SAFETY DATA SHEET

OXYVINYLS® PVC HOMOPOLYMER SUSPENSION RESIN (PRIME GRADES)

North America EN
SDS No.: M40722

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SECTION 1. CHEMICAL PRODUCT / COMPANY IDENTIFICATION

Company Identification:	Oxy Vinyls, LP 14555 Dallas Parkway, Suite 400 Dallas, Texas 75254-4300
24 Hour Emergency Telephone Number:	1-800-733-3665 (USA); CANUTEC (Canada): 1-613-996-6666; CHEMTREC (within USA and Canada): 1-800-424-9300; CHEMTREC (outside USA and Canada): +1 703-527-3887; CHEMTREC Contract No: CCN16186
To Request an SDS:	MSDS@oxy.com or 1-972-404-3245
Customer Service:	1-800-752-5151 or 1-972-404-3700
Product Identifier:	**OXYVINYLS® PVC HOMOPOLYMER SUSPENSION RESIN (PRIME GRADES)**
Trade Name:	OxyVinyls® 155, 155F, 185, 185F, 190F, 195, 195F, 200, 200F, 216, 216A, 216S, 220, 220F, 225, 225A, 225P, 226, 226F, 240, 240F, 255, 255F, 280, 310, 355, 450F, 500, 500F
Synonyms:	Polyvinyl chloride; PVC
Product Use:	FOR USE BY PVC FORMULATORS AND PROCESSORS
Uses Advised Against:	Some formulation additives historically used in PVC compounding are currently restricted and/or banned, such as but not limited to, some phthalates plasticizers and heavy metals (e.g. lead). PVC compounders/processors should verify their product formulations to ensure regulatory compliance and environment/human health and safety of final products.
Restrictions on Use (United States):	PVC resin itself is not restricted; however, certain formulation additives used in compounding may be restricted and/or banned. PVC compounders/processors must verify their product formulations to ensure compliance with various local, state, and national restrictions.

Other Global Restrictions on Use:	The PVC compounding process uses various stabilizers, lubricants, fillers, and additives which must be evaluated to determine their regulatory, environmental, and sustainability requirements on a case-by-case basis. Other restrictions on use based on local, regional, or national regulations may exist and must be determined on a case-by-case basis.

SECTION 2. HAZARDS IDENTIFICATION

OSHA REGULATORY STATUS: Suspension grade PVC resin is not hazardous as manufactured, packaged, and shipped because the product's particles sizes are not in the respirable range (e.g.,10 microns or less). However, there may be a potential for the product to become hazardous as the result of downstream activities if those activities result in significant alteration of the product's particles sizes by mechanical activities capable of generating particles in the respirable range (e.g.,10 microns of smaller). The downstream user should evaluate their processing activities to determine the potential for creating respirable airborne PVC particle sizes in the range of 10 microns or less.

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EMERGENCY OVERVIEW:

Color:	White
Physical State:	Solid
Appearance:	Powder, Granular
Odor:	Odorless
Signal Word:	**WARNING**

MAJOR HEALTH HAZARDS: RESPIRABLE PVC PARTICLES MAY CAUSE DAMAGE TO RESPIRATORY SYSTEM THROUGH PROLONGED OR REPEATED EXPOSURE.

PHYSICAL HAZARDS: Use methods to minimize generation of dust. Fine PVC dust is capable of propagating a secondary dust explosion.

PRECAUTIONARY STATEMENTS: Do not breathe PVC dust.

ADDITIONAL HAZARD INFORMATION: Fumes produced in processing may irritate respiratory tract, skin, and eyes if not processed in an enclosed system and/or controlled with capture ventilation. This material causes mild mechanical irritation to skin and eyes. Good hygiene and safety practices should be used when handling and working with this material. Good hygiene practices include but are not limited to wearing suitable chemical resistant gloves; eye protection; washing hands and affected skin immediately after handling, before breaks, and at the end of the workday; regularly cleaning work area and clothing; etc.

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HAZARD CLASSIFICATION:

Note: This product as sold in it's unaltered state is not classified as hazardous according to the OSHA Hazard Communication Standard (29 CFR 1910.1200); however, if altered to generate respirable size PVC particles and fine PVC dusts, the hazards below would apply.

