Safety Data Sheet
BROWN PVC 570

SDS Revision Date: **01/05/2016**

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity	BROWN PVC 570
Alternate Names	BROWN PVC 570UC

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

Intended use	See Technical Data Sheet.
Application Method	See Technical Data Sheet.

1.3. Manufacturer of this product:

Company Name	Breen Color Concentrates 11 Kari Drive Lambertville, NJ 08530
Emergency	
CHEMTREC (USA)	(800) 424-9300
24 hour Emergency Telephone No.	609-397-8200
Customer Service: Breen Color Concentrates	

2. Hazard identification of the product

2.1. Classification of the substance or mixture

No applicable GHS categories

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.
No applicable GHS categories

[Prevention]:
No GHS prevention statements
[Response]:
No GHS response statements
[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Polyvinyl Chloride **CAS Number: 0009002-86-2**	**25 - 50**	**Skin Irrit. 2;H315** **Eye Dam. 2A;H319** **STOT SE 3;H335**	**[1]**
Pigment Red 101 **CAS Number: 0001309-37-1**	**10 - 25**	**Not Classified**	**[1][2]**
Calcium Carbonate **CAS Number: 0000471-34-1**	**10 - 25**	**Not Classified**	**[1][2]**
Di-octyl Terephthalate **CAS Number: 0006422-86-2**	**10 - 25**	**Not Classified**	**[1]**
Pigment White 6 **CAS Number: 0013463-67-7**	**1.0 - 10**	**Not Classified**	**[1][2]**

[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit.
[3] PBT-substance or vPvB-substance.
*The full texts of the phrases are shown in Section 16.

This product encapsulates hazardous substances noted in section 3 in an insoluble polymer matrix. In its purchased form, either as pellets or powder comprised of raw materials, the product does not present the same hazards as its component raw materials.

4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview No specific symptom data available.
See section 2 for further details.

5. Fire-fighting measures

5.1. Extinguishing media

Extinguish with foam or water spray.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Thermal decomposition is a function of both processing temperature and time at that temperature. Decomposition byproducts include oxides of carbon and nitrogen and hydrogen chloride.

5.3. Advice for fire-fighters

When water is used, it should be applied, if possible, as a spray from a fogging nozzle.

ERG Guide No. ----

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

7. Handling and storage

7.1. Precautions for safe handling

Keep lids on drums. Use proper handling techniques so as not to create airborne dust.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: No data available.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000471-34-1	Calcium Carbonate	OSHA	TWA 10 mg/m3 (total) TWA 5 mg/m3 (resp)
		ACGIH	No Established Limit
		NIOSH	TWA 10 mg/m3 (total) TWA 5 mg/m3 (resp)
		Supplier	No Established Limit
0001309-37-1	Pigment Red 101	OSHA	TWA 15 mg/m3 (total) TWA 5 mg/m3 (resp)
		ACGIH	TWA: 5 mg/m3 (dust or fume)STEL 10 mg/m3 (as fume)
		NIOSH	TWA 5 mg/m3
		Supplier	No Established Limit
0006422-86-2	Di-octyl Terephthalate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0009002-86-2	Polyvinyl Chloride	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0013463-67-7	Pigment White 6	OSHA	TWA 15 mg/m3
		ACGIH	TWA: 10 mg/m32B, Revised 2006,
		NIOSH	Footnote ca
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000471-34-1	Calcium Carbonate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0001309-37-1	Pigment Red 101	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0006422-86-2	Di-octyl Terephthalate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0009002-86-2	Polyvinyl Chloride	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0013463-67-7	Pigment White 6	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Eyes	Protective safety glasses recommended.
Skin	Under normal conditions skin protection should not be needed but it's always a good practice to wear clothing that covers your arms, legs and general body area that may come in contact with any non hazardous chemical.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Solid
Odor	
Odor threshold	Not Measured
pH	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	Not Measured
Flash Point	Not Measured
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	**Lower Explosive Limit:** Not Measured
	Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	Not Measured
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Thermal decomposition is a function of both processing temperature and time at that temperature. Decomposition byproducts include oxides of carbon and nitrogen and hydrogen chloride.

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Polyvinyl Chloride - (9002-86-2)	No data available	No data available	No data available	No data available	No data available
Pigment Red 101 - (1309-37-1)	10,000.00, Rat - Category: NA	No data available	No data available	No data available	No data available
Calcium Carbonate - (471-34-1)	2,000.00, Rat - Category: 4	No data available	No data available	No data available	No data available
Di-octyl Terephthalate - (6422-86-2)	No data available	No data available	No data available	No data available	No data available
Pigment White 6 - (13463-67-7)	10,000.00, Rat - Category: NA	10,000.00, Rabbit - Category: NA	No data available	6.82, Rat - Category: NA	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable

Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Polyvinyl Chloride - (9002-86-2)	Not Available	Not Available	Not Available
Pigment Red 101 - (1309-37-1)	Not Available	Not Available	Not Available
Calcium Carbonate - (471-34-1)	56,000.00, Gambusia affinis	Not Available	Not Available
Di-octyl Terephthalate - (6422-86-2)	Not Available	Not Available	Not Available
Pigment White 6 - (13463-67-7)	1,000.00, Fundulus heteroclitus	5.50, Daphnia magna	5.83 (72 hr), Pseudokirchneriella subcapitata

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

	DOT (Domestic Surface	IMO / IMDG (Ocean	ICAO/IATA

	Transportation)	Transportation)	
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	**DOT Hazard Class:** Not Applicable **DOT Label:** ---	**IMDG:** Not Applicable **Sub Class:** Not Applicable	**Air Class:** Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

14.5. Environmental hazards

IMDG Marine Pollutant: No

14.6. Special precautions for user

No further information

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification Not Regulated

US EPA Tier II Hazards

Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): No
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:
(No Product Ingredients Listed)

EPCRA 302 Extremely Hazardous :
(No Product Ingredients Listed)

EPCRA 313 Toxic Chemicals:
(No Product Ingredients Listed)

Proposition 65 - Carcinogens (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Developmental Toxins (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Female Repro Toxins (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Male Repro Toxins (>0.0%):
(No Product Ingredients Listed)

N.J. RTK Substances (>1%):

Pigment Red 101

Pigment White 6

Penn RTK Substances (>1%):

Pigment Red 101

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section

3 is: H315 Causes skin irritation.

H319 Causes serious eye

irritation. H335 May cause

respiratory irritation.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purposes(s). BREEN COLOR CONCENTRATES

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Document

Hoffman Plastic Compounds, Inc.

ISO 9001:2008 Company

Safety Data Sheet (SDS)

In compliance with 1907 / 2006 / EC, Article 31

1. Product Identification

Product Name: V0-298 R4 NATURAL

Effective Date: JUNE 23, 2015

Product Type: Flexible Polyvinyl Chloride (PVC) Compound

Synonyms: chloroethylene homopolymer compound Chemical

formula: $(C_2H_3Cl)_n$

CAS: N/A (Mixture)

Product Use: Extrusion and compounding, injection molded parts, extruded parts, films, coatings.

Manufacturer / Supplier
Hoffman Plastic Compounds, Inc.
16616 Garfield Ave., Paramount, CA 90723
323.636.3346 – Phone
562.630.8200 - Fax
info@hoffmanplastic.com
www.hoffmanplastic.com

Emergency Contact Information For transportation emergencies
CHEMTREC: (800) 424-9300
All other emergencies: (323) 636-3346

SDS Contact
Roland Hoffman – Vice President of Operations 16616 Garfield Ave., Paramount, CA 90723
(323) 636-3346

2. Hazard(s) Identification

PRECAUTIONARY INFORMATION

Caution: If proper procedures for processing PVC compounds are not followed, processing vapors can be liberated at elevated temperatures. The presence of these vapors may result in exposure. Additionally, the composition of these fumes or vapors may vary widely according to the individual processing procedures and materials used. Processors must determine for themselves the appropriate equipment and procedures for their operation.

POTENTIAL HEALTH EFFECTS

2 **Primary routes of exposure**

2.1. Inhalation of emissions during processing at elevated temperature.

3 **Eye**

3.1. Vapors or fumes emitted during processing at elevated temperatures may cause eye irritation. Dust may cause eye irritation from handling.

4 **Skin Contact**

4.1. Vapors or fumes emitted during processing at elevated temperatures may cause skin irritation. Dust resulting from powder handling may cause skin irritation.

5 **Skin Absorption**

5.1. The compound in pellet form is a dry solid material. Absorption into the skin is unlikely in its initial form.

5.2. Vapors or fumes during processing may absorb through the skin at low levels.

6 **Ingestion**

6.1. Slightly toxic by ingestion. Airborne dust may occur during handling, resulting in incidental ingestion. Vapors or fumes emitted during processing at elevated temperatures may be ingested at low levels. Adequate ventilation should be provided.

7 **Inhalation**

7.1. Airborne dust may occur during handling, which can result in a potential inhalation exposure. Vapors or fumes emitted during processing at elevated temperatures may be inhaled if not adequately ventilated.

HAZARD CLASSIFICATION

3 **Acute Effects**

3.1. Dust associated with the handling of PVC powder as well as vapors or fumes liberated from PVC compound at high temperatures may be irritating to the eyes, skin and respiratory tract if not adequately ventilated.

4 **Chronic Effects**

4.1. Chronic exposure to vapors or fumes from thermally decomposed or decomposing plastics or plastics that are otherwise exposed to elevated temperatures or are processed at elevated temperatures may cause an asthma-like syndrome due to the inhalation of processing vapors or fumes. The onset of irritation may be delayed for several hours. Vapors or fumes may accumulate within the facility during normal operating procedures that involve elevated temperatures. Exposure to these elevated concentrations, if not adequately ventilated, may have significant health effects.

5 **Carcinogenic**

5.1. IARC has determined that there is inadequate evidence of carcinogenicity of a polyvinyl chloride compound in both animals and humans. The overall evaluation of polyvinyl chloride is Group 3, meaning that it is not classifiable as a carcinogen (IARC Vol. 19, 1979). Therefore, polyvinyl chloride is not listed as a carcinogen by OSHA, NIOSH, NTP, IARC or EPA.

3. Composition / Information on Ingredients

Compounded PVC is in inert material in its normal state in either pellets, or granules. All the ingredients and / or components listed below are encapsulated within the PVC matrix:

Component	% Weight	CAS #	Additional Information
Polyvinyl Chloride Polymer	45% - 80%	9002-86-2	
Inert Fillers	0% - 40%	1317-65-3	Limestone
Heat Stabilizers	3% - 10%	Mixture	Organometallic compounds of barium and/or Calcium Zinc
Plasticizers	0% - 60%	Mixture	High molecular weight esters
Colorants	0% - 5%	Mixture	Organic & Inorganic colorants

4. First Aid Measures

5 **Inhalation**

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

6 **Skin Contact**

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

7 **Eye Contact**

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

8 **Ingestion**

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

5. Fire Fighting Measures

Properties	Description
Flashpoint	> 600ºF
Auto-ignition temperature (ASTM D1929)	+850ºF
Flammable limits in air (% by volume)	
Upper:	N/A
Lower:	N/A
Extinguishing Media	Water, Dry Chemical

Special Firefighting Procedures:
Wear NIOSH/MSHA approved self-contained breathing apparatus & full protective clothing in fire conditions.

Unusual Fire Hazards:
Decomposition by burning (generating HCL gas).

6. Accidental Release Measures

6 **Protect People**

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

7 **Protect the Environment**

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

8 **Clean Up**

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

7. Handling and Storage

7 **Advice on Safe Handling**

7.1. Use the proper personal protective equipment during handling. Minimize dust generation and accumulation. Use good housekeeping practices.

8 **Protective measures**

8.1. Use methods to minimize generation of dust. Wash thoroughly after handling. PVC resin and compound processing under extreme temperatures beyond normal processing temperatures may result in the release of hydrogen chloride (HCl). Use only in well-ventilated areas.

9 **Storage**

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

8. Exposure Controls / Personal Protection

All personal protective equipment should be selected in accordance with the hazard assessment required by 29 CFR 1910.132(d).

8 **Respiratory Protection**

8.1. For most conditions, no respiratory protection should be needed. However, if dust is produced during handling, a NIOSH approved air purifying filter respirator that meets the requirements of 29 CFR 1910.134 should be used.

8.2. Full-face self contained breathing apparatus may be needed when dealing with vapors from combustion of product. Respirators must be selected based on the airborne levels found in the workplace and must not exceed the working limits of the respirator.

11 **Eye Protection**

11.1. Use safety glasses. If there is a potential for exposure to particles, which could cause mechanical injury to the eye, wear chemical or dust proof goggles.

12 **Skin Protection**

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

13 **Engineering Controls**

13.1. Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Adequate ventilation