do not mix or follow ACETAL in an extrusion or injection molding machine.

1.3 Details of the supplier of the safety data sheet

Manufacturer • Axiall, LLC
1000 Abernathy Rd. NE, Suite 1200
Atlanta, GA 30328
United States
www.axiall.com
msdsinfo@axiall.com

Telephone (General) • +1 225-685-1240

1.4 Emergency telephone number

Manufacturer • +1 304-455-6882

Section 2: Hazards Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 2
Combustible Dust

2.2 Label elements

OSHA HCS 2012

WARNING



Hazard statements • May cause damage to organs through prolonged or repeated exposure
May form combustible dust concentrations in air.

Precautionary statements

Prevention • Do not breathe dust.

Response • Get medical advice/attention if you feel unwell.

Storage/Disposal • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

OSHA HCS 2012 • Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

WHMIS • Classification criteria not met

2.2 Label elements

WHMIS • No label element(s) required.

2.3 Other hazards

WHMIS • May form combustible dust concentrations in air.

In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance.

3.2 Mixtures

Composition		
Chemical Name	Identifiers	%
Polyvinyl Chloride	CAS:9002-86-2	<= 90
Vinyl Chloride	CAS:75-01-4	0.001%
Plasticizer		0 – 60
Inert Fillers		0 – 50
Flame Retardant		0 – 30
Heat Stabilizer		1 - 10
Colorant		0 – 15
Impact Modifiers		0 – 50

Process Aid		0 – 25
Lubricants		0 - 20

Compounded PVC is an inert material in its normal usage; all of the ingredients listed above are encapsulated in the PVC matrix along with typical compositions.

Section 4 - First Aid Measures

4.1 Description of first aid measures

- Inhalation**
- Administer oxygen if breathing is difficult. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Give artificial respiration if victim is not breathing. Get medical attention immediately.
- Skin**
- For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. If irritation develops and persists, get medical attention.
- Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.
- Ingestion**
- If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. Obtain medical attention immediately if ingested.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- Immediate medical attention after exposure to this material not expected to be necessary. No special treatment indicated related to exposure to this material.

Section 5 - Firefighting Measures

5.1 Extinguishing media

- Suitable Extinguishing Media**
- Carbon dioxide or water.
In case of fire use media as appropriate for surrounding fire.

- Unsuitable Extinguishing Media**
- None known.

5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Dense smoke emitted when burned without sufficient oxygen. PVC will not continue to burn after ignition without an external fire source.

- Hazardous Combustion Products**
- No data available

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA).
Structural firefighters' protective clothing will only provide limited protection.

Do not allow fire fighting runoff water to enter streams, rivers or lakes. The water will collect Hydrochloric Acid from the by-products of combustion.
Dike fire control water for later disposal.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Ventilate enclosed areas. Stay upwind. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact.
- Emergency Procedures**
- Contain spill and monitor for excessive dust accumulation. Avoid unnecessary personnel and equipment traffic in the spill area.

6.2 Environmental precautions

- Prevent entry into waterways and sewers.

6.3 Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Avoid generating dust.
Use clean nonsparking tools to collect material.
Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.
Spill area can be washed with water. Place unusable material into a closed, properly labeled container compatible with the product.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

- Handling**
- PVC dust is capable of propagating a secondary dust explosion. This potential can be reduced by good housekeeping, prevention of dust from process equipment, preventing accumulation of dust on overhead horizontal surfaces and eliminating potential ignition sources. Avoid heat, flames, sparks, and other sources of ignition. Use properly grounded electrically conductive materials for piping circuits and equipment. Avoid breathing dust. Avoid contact with eyes. Employees working with dried polymer should wear respiratory protective equipment. Wash thoroughly after handling. PVC resin processing may result in the release of low levels of vinyl chloride. Use only in well-ventilated areas.

7.2 Conditions for safe storage, including any incompatibilities

- Storage**
- Keep container closed. Store in a cool, dry, well-ventilated place. Reseal containers immediately after use. To maintain product quality, do not store in heat or direct sunlight. Keep only in the original container at a temperature not exceeding 40°C.

