Safety Data Sheet

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

1.1 Product identifier

Product Name • **Rigid PVC Compounds - Powder, All Colors**

Synonyms • All powder products with the product numbers 3###, including all colors.; Chloroethylene homopolymer 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 • Westlake Compounds LLC

2801 Post Oak Blvd., Suite 600
Houston, TX 77056
United States
www.westlake.com
SDSinfo@westlake.com

Telephone (General) • +1 713-960-9111

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

- Skin Corrosion 1B - H314
  Skin Sensitization 1 - H317
  Serious Eye Damage 1 - H318
  Respiratory Sensitization 1 - H334
  Germ Cell Mutagenicity 2 - H341
  Carcinogenicity 1A - H350i
  Reproductive Toxicity 2 - H361
  Specific Target Organ Toxicity Single Exposure 2 - H371

2.2 Label Elements

CLP

DANGER

Hazard statements
- H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341 - Suspected of causing genetic defects.
H350i - May cause cancer by inhalation.
H361 - Suspected of damaging fertility or the unborn child.
H371 - May cause damage to organs.

Prevention
- P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust.
P264 - Wash thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P281 - Use personal protective equipment as required.
P285 - In case of inadequate ventilation wear respiratory protection.

Response
- P304+P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P310 - Immediately call a POISON CENTER or doctor/physician.
P321 - Specific treatment, see supplemental first aid information.
P363 - Wash contaminated clothing before reuse.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P309+P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Storage/Disposal
- P405 - Store locked up.
P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other Hazards

CLP
- According to Regulation (EC) No. 1272/2008 (CLP) this material is 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
- Skin Corrosion 1B
Skin Sensitization 1
Serious Eye Damage 1
Respiratory Sensitization 1
Germ Cell Mutagenicity 2
Carcinogenicity 1A
Reproductive Toxicity 2
Specific Target Organ Toxicity Repeated Exposure 1
Specific Target Organ Toxicity Repeated Exposure 2

2.2 Label elements

UN GHS

DANGER

Hazard statements

- Causes severe skin burns and eye damage.
  May cause an allergic skin reaction
  Causes serious eye damage
  May cause allergy or asthma symptoms or breathing difficulties if inhaled
  Suspected of causing genetic defects.
  May cause cancer.
  Suspected of damaging fertility or the unborn child.
  Causes damage to organs through prolonged or repeated exposure.
  May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention

- Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  Do not breathe dust.
  Wash thoroughly after handling.
  Contaminated work clothing should not be allowed out of the workplace.
  Wear protective gloves/protective clothing/eye protection/face protection.
  Use personal protective equipment as required.
  In case of inadequate ventilation wear respiratory protection.

Response

- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
  If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
  Immediately call a POISON CENTER or doctor/physician.
  Wash contaminated clothing before reuse.
  Specific treatment, see supplemental first aid information.
  If skin irritation or rash occurs: Get medical advice/attention.
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  IF exposed or concerned: Get medical advice/attention.
  Get medical advice/attention if you feel unwell.

Storage/Disposal

- Store locked up.
  Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

UN GHS

- According to the Globally Harmonized System for Classification and Labeling (GHS) this product is considered hazardous

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

- Skin Corrosion 1B
  Skin Sensitization 1
  Serious Eye Damage 1
  Respiratory Sensitization 1
  Germ Cell Mutagenicity 2
  Carcinogenicity 1A
  Reproductive Toxicity 2
  Specific Target Organ Toxicity Repeated Exposure 1
  Specific Target Organ Toxicity Repeated Exposure 2

2.2 Label elements

OSHA HCS 2012

DANGER

Hazard statements

- Causes severe skin burns and eye damage.
  May cause an allergic skin reaction
  Causes serious eye damage
  May cause allergy or asthma symptoms or breathing difficulties if inhaled
  Suspected of causing genetic defects.
  May cause cancer.
  Suspected of damaging fertility or the unborn child.
  Causes damage to organs through prolonged or repeated exposure.
  May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention

- Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  Do not breathe dust.
  Wash thoroughly after handling.
  Do not eat, drink or smoke when using this product.
  Contaminated work clothing should not be allowed out of the workplace.
  Wear protective gloves/protective clothing/eye protection/face protection.
  In case of inadequate ventilation wear respiratory protection.

