## Safety Data Sheet



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

### 1.1 Product identifier

Product Name · Rigid PVC Compounds - Pellet, All Colors

• All products with the product numbers 5###, 6###, 7###, 8###, and 93##, including all colors; Chloroethylene homopolymer compound; Polyvinyl chloride compound

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

Relevant identified use(s) • Rigid plastic for forming products

**Use(s) advised against**• Do not mix or follow with 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

### **EU/EEC**

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

### 2.1 Classification of the substance or mixture

CLP
 Not classified

### 2.2 Label Elements

CLP

**Hazard statements** • No label element(s) required

### 2.3 Other Hazards

• According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered

hazardous.

### UN GHS Revision 3

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Third Revised Edition

### 2.1 Classification of the substance or mixture

**UN GHS** 

Not classified

2.2 Label elements

**UN GHS** 

Hazard statements • No label element(s) required

**Precautionary statements** 

2.3 Other hazards

**UN GHS** 

 According to the Globally Harmonized System for Classification and Labeling (GHS) this product is not considered hazardous.

**United States (US)** 

According to: OSHA 29 CFR 1910.1200 HCS

### 2.1 Classification of the substance or mixture

OSHA HCS 2012

· Not classified

2.2 Label elements

OSHA HCS 2012

Hazard statements · No label element(s) required

2.3 Other hazards

**OSHA HCS 2012** 

 This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

### Canada

According to: WHMIS 2015

### 2.1 Classification of the substance or mixture

WHMIS 2015

Not classified

2.2 Label elements

**WHMIS 2015** 

Hazard statements · No label element(s) required

**Precautionary statements** 

2.3 Other hazards

**WHMIS 2015** 

 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	%	LD50/LC50	Classifications According to Regulation/Directive		
Polyvinyl Chloride	CAS:9002-86-2	<= 95%	NDA	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified		
Impact Modifiers	NDA	0% TO 70%	NDA	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified		
Inert Fillers	NDA	0% TO 50%	NDA	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified		
Process Aid	NDA	0% TO 25%	NDA	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified		
Lubricants	NDA	0% TO 20%	NDA	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified		
Flame Retardants	NDA	0% TO 15%	NDA	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified		
Colorant	NDA	0% TO 15%	NDA	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified		
Heat Stabilizer	NDA	1% TO 10%	NDA	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified		
Plasticizer	NDA	0% TO 5%	NDA	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified		
Vinyl Chloride	CAS:75-01-4 EC Number:200- 831-0 EU Index:602-023- 00-7	< 0.0005%	Inhalation-Rat LC50 • 18 pph 15 Minute(s)	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified		

• Compounded PVC is an inert material in its normal usage; all of the ingredients listed above are encapsulated in the PVC matrix and typical concentrations are indicated.

See Section 16 for full text of H-statements.

### Section 4 - First Aid Measures

## 4.1 Description of 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 immediately if irritation persists.

Skin

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

No effect expected. If large amounts are ingested, seek medical attention. Do NOT induce vomiting.

## 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

Hazardous Combustion Products

 Dense smoke emitted when burned without sufficient oxygen. PVC will not continue to burn after ignition without an external fire source.

 Depending on conditions, 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.

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

**Emergency Procedures** 

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.

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

Format: EU CLP/REACH Language: English (US) EU CLP, UN GHS Revision 3, OSHA HCS 2012, WHMIS 2015

### Handling

 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 wellventilated 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 40C.

## 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 Manitoba	Canada Ontario	Canada Quebec	
Vinyl Chloride (75-01-4)	TWAs	1 ppm TWA	1 ppm TWA	Not established	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/m3 TWAEV	
	Designated Substances	Not established	Not established	Present	Not established	Not established	
Polyvinyl Chloride	TWAs	1 mg/m3 TWA (respirable fraction)	1 mg/m3 TWA (respirable)	Not established	1 mg/m3 TWA (respirable)	10 mg/m3 TWAEV (including dust, inert or nuisance particulates; containing no Asbestos and <1% Crystalline silica, total dust)  as Particulates not otherwise classified	
		Exp	     osure Limits/Gui	delines (Con't.)		(PNOC)	
			Result		OSHA		
Vinyl Chloride			STELs				
(75-01-4)				1 ppm TWA			
Polyvinyl Chloride			TWAs		15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) as Particulates not otherwise classified (PNOC)		

## 8.2 Exposure controls

Engineering

Good general ventilation should be used. Ventilation rates should be matched to

#### Measures/Controls

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).

### **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.

Eye/Face Skin/Body

- Wear safety glasses.
- 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.

## Environmental Exposure Controls

 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.

### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

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

exposures

OSHA = Occupational Safety and Health Administration
Short Term Exposure Limits are based on 15-minute

TWAEV = Time-Weighted Average Exposure Value

STEL = Short remi Exposure

## **Section 9 - Physical and Chemical Properties**

## 9.1 Information on Basic Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Pellet of varying size, harness, and color with a potential slight odor.
Color	Various colors.	Odor	Potential slight odor.
Odor Threshold	No data available		
General Properties			_
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	Temperature of 300°F (150°C) or greater over an extended period of time may cause thermal degradation of PVC resin.	рН	No data available
Specific Gravity/Relative Density	1.15 to 1.7 Water=1	Water Solubility	Insoluble
Viscosity	No data available	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(> 315.5556 °C)	UEL	No data available
LEL	No data available	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

 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 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.