GHS: TARGET ORGAN TOXICITY (REPEATED EXPOSURE):	Category 2 - May cause damage to organs (lungs) through prolonged or repeated exposure (by inhalation of respirable particles)
HAZARDS NOT OTHERWISE CLASSIFIED (HNOC):	- Fine PVC dust is capable of propagating a secondary dust explosion

GHS SYMBOL: Health hazards

GHS SIGNAL WORD: **WARNING**

GHS HAZARD STATEMENTS:

GHS - Health Hazard Statement(s)
• May cause damage to organs (lungs) through prolonged or repeated exposure (by inhalation of respirable particles)

Additional Hazards - GHS Hazards Not Otherwise Classified (HNOC):
• Fine PVC dust is capable of propagating a secondary dust explosion

GHS - Precautionary Statement(s) - Prevention
• Do not breathe dust

GHS - Precautionary Statement(s) - Response
• Get medical advice/attention if you feel unwell

GHS - Precautionary Statement(s) - Storage
• There are no Precautionary-Storage phrases assigned

GHS - Precautionary Statement(s) - Disposal
• Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

Physical Hazards of Significance Not Mentioned in GHS Classification
• Fine PVC dust is capable of propagating a secondary dust explosion

See Section 11: TOXICOLOGICAL INFORMATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Systematic Chemical Name	Common name	CAS Number	Percent [%]
Polyvinyl chloride	Poly(1-chloroethylene)	PVC	9002-86-2	100

SECTION 4. FIRST AID MEASURES

EYE CONTACT: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs, get medical advice/attention.

SKIN CONTACT: Wash contaminated areas with water. If irritation persists, get medical advice/attention.

INHALATION: If adverse effects occur, such as irritation, remove to uncontaminated area. Get medical attention if you feel unwell.

INGESTION: No expected effect. If large amounts are ingested, GET MEDICAL ATTENTION.

Most Important Symptoms/Effects (Acute and Chronic [Delayed]):

Acute Symptoms/Effects:
Eye: Eye Irritation. Eye exposure may cause mild irritation of the eyelids and conjunctiva due to mechanical effect.
Skin: Skin Irritation. Exposure of powder or fine particulates to skin may cause slight redness, irritation due to mechanical effect.
Inhalation (Breathing): Respiratory System Effects: Inhalation of powders or fine particulates may cause respiratory tract irritation, cough.
Ingestion (Swallowing): No known effects.
Other Health Effects: Occupational asthma has been reported.

Chronic (Delayed) Symptoms/Effects:
- Inhalation of high levels of respirable PVC particles has been associated with pulmonary fibrosis, a PVC pneumoconiosis, in several studies. Laboratory findings included small opacities on chest x-ray and impairment of lung function (restriction or reversible airway obstruction)
- Occupational asthma has been reported
- Respirable particles are less than 10 microns in size. Particles associated with suspension polymerization are typically greater than 10 microns in size
- This product contains less than 4 ppm of vinyl chloride monomer (VCM)

Protection of First-Aiders: Do not breathe dust. Avoid contact with skin and eyes. Use personal protective equipment (PPE). Refer to Section 8 for specific PPE recommendations. At minimum, treating personnel should utilize PPE sufficient for prevention of bloodborne pathogen transmission.

Notes to Physician: This material causes mild mechanical irritation to skin and eyes. Removing the material via irrigation is usually sufficient.

Interaction with Other Chemicals Which Enhance Toxicity: None known.

Medical Conditions Aggravated by Exposure: Respiratory conditions including asthma and other breathing disorders.

SECTION 5. FIRE FIGHTING MEASURES

Fire Hazard: Combustible. Gives off irritating or toxic fumes (or gases) in a fire. Finely dispersed particles form explosive mixtures in air.

Explosive properties: Minimize dust formation. Fine PVC dust is capable of propagating a secondary dust explosion.

Extinguishing Media: Use water spray, powder, foam, carbon dioxide.

Unsuitable Extinguishing Media: No information available.