Incompatible Materials or Ignition Sources

- Strong acids, strong bases, and oxidizing agents.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Canada British Columbia	Canada Ontario	Canada Quebec	OSHA
Vinyl Chloride (75-01-4)	TWAs	1 ppm TWA	1 ppm TWA	1 ppm TWA (designated substances regulation); 1 ppm TWA (applies to workplaces to which the designated substances regulation does not apply)	1 ppm TWAEV; 2.6 mg/m ³ TWAEV	1 ppm TWA
	STELs	Not established	Not established	Not established	Not established	5 ppm STEL (see 29 CFR 1910.1017)
Polyvinyl Chloride as Particulates not otherwise classified (PNOC)	TWAs	1 mg/m ³ TWA (respirable fraction)	1 mg/m ³ TWA (respirable)	1 mg/m ³ TWA (respirable)	10 mg/m ³ TWAEV (including dust, inert or nuisance particulates; containing no Asbestos and <1% Crystalline silica, total dust) <i>as Particulates not otherwise classified (PNOC)</i>	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction) <i>as Particulates not otherwise classified (PNOC)</i>

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is not leakage from the equipment). It is recommended that dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Use only appropriately classified electrical equipment.

Personal Protective Equipment

Respiratory

- Under normal use conditions, respiratory protection should not be needed. However, as deemed required, respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety glasses.

Skin/Body

- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Clean clothing should be sufficient under normal use conditions.

General Industrial Hygiene Considerations

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties**9.1 Information on Physical and Chemical Properties**

Material Description			
Physical Form	Solid	Appearance/Description	Pellet of varying size, hardness and color with a potential slight odor
Color	Varying	Odor	Slight potential odor
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point	No data available
Decomposition Temperature	Temperatures of 300°F (150°C) or greater over an extended period of time may cause thermal degradation of PVC resin	pH	Not relevant
Specific Gravity/Relative Density	1.15 – 1.70	Water Solubility	Negligible < 0.1 %
Viscosity	Not Applicable	Explosive Properties	No data available
Oxidizing Properties:	No data available		
Volatility			
Vapor Pressure	< 1 mmHg (torr)	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	>600°F	UEL	Not relevant
LEL	Not relevant	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Under normal conditions of storage and use, hazardous polymerization will not occur.

10.4 Conditions to avoid

- Keep away from heat, sparks, flame, all possible sources of ignition, as well as incompatible materials. Instantaneous temperatures above 420°F/215°C, prolonged heating at processing temperatures, or excessive shear/heat combinations during processing can generate hazardous decomposition products

10.5 Incompatible materials

- Polyvinyl chloride materials 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 or pressure. Strong oxidizing agents.

10.6 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.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Polyvinyl Chloride (> 99.8%)	9002-86-2	Tumorigen / Carcinogen: Ingestion/Oral-Rat TDLo • 210 g/kg 30 Week(s)-Continuous; <i>Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Skin and Appendages:Other:Tumors</i>

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012•Data lacking
Aspiration Hazard	OSHA HCS 2012•Data lacking
Carcinogenicity	OSHA HCS 2012•Data lacking
Germ Cell Mutagenicity	OSHA HCS 2012•Data lacking
Skin corrosion/Irritation	OSHA HCS 2012•Data lacking
Skin sensitization	OSHA HCS 2012•Data lacking
STOT-RE	OSHA HCS 2012•Specific Target Organ Toxicity Repeated Exposure 2
STOT-SE	OSHA HCS 2012•Data lacking
Toxicity for Reproduction	OSHA HCS 2012•Data lacking
Respiratory sensitization	OSHA HCS 2012•Data lacking
Serious eye damage/Irritation	OSHA HCS 2012•Data lacking

Medical Conditions • Disorders of the lungs.

Aggravated by Exposure

Potential Health Effects

Inhalation

- Acute (Immediate)** • Exposure to dust may cause irritation. Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible.
- Chronic (Delayed)** • Prolonged and repeated inhalation of dust may cause damage to lungs. Exposure to PVC dust has been reported to cause lung changes in animals and humans, including decreased respiratory capacity and inflammation.

Skin

Acute (Immediate) • Exposure to dust may cause mechanical irritation.

Chronic (Delayed) • No data available.

Eye

Acute (Immediate) • Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in eyes.

Chronic (Delayed) • No data available.

Ingestion

Acute (Immediate) • Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

Chronic (Delayed) • No data available

Section 12 - Ecological Information

12.1 Toxicity

- 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.

12.2 Persistence and degradability

- Not subject to biodegradation.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been carried out.

12.6 Other adverse effects

- Material data lacking.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

- Product waste** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Packaging waste** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

14.6 Special precautions for user

- None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Data lacking.

Section 15 - Regulatory Information

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

- All components of this product are listed on the TSCA Inventory.

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

15.3 Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Last Revision Date • 28/May/2015

Preparation Date • 28/May/2015

**Disclaimer/Statement
of Liability**

- The technical data given herein is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. No guarantee is being given as to the end use performance. The product is sold on the basis that buyers test the product for their specific purposes. This information related to the material designated and may not be valid for such material used in combination with any other materials or in any process.

Key to abbreviations

NDA = No data available