## 10.6 Hazardous decomposition products

 Depending on conditions, 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 (<= 95%)	9002- 86-2	Acute Toxicity: Intratracheal-Rat TDLo • 50 mg/kg; Lungs, Thorax, or Respiration:Fibrosing alveolitis; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Dehydrogenases; Tumorigen / Carcinogen: Ingestion/Oral-Rat TDLo • 210 g/kg 30 Week(s)-Continuous; Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Skin and Appendages:Other:Tumors				

GHS Properties	Classification
Acute toxicity	EU/CLP • No data available UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Skin corrosion/Irritation	EU/CLP • No data available UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
	EU/CLP • No data available

Serious eye damage/Irritation	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Skin sensitization	EU/CLP • No data available UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Respiratory sensitization	EU/CLP • No data available UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Aspiration Hazard	EU/CLP • No data available UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Carcinogenicity	EU/CLP • No data available UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Germ Cell Mutagenicity	EU/CLP • No data available UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Toxicity for Reproduction	EU/CLP • No data available UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
STOT-SE	EU/CLP • No data available UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
STOT-RE	EU/CLP • No data available UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available

# 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)** 

· No data available

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)** 

Carcinogenic Effects

No data available

 This material does contain a component that may cause cancer, however based on regulatory criteria this material is not classified as a carcinogen.

Carcinogenic Effects						
CAS OSHA IARC NTP						
Vinyl Chloride	75-01-4	Specifically Regulated Carcinogen	Group 1-Carcinogenic	Known Human Carcinogen		

### Key to abbreviations

TD = Toxic Dose

## **Section 12 - Ecological Information**

## 12.1 Toxicity

Based on the high molecular weight of this polymeric material, transport of this
compoundacross 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

· None specified.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Data lacking.

## **Section 15 - Regulatory Information**

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

SARA Hazard Classifications • None

Inventory							
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA	
Polyvinyl Chloride	9002-86-2	Yes	No	No	Yes	Yes	
Vinyl Chloride	75-01-4	Yes	No	Yes	No	Yes	

### Canada

Labor Canada - WHMIS - Classifications of Substances		
Vinyl Chloride	75-01-4	A, B1, D2A, D2B, F
Polyvinyl Chloride	9002-86-2	Uncontrolled product according to WHMIS classification criteria
Canada - WHMIS - Ingredient Disclosure List		
Vinyl Chloride	75-01-4	0.1 %
Polyvinyl Chloride	9002-86-2	Not Listed

Environment Canada - CEPA - Priority Substances List		
Vinyl Chloride	75-01-4	Not Listed
Polyvinyl Chloride	9002-86-2	Not Listed

### **United States**

Labor		
U.S OSHA - Process Safety Management - Highly Hazardous Ch	iemicals	
Vinyl Chloride	75-01-4	Not Listed
Polyvinyl Chloride	9002-86-2	Not Listed
U.S OSHA - Specifically Regulated Chemicals		
		0.5 ppm Action Level (See 29
		CFR 1910.1017); 1 ppm TWA
Vinyl Chloride	75-01-4	(See 29 CFR 1910.1017); 5
		ppm STEL (See 29 CFR
		1910.1017, 15 min)
Polyvinyl Chloride	9002-86-2	Not Listed

### Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

Vinyl Chloride	75-01-4	
Polyvinyl Chloride	9002-86-2	Not Listed
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantiti	ies	
Vinyl Chloride	75-01-4	1 lb final RQ; 0.454 kg final RQ
Polyvinyl Chloride	9002-86-2	Not Listed
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities		
Vinyl Chloride	75-01-4	Not Listed
Polyvinyl Chloride	9002-86-2	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA	RQs	
Vinyl Chloride	75-01-4	Not Listed
Polyvinyl Chloride	9002-86-2	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
Vinyl Chloride	75-01-4	Not Listed
Polyvinyl Chloride	9002-86-2	Not Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		
Vinyl Chloride	75-01-4	0.1 % de minimis
,	0000 00 0	concentration
Polyvinyl Chloride	9002-86-2	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
Vinyl Chloride	75-01-4	Not Listed
Polyvinyl Chloride	9002-86-2	Not Listed
U.S TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notifica	tion	
Vinyl Chloride	75-01-4	Not Listed
Polyvinyl Chloride	9002-86-2	Not Listed

## **United States - California**

Environment U.S California - Proposition 65 - Carcinogens List		
Vinyl Chloride	75-01-4	carcinogen, initial date 2/27/87
Polyvinyl Chloride	9002-86-2	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
Vinyl Chloride	75-01-4	Not Listed
Polyvinyl Chloride	9002-86-2	Not Listed
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
Vinyl Chloride	75-01-4	Not Listed
Polyvinyl Chloride	9002-86-2	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
Vinyl Chloride	75-01-4	3 μg/day NSRL
Polyvinyl Chloride	9002-86-2	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
Vinyl Chloride	75-01-4	Not Listed
Polyvinyl Chloride	9002-86-2	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male		
Vinyl Chloride	75-01-4	Not Listed

Polyvinyl Chloride
 9002-86-2
 Not Listed

## 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

### Relevant Phrases (code & full text)

• H373 - May cause damage to organs through prolonged or repeated exposure.

Revision Date Preparation Date • 29/August/2016

Disclaimer/Statement of Liability

• 31/August/2015

• 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