Specific Hazards: Decomposes on heating. This produces toxic fumes including hydrogen chloride and phosgene. PVC reacts violently with fluorine. PVC reacts violently with acetal and acetal copolymers.

Unusual Hazards: PVC foamed compounds may burn readily based on other formulation additives. Finished foam resins burn readily. Once fire becomes established in stock of a foamed compound will develop rapidly and application of large quantities of water at early stage is necessary to effect extinguishment. Foamed compounds are excellent thermal insulators and risk of spontaneous ignition may arise if freshly manufactured material is not allowed to cool thoroughly before stacking in bulk.

Fire Fighting: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Cool extinguished material to prevent decomposition.

Hazardous Combustion Products: Phosgene; Hydrogen chloride; Oxides of carbon; Small amounts of benzene and aromatic and aliphatic hydrocarbons

Sensitivity to Mechanical Impact: Not sensitive.

Sensitivity to Static Discharge: Electrostatic charges may build up during handling. Ground equipment.

Lower Flammability Level (air): Not flammable

Upper Flammability Level (air): Not flammable

Flash point: 736 °F (391 °C)

Method: ASTM D1929

Auto-ignition Temperature: 849 °F (454 °C)

Physical Hazards of Significance Not Mentioned in GHS Classification
- Fine PVC dust is capable of propagating a secondary dust explosion

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Keep unnecessary people away, isolate hazard area and deny entry. Eliminate all sources of ignition. Ground equipment. Do not breathe dust. Avoid contact with skin and eyes. Wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS.

Personal Protective Equipment: See Section 8 for information on personal protective equipment.

Emergency Procedures: Prevent material and runoff from entering sewers and waterways if it can be done safely well ahead of the release. For other than minor leaks, immediately implement the facility's predetermined emergency response plan.

Environmental Precautions: Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate regulatory agencies. This product or others of similar composition, in the as shipped condition have been tested and found to not be hazardous using the USEPA's Toxicity Characteristic Leaching Procedure (TCLP-40 CFR 261, Appendix II). Any physical or chemical modification of this product as shipped may change the TCLP test results.

Methods and Materials for Clean-up

Recovery: Reuse or reprocess, if possible. The recovered material must be placed in a suitable container and labelled with corresponding identification. Shovel dry material (briquettes, chunks, rubble) into suitable container. Shoveling dry material may generate dust. Avoid dust formation. HEPA vacuum or wet sweep any remaining material into a suitable container.

Neutralization: No additional information available.

Final Disposal: Runoff may pollute waterways. Dispose in accordance with all applicable regulations. For waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

Handling:

Precautions for Safe Handling: Use methods to minimize generation of dust. Fine PVC dust is capable of propagating a secondary dust explosion. Avoid breathing dust. This potential can be reduced by good housekeeping, prevention of dust from process equipment, preventing accumulation of dust emissions on overhead, horizontal surfaces and eliminating potential ignition sources. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. PVC resin processing may result in the release of low levels of vinyl chloride.

Technical measures/precautions: Adequate fire exits and escapes should be provided and arrangements should be made for venting large quantities of smoke produced, in case of fire, preferably by use of automatic or remotely

controlled equipment.

Prevention of contact: Wet sweep or HEPA vacuum spills. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product.

Storage:

Safe Storage Conditions: Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Store in a cool, dry area. Store in a well-ventilated area. Avoid heat, flames, sparks and other sources of ignition. Ground equipment.

Technical measures: Storage areas for foamed compounds must be kept free of paper or textile, which could be ignited by smoldering object and then act as fuse to carry fire to foamed product. Installation of sprinkler system with above average density of sprinkler heads is recommended in warehouses used for storing foamed compounds.

Incompatible Substances: PVC reacts violently with acetal and acetal copolymers. Reacts violently with fluorine.

Additional Information:

Physical Hazards of Significance Not Mentioned in GHS Classification
- Fine PVC dust is capable of propagating a secondary dust explosion

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

REGULATORY EXPOSURE LIMIT(S):
Listed below for the product components that have regulatory occupational exposure limits (OEL's).

Component	OSHA Final PEL TWA	OSHA Final PEL STEL	OSHA Final PEL Ceiling
Particles Not Otherwise Regulated (PNOR) 00-00-001	15mg/m³ (Total) 5mg/m³ (Respirable)	-----	-----
Ethene, chloro-, homopolymer (PolyVinyl Chloride) 9002-86-2	-----	-----	-----

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

Component	Canada - TWAs	Canada - STELs	Canada - Ceilings
Particles Not Otherwise Regulated (PNOR) 00-00-001	10 mg/m³(Total) 5 mg/m³(Respirable)	-----	-----
Ethene, chloro-, homopolymer (PolyVinyl Chloride) 9002-86-2	Ontario - 1 mg/m³ (TWA) British Columbia - 1 mg/m³ (TWA)	-----	-----

NON-REGULATORY EXPOSURE LIMIT(S):
Listed below are the product components that have advisory (non-regulatory) occupational exposure limits (OEL's) established.

Component	ACGIH TWA	ACGIH STEL	ACGIH Ceiling	Skin Absorption - ACGIH	OSHA TWA (Vacated)	OSHA STEL (Vacated)	OSHA Ceiling (Vacated)
Ethene, chloro-, homopolymer (PolyVinyl Chloride) 9002-86-2	1 mg/m³ (respirable fraction)	-----	-----	-----	-----	-----	-----

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).

- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

Recommended Exposure Limits (REL's) are non-regulatory occupational exposure limits the manufacturer has established based on health effects data. Polyvinyl Chloride (PVC) ACGIH exposure level is established at 1 mg/m³ Threshold Limit Level (TLV) 8-hour Time Weighted Average (TWA) for the respirable aerosol fraction range. ACGIH defines respirable aerosol fraction (or alveolar fraction) as the sub fraction of the ***inhaled particles with an aerodynamic diameter (dae) <10 µm that penetrates into the alveolar region of the*** *lung (i.e., includes the respiratory bronchioles, the alveolar ducts and sacs) and is pertinent to the development of such chronic diseases as pneumoconiosis and emphysema.*

Component	OXY REL 8 hr TWA	OXY REL STEL	OXY REL Ceiling
Ethene, chloro-, homopolymer (PolyVinyl Chloride) 9002-86-2	1 mg/m³ (respirable fraction)	NA	NA

Additional Advice: The fabrication processes for the final product may involve coating, calendering, and molding. To assess the health hazards associated with exposure to compounded PVC dusts, it may be necessary to have information on the ingredients used in the compounding of the resin.

ENGINEERING CONTROLS: Provide local exhaust ventilation where dust or vapors may be generated. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Use good hygiene practices when handling this material. For dusty operations or when manually handling this material, wear tight fitting chemical resistant safety goggles.

Skin and Body Protection: When potential for contact with dry material exists, wear disposable coveralls suitable for dust exposure, such as Tyvek®.

Hand Protection: As a good hygiene practice, wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove.

Protective Material Types: Polyvinyl chloride (PVC). Tyvek®.

Respiratory Protection: A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. The added protection of a full face-piece respirator is required when visible dusty conditions are encountered and eye irritation may occur. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

HYGIENE MEASURES: Handle in accordance with good industrial hygiene and safety practices. Good hygiene practices include but are not limited to wearing suitable chemical resistant gloves; eye protection; washing hands and affected skin immediately after handling, before breaks, and at the end of the workday; regularly cleaning work area and clothing; etc.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Color:	White
Odor:	Odorless
Odor Threshold [ppm]:	No data available
pH:	Not applicable
Melting Point/Range:	No data available
Freezing Point/Range:	Not applicable to solids
Flash point:	736 °F (391 °C)
Method:	ASTM D1929
Evaporation Rate (ether=1):	Not applicable
Flammability (solid, gas):	Not flammable
Lower Flammability Level (air):	Not flammable
Upper Flammability Level (air):	Not flammable
Vapor Pressure:	Not applicable
Water Solubility:	Negligible
Vapor Density (air=1):	Not applicable
Relative Density/Specific Gravity (water=1):	1.4
Partition Coefficient (n-octanol/water):	No data available
Auto-ignition Temperature:	849 °F (454 °C)
Decomposition Temperature:	No data available
Viscosity:	Not applicable to solids
Other Information	
Molecular Formula:	$(C_2H_3Cl)_n$
Density:	1.4 gm/cm3
VOC Content (%):	No data available
Volatility:	Not applicable
Particle Size Distribution:	Approximate mean particle size distribution (ASTM D1921): 100 - 180 microns with 0% of particles being ≤ 10 microns

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal temperatures and pressures.

Reactivity: Not reactive under normal temperatures and pressures.

Possibility of Hazardous Reactions: Avoid heat, flames, sparks, and other sources of ignition.

Conditions to Avoid (e.g., static discharge, shock, or vibration): Electrostatic charges may build up during handling causing ignition source. Fine PVC dust is capable of propagating a secondary dust explosion.

Incompatible Substances: PVC reacts violently with acetal and acetal copolymers. Reacts violently with fluorine.

Hazardous Decomposition Products: Hydrochloric acid, Carbon oxides, Small amounts of benzene and aromatic and aliphatic hydrocarbons, Phosgene.

Hazardous Polymerization: PVC is a stable polymer and will not further polymerize. This material will not depolymerize to form VCM.

SECTION 11. TOXICOLOGICAL INFORMATION

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POTENTIAL HEALTH EFFECTS:

ACUTE TOXICITY:
Vinyl chloride monomer (VCM) is NOT likely to be present at levels that would produce an acute biological effect when used in a well ventilated area. Acute biological effects of VCM include CNS and respiratory depression.

Eye contact: Eye Irritation. Eye exposure may cause mild irritation of the eyelids and conjunctiva. May cause eye irritation from the mechanical action of lodged particles.
Skin contact: This material is unlikely to cause chemical skin irritation. Skin irritation may occur due to mechanical action. Exposing skin to powder or fine particulate may cause slight redness, irritation.
Inhalation: No known effects. Inhalation of powder or fine particulates may cause irritation, cough.
Ingestion: No known effects. This material is practically non-toxic by the oral route.

CHRONIC TOXICITY:
The available evidence from experimental animals and from humans indicates that pure PVC is not metabolized in mammals. Several studies have described pulmonary fibrosis from inhalation of high levels of respirable PVC particles. PVC resin particles generated by suspension polymerization are generally large enough in diameter that the majority are not considered respirable. Vinyl chloride monomer (VCM) is NOT likely to be present at levels that would produce a chronic biological effect when used in a well ventilated area. Chronic biological effects of VCM

include damage to the liver, which causes angiosarcoma of the liver (a rare form of liver cancer in humans), Raynaud's syndrome, and acroosteolysis (bone loss in finger tips). Long latent period may exist between exposure and symptom onset.

Chronic Effects: Chronic exposure to the respirable fraction (particles less than 10 microns in size) of PVC particles may produce pulmonary fibrosis. Particle sizes associated with suspension polymerization are typically greater than 10 microns in size. Product contains residual amounts of VCM, concentrations are less than 4 ppm (<0.0004%).

SIGNS AND SYMPTOMS OF EXPOSURE:

Inhalation (Breathing): Respiratory System Effects: Inhalation of powders or fine particulates may cause respiratory tract irritation, cough.
Skin: Skin Irritation. Exposure of powder or fine particulates to skin may cause slight redness, irritation due to mechanical effect.
Eye: Eye Irritation. Eye exposure may cause mild irritation of the eyelids and conjunctiva due to mechanical effect.
Ingestion (Swallowing): No known effects.

Other Health Effects: Occupational asthma has been reported.

Interaction with Other Chemicals Which Enhance Toxicity: None known.

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GHS HEALTH HAZARDS:

GHS: TARGET ORGAN TOXICITY (REPEATED EXPOSURE):
Category 2 - May cause damage to organs (lungs) through prolonged or repeated exposure (by inhalation of respirable particles)

TOXICITY DATA:

PRODUCT TOXICITY DATA:

LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
No data available	No data available	No data available

COMPONENT TOXICITY DATA: The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given

Component	Oral LD50	Dermal LD50	Inhalation LC50
Polyvinyl chloride	No data available	No data available	No data available
Vinyl Chloride	500 mg/kg (Rat)	No data available	390 mg/L (2-h Rat)

EYE IRRITATION/CORROSION: This substance is not classified as an eye irritant per GHS criteria.

SKIN IRRITATION/CORROSION: Slight skin irritation from mechanical friction from PVC particles may occur.

SKIN ABSORBENT / DERMAL ROUTE: NO
Product is not absorbed by skin (dermal route).

RESPIRATORY OR SKIN SENSITIZATION: Not classified as a skin or respiratory sensitizer per GHS criteria.

CARCINOGENICITY: Not classified as a carcinogen per GHS criteria. This product is not classified as a carcinogen by NTP, IARC or OSHA. This material does not contain vinyl chloride monomer (VCM) at high enough levels to classify it as a carcinogen.

SPECIFIC TARGET ORGAN TOXICITY (Single Exposure): The weight of evidence suggests that single exposure of PVC does not cause specific target organ toxicity.

SPECIFIC TARGET ORGAN TOXICITY (Repeated or Prolonged Exposure): Fibrotic lung changes and altered pulmonary function tests have been reported in workers exposed to PVC dust for repeated and prolonged exposures. Classification according to GHS: Category 2 - Respiratory System (Lungs).

INHALATION HAZARD: A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

IN-VITRO / IN-VIVO GENOTOXICITY: The weight of evidence suggests that PVC is not mutagenic to humans or to experimental animals.

REPRODUCTIVE TOXICITY: There are no known or recorded effects on reproductive function or fetal development. Not classified as a reproductive toxin per GHS criteria.

DEVELOPMENTAL TOXICITY: Not classified as a developmental or reproductive toxin per GHS criteria.

TOXICOKINETICS: Not available.

METABOLISM: Not available.

ENDOCRINE DISRUPTOR: Vinyl Chloride may be present as a contaminant in this product at very low levels. Vinyl Chloride is listed on The Endocrine Disruptors Exchange's (TEDX) List of Potential Endocrine Disruptors database of chemicals with the potential to affect the endocrine system. Every chemical on the TEDX List has one or more verified citations published, accessible, primary scientific research demonstrating effects on the endocrine system.

NEUROTOXICITY: Not considered a neurotoxin.

IMMUNOTOXICITY: Not available.

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY (EC, IC, and LC):

Aquatic Toxicity:
No data available. This material is believed to be practically non-toxic to aquatic life.

FATE AND TRANSPORT:

PERSISTENCE: This material will persist in the environment.

BIODEGRADATION: PVC will not biodegrade. Vinyl chloride may degrade under anaerobic conditions.

BIOCONCENTRATION: This material will not bioconcentrate.

BIOACCUMULATIVE POTENTIAL: 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.

MOBILITY IN SOIL: Not expected to adsorb on soil.

ADDITIONAL ECOLOGICAL INFORMATION: This material is believed to be practically non-toxic to terrestrial organisms. PVC compounds may present harm to marine life when improperly disposed based on the compound formulation additives.

SECTION 13. DISPOSAL CONSIERATIONS

Waste from material:
Reuse or reprocess, if possible. Incineration, preferably after mixing with another combustible fuel. Care must be exercised to assure complete combustion to prevent the formation of phosgene. An acid scrubber is necessary to remove the halo acids produced. May be subject to disposal regulations. Dispose of contents/ container in accordance with applicable local, regional, national, and/or international regulations.

Container Management:
Dispose of container in accordance with applicable local, regional, national, and/or international regulations. This product or others of similar composition, in the as shipped condition have been tested and found to not be hazardous using the USEPA's Toxicity Characteristic Leaching Procedure (TCLP-40 CFR 261, Appendix II). Any physical or chemical modification of this product as shipped may change the TCLP test results. Container rinsate must be disposed of in compliance with applicable regulations.

Contaminated Material:
At the time of review, criteria for land treatment or burial (sanitary landfill) disposal practices are subject to significant revision. Prior to implementing land disposal of waste residue (including waste sludge), consult with environmental regulatory agencies for guidance on acceptable disposal practices.

SECTION 14. TRANSPORT INFORMATION

LAND TRANSPORT

U.S. DOT 49 CFR 172.101:
Status: Not Regulated
CANADIAN TRANSPORTATION OF DANGEROUS GOODS:
Status: Not Regulated

MARITIME TRANSPORT (IMO / IMDG)

Status - IMO / IMDG: Regulated.

AIR TRANSPORT (ICAO / IATA)

Special Instructions CAO: IATA Certificate for shipping personnel is required

SECTION 15. REGULATORY INFORMATION

U.S. REGULATIONS

OSHA REGULATORY STATUS:

Suspension grade PVC resin is not hazardous as manufactured, packaged, and shipped because the product's particles sizes are not in the respirable range (e.g.,10 microns or less). However, there may be a potential for the product to become hazardous as the result of downstream activities if those activities result in significant alteration of the product's particles sizes by mechanical activities capable of generating particles in the respirable range (e.g.,10 microns of smaller). The downstream user should evaluate their processing activities to determine the potential for creating respirable airborne PVC particle sizes in the range of 10 microns or less.

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

Component	U.S. DOT Hazardous Substances/ RQs	CERCLA Hazardous Substances / RQs	CERCLA Section 302 EHS EPCRA RQs	Section 302 Threshold Planning Quantity (TPQ)
Polyvinyl chloride 9002-86-2 (100)	Not listed	Not listed	Not listed	Not Listed
Vinyl Chloride 75-01-4 (< 0.0004)	1 lbs. (RQ)	1 lbs. (RQ)	Not listed	Not Listed

SARA EHS Chemical (40 CFR 355.30)

Not regulated.

Chronic Health Hazard

SARA HAZARD CATEGORIES ALIGNED WITH GHS (2018):

Health Hazard - Specific Target Organ Toxicity (STOT) Repeat Exposure (RE)
Physical Hazard - HNOC

EPCRA SECTION 313 (40 CFR 372.65):

To the best of our knowledge, this product does not contain chemicals at levels that require reporting under this statute. Vinyl chloride is at levels significantly lower than the established 0.1% de minims concentration.

Component	SARA 313 - Emission Reporting	SARA 313 PBT
Vinyl Chloride 75-01-4 (< 0.0004)	0.1% (de minimis concentration)	Not Listed

DEPARTMENT OF HOMELAND SECURITY (DHS)- Chemical Facility Anti-Terrorism Standards (6 CFR 27):

Not likely to be regulated based on composition level of component below in formulation

Component	DHS - Security Issues	DHS-Sabotage Screening Threshold Qnty.	DHS-Sabotage Min. Conc.	DHS-Theft Screening Threshold Qnty.	DHS-Theft Min. Conc.	DHS-Release Screening Threshold Qnty.	DHS-Release Min. Conc.	CWC Toxic Chemicals:
Polyvinyl chloride 9002-86-2 (100)	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Vinyl Chloride 75-01-4 (< 0.0004)	Release - Flammable	Not Listed	Not Listed	Not Listed	Not Listed	10000 lbs. STQ	1.0% Minimum Concentration	Not Listed

OSHA SPECIFICALLY REGULATED SUBSTANCES:

OSHA 29 CFR 1910.1017 (Vinyl chloride); The U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) specifically regulates manufacturing, handling and processing of polyvinyl chloride. Such regulations have been published at 29 CFR 1910.1017. It is necessary that handlers and processors of polyvinyl chloride be familiar with these regulations. This resin may contain low levels of vinyl chloride. If applicable, the workplace should be monitored, and if the level exceeds the PELs or action levels, refer to additional regulatory requirements in 29 CFR 1910.1017.

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):

Not regulated.

Component	EPA RMP Toxic or Flammable TPQ	PSM - Highly Hazardous Substances, Toxics and Reactives	Flash Point
Vinyl Chloride 75-01-4 (< 0.0004)	Flammable (10000 lb threshold quantity)	Not Listed	-78°Copen cup

EPA'S CLEAN WATER AND CLEAN AIR ACTS:

Regulated as noted in table below.

Component	Clean Water Act - Priority Pollutants	CAA - ODS CLASS 1 AND CLASS 2	CAA - Volatile Organic Compounds (VOCs) in SOCMI	CAA - HON Rule - Organic HAPs	CAA - Hazard Air Pollutants	CAA - Urban HAPs List (Integrated Urban Strategy)	SNAP - Substitutes for ODS	EPA RMP Toxic or Flammable TPQ
Vinyl Chloride 75-01-4 (< 0.0004 %)	Present	Not Listed	Present	Present	Present	Present	Not Listed	Flammable (10000 lb threshold quantity)

NATIONAL INVENTORY STATUS

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA):

Component	TSCA Inventory	TSCA ACTIVE LIST	TSCA 12(b)	TSCA/Section 4	TSCA/Section 5	TSCA/Section 6	TSCA/Section 8
Polyvinyl chloride 9002-86-2 (100 %)	Listed	ACTIVE XU	Not Listed	Not listed	Not Listed	Not listed	Not listed
Vinyl Chloride 75-01-4 (< 0.0004 %)	Listed	ACTIVE	Not Listed	Not listed	Not Listed	Not listed	Not listed

Canadian Chemical Inventory: All components of this product are listed on either the DSL or the NDSL.

Component	DSL	NDSL
Polyvinyl chloride 9002-86-2 (100)	Listed	Not Listed
Vinyl Chloride 75-01-4 (< 0.0004)	Listed	Not Listed

STATE REGULATIONS

California Proposition 65:
This product is not listed on the California Governor's current list of Carcinogens, Reproductive Toxicants, and/or Candidate Carcinogens (Proposition 65), but it may contain trace amounts of impurities that are listed. For additional information, contact Occidental Chemical Corporation Customer Service (1-800-752-5151 or 1-972-404-3700).

Component	California Proposition 65 Cancer WARNING:	California Proposition 65 CRT List - Male reproductive toxin:	California Proposition 65 CRT List - Female reproductive toxin:	Massachusetts Right to Know Hazardous Substance List	Rhode Island Right to Know Hazardous Substance List
Polyvinyl chloride 9002-86-2 (100 %)	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Vinyl Chloride 75-01-4 (< 0.0004 %)	Not Listed	Not Listed	Not Listed	Listed	Not Listed

Component	New Jersey Right to Know Hazardous Substance List	New Jersey Special Health Hazards Substance List	New Jersey - Environmental Hazardous Substance List	Pennsylvania Right to Know Hazardous Substance List	Pennsylvania Right to Know Special Hazardous Substances	Pennsylvania Right to Know Special Hazardous Substances	Pennsylvania Right to Know Environmental Hazard List
Polyvinyl chloride	3622	Not Listed	Listed	Not Listed	Not Listed	Not Listed	Not Listed
Vinyl Chloride	2001	carcinogen; flammable - fourth degree; mutagen	Listed	Listed	Present	Present	Present

CANADIAN REGULATIONS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Component	Canada - CEPA - Schedule I - List of Toxic Substances	Canada - NPRI	Canada - CEPA - 2010 Greenhouse Gases (GHG) Subject to Mandatory Reporting	Canadian Chemical Inventory:	NDSL
Polyvinyl chloride 9002-86-2 (100)	Not listed	Not Listed	Not Listed	Listed	Not Listed
Vinyl Chloride 75-01-4 (< 0.0004)	Present (009) Present (065)	Part 1, Group 1 Substance Part 4 Substance	Not Listed	Listed	Not Listed

SECTION 16. OTHER INFORMATION

Prepared by: Occidental Chemical Corporation - HES&S Product Stewardship Department

Rev. Date: 14-Jun-2022

Reason for Revision:
• Removed reference to statement from CFR1910.1017(l)(4) that is no longer relevant in section 2,

• Modified Composition/Information on Ingredients: SEE SECTION 3
• Modified residual VCM concentration values: SEE SECTION 11

IMPORTANT:
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OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees.

End of Safety Data Sheet