Response

- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
  If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
  If on skin: Wash with plenty of water .
  Immediately call a POISON CENTER or doctor/physician.
  Specific treatment, see supplemental first aid information.
  Wash contaminated clothing before reuse.
  If skin irritation or rash occurs: Get medical advice/attention.
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
  IF exposed or concerned: Get medical advice/attention.
  Get medical advice/attention if you feel unwell.

Storage/Disposal

- Store locked up.
  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 2015

2.1 Classification of the substance or mixture

WHMIS 2015

- Skin Corrosion 1B
  Skin Sensitization 1
  Serious Eye Damage 1
  Respiratory Sensitization 1
  Germ Cell Mutagenicity 2
  Carcinogenicity 1A
  Reproductive Toxicity 2
  Specific Target Organ Toxicity Repeated Exposure 1
  Specific Target Organ Toxicity Repeated Exposure 2

2.2 Label elements

WHMIS 2015

DANGER

Hazard statements

- Causes severe skin burns and eye damage.
May cause an allergic skin reaction
Causes serious eye damage
May cause allergy or asthma symptoms or breathing difficulties if inhaled
Suspected of causing genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention

- Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
In case of inadequate ventilation wear respiratory protection.

Response

- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER/doctor .
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Specific treatment, see supplemental first aid information.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor .
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.

Storage/Disposal

- Store locked up.
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

WHMIS 2015

- In Canada, the product mentioned above is 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:** STOT RE 2 (Lungs); Comb. Dust **WHMIS 2015:** STOT RE 2 (Lungs); Comb. Dust
Inert Fillers	NDA	0% TO 50%	NDA	**EU CLP:** Skin Irrit. 2, H315; Carc. 1A, H350i; STOT RE 1, H372 (Lungs/Inhalation) **UN GHS Revision 3:** Skin Irrit. 2; Acute Tox. 3 (Skin); Carc. 1A; STOT RE 1 (Lungs/Inhalation) **OSHA HCS 2012:** Skin Irrit. 2; Carc. 1A; STOT RE 1 (Lungs/Inhalation) **WHMIS 2015:** Skin Irrit. 2; Carc. 1A; STOT RE 1 (Lungs/Inhalation)
Impact Modifiers	NDA	0% TO 50%	NDA	**EU CLP:** Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT RE 1 (lungs, inhl), H372; Aquatic Acute 1, H400 **UN GHS Revision 3:** Acute Tox. 4 (oral); Skin Irrit. 2; Eye Irrit. 2; STOT RE 1 (lungs, inhl); Aquatic Acute 2 **OSHA HCS 2012:** Acute Tox. 4 (Oral); Skin Irrit. 2; Eye Irrit. 2; STOT RE 1 (lungs, inhl) **WHMIS 2015:** Acute Tox. 4 (Oral); Skin Irrit. 2; Eye Irrit. 2; STOT RE 1 (Lungs, Inhl)
Process Aid	NDA	0% TO 25%	NDA	**EU CLP:** Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 4, H302; Aquatic Acute 1, H400 **UN GHS Revision 3:** Skin Irrit. 2; Eye Irrit. 2; Acute Tox. 4 (orl); Aquatic Acute 1 **OSHA HCS 2012:** Skin Irrit. 2; Eye Irrit. 2; Acute Tox. 4 (orl) **WHMIS 2015:** Acute Tox. 4 (orl); Skin Irrit. 2; Eye Irrit. 2
Lubricants	NDA	0% TO 20%	NDA	**EU CLP:** Skin Irrit. 2, H315 **UN GHS Revision 3:** Skin Irrit. 2; Acute Tox. 5 (skn) **OSHA HCS 2012:** Skin Irrit. 2 **WHMIS 2015:** Skin Irrit. 2
Colorant	NDA	0% TO 15%	NDA	**EU CLP:** Muta. 2, H341; Carc. 2, H351; STOT RE 2 (lungs), H373 **UN GHS Revision 3:** Skin Irrit. 3; Eye Irrit. 2; Muta. 2; Carc. 2; STOT RE 2 (Lungs); Aquatic Chronic 4 **OSHA HCS 2012:** Eye Irrit. 2; Muta. 2; Carc. 2; STOT RE 2 (Lungs) **WHMIS 2015:** Eye Irrit. 2; Muta. 2; Carc. 2; STOT RE 2 (Lungs)
Heat Stabilizer	NDA	1% TO 10%	NDA	**EU CLP:** Skin Corr. 1B, H314; Eye Dam. 1, H318; STOT RE 2 (Lungs, Blood), H373; Acute Tox. 4, H302; Skin Sens. 1B, H317; Repr. 2, H361; STOT SE 2, H371; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 **UN GHS Revision 3:** Flam. Liq. 4; Skin Corr. 1B; Eye Dam. 1; Acute Tox. 4 (orl); Skin Sens. 1B; Repr. 2; STOT RE 2 (lungs, blood); Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1 **OSHA HCS 2012:** Flam. Liq. 4; Skin Corr. 1B; Eye Dam. 1; Acute Tox. 4 (orl); Skin Sens. 1B; Repr. 2; STOT RE 2 (lungs, blood); Asp. Tox. 1 **WHMIS 2015:** Flam. Liq. 4; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1B; Acute Tox. 4 (orl); Repr. 2; STOT RE 2 (lungs, blood); Asp. Tox. 1
Blowing agent	NDA	0% TO 7%	NDA	**EU CLP:** Resp. Sens. 1, H334 **UN GHS Revision 3:** Flam. Sol. 1; Resp. Sens. 1; Skin Sens. 1 **OSHA HCS 2012:** Flam. Sol. 1; Resp. Sens. 1; Skin Sens. 1 **WHMIS 2015:** Flam. Sol. 1; Resp. Sens. 1; Skin Sens. 1
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%	Ingestion/Oral-Rat LD50 • 500 mg/kg Inhalation-Rat LC50 • 18 pph 15 Minute(s)	**EU CLP:** Community workplace exposure limit **OSHA HCS 2012:** Exposure limits

See Section 16 for full text of H-statements.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation
- Move victim to fresh air. 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. Remove contact lenses, if present and easy to do. Continue rinsing. 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
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

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
- 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. 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.
  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
- 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 40C.

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 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
						10 mg/m3 TWAEV

Polyvinyl Chloride	TWAs	1 mg/m3 TWA (respirable fraction)	1 mg/m3 TWA (respirable)	Not established	1 mg/m3 TWA (respirable)	(including dust, inert or nuisance particulates; containing no Asbestos and <1% Crystalline silica, total dust) *as Particulates not otherwise classified (PNOC)*

Exposure Limits/Guidelines (Con't.)

	Result	OSHA
Vinyl Chloride (75-01-4)	STELs	5 ppm STEL (see 29 CFR 1910.1017)
	TWAs	1 ppm TWA
Polyvinyl Chloride	TWAs	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) *as Particulates not otherwise classified (PNOC)*

Exposure Limits Supplemental

OSHA

•Polyvinyl Chloride as Particulates not otherwise classified (PNOC): **Mineral Dusts:** (15 mppcf TWA (respirable fraction); 5 mg/m3 TWA (respirable fraction); 50 mppcf TWA (total dust); 15 mg/m3 TWA (total dust))

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. Use only appropriately classified electrical equipment.

Personal Protective Equipment

Respiratory

- 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. 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

- Use good hygiene practices when handling this material. Safety glasses with side shields should be worn at a minimum. In dusty environments, goggles or glasses designed for dust protection are recommended.

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. HANDS: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties.

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
MSHA = Mine Safety and Health Administration
NIOSH = National Institute of Occupational Safety and Health
OSHA = Occupational Safety and Health Administration
STEL = Short Term Exposure Limits are based on 15-minute exposures
TWAEV = Time-Weighted Average Exposure Value
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Powder 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.	pH	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 recommended storage and handling conditions.

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	**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** • Skin Corrosion 1B **UN GHS 3** • Skin Corrosion 1B **OSHA HCS 2012** • Skin Corrosion 1B **WHMIS 2015** • Skin Corrosion 1B
Serious eye damage/Irritation	**EU/CLP** • Serious Eye Damage 1 **UN GHS 3** • Serious Eye Damage 1 **OSHA HCS 2012** • Serious Eye Damage 1 **WHMIS 2015** • Serious Eye Damage 1
Skin sensitization	**EU/CLP** • Skin Sensitizer 1 **UN GHS 3** • Skin Sensitizer 1 **OSHA HCS 2012** • Skin Sensitizer 1 **WHMIS 2015** • Skin Sensitizer 1
Respiratory sensitization	**EU/CLP** • Respiratory Sensitizer 1 **UN GHS 3** • Respiratory Sensitizer 1 **OSHA HCS 2012** • Respiratory Sensitizer 1 **WHMIS 2015** • Respiratory Sensitizer 1
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** • Carcinogenicity 1A; May cause cancer by inhalation **UN GHS 3** • Carcinogenicity 1A **OSHA HCS 2012** • Carcinogenicity 1A **WHMIS 2015** • Carcinogenicity 1A
Germ Cell Mutagenicity	**EU/CLP** • Germ Cell Mutagenicity 2 **UN GHS 3** • Germ Cell Mutagenicity 2 **OSHA HCS 2012** • Germ Cell Mutagenicity 2 **WHMIS 2015** • Germ Cell Mutagenicity 2
	EU/CLP • Toxic to Reproduction 2

Toxicity for Reproduction	**UN GHS 3** • Toxic to Reproduction 2 **OSHA HCS 2012** • Toxic to Reproduction 2 **WHMIS 2015** • Toxic to Reproduction 2
STOT-SE	**EU/CLP** • Specific Target Organ Toxicity Single Exposure 2 **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** • Specific Target Organ Toxicity Repeated Exposure 1; Specific Target Organ Toxicity Repeated Exposure 2 **OSHA HCS 2012** • Specific Target Organ Toxicity Repeated Exposure 1; Specific Target Organ Toxicity Repeated Exposure 2 **WHMIS 2015** • Specific Target Organ Toxicity Repeated Exposure 1; Specific Target Organ Toxicity Repeated Exposure 2

Potential Health Effects

Inhalation

Acute (Immediate)
- May cause corrosive burns - irreversible damage.

Chronic (Delayed)
- Repeated or prolonged exposure to corrosive fumes may cause bronchial irritation with chronic cough. Repeated and prolonged exposure to components of this material may cause lung damage.

Skin

Acute (Immediate)
- Causes severe skin burns. May cause skin sensitization. Symptoms include redness, and skin rash.

Chronic (Delayed)
- Repeated or prolonged exposure to corrosive materials will cause dermatitis.

Eye

Acute (Immediate)
- Causes serious eye damage. Direct contact with the eyes can cause irreversible damage, including blindness.

Chronic (Delayed)
- Repeated or prolonged exposure to corrosive materials or fumes may cause conjunctivitis.

Ingestion

Acute (Immediate)
- May cause irreversible damage to mucous membranes.

Chronic (Delayed)
- Repeated or prolonged exposure to corrosive materials or fumes may cause gastrointestinal distrubances.

Other

Chronic (Delayed)
- Repeated and prolonged exposure may affect the blood.

Mutagenic Effects
- Repeated and prolonged exposure may cause mutagenic effects.

Carcinogenic Effects
- Repeated and prolonged exposure may cause cancer.

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

Reproductive Effects
- Repeated and prolonged exposure may cause reproductive effects.

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

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 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
- Acute, Chronic

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 Chemicals

• Vinyl Chloride	75-01-4	Not Listed
• Polyvinyl Chloride	9002-86-2	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Vinyl Chloride	75-01-4	0.5 ppm Action Level (See 29 CFR 1910.1017); 1 ppm TWA (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 Quantities

• 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 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 Notification

• 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

- NOTICE: For the State of California:

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Section 16 - Other Information

Relevant Phrases (code & full text)

- H302 - Harmful if swallowed
  H304 - May be fatal if swallowed and enters airways
  H315 - Causes skin irritation
  H319 - Causes serious eye irritation
  H351 - Suspected of causing cancer.
  H372 - Causes damage to organs through prolonged or repeated exposure.
  H373 - May cause damage to organs through prolonged or repeated exposure.
  H400 - Very toxic to aquatic life
  H410 - Very toxic to aquatic life with long lasting effects

Revision Date

- 15/March/2018

Disclaimer/Statement of

- The technical data given herein is correct to the best of our knowledge, information

Liability

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Key to abbreviations

NDA = No Data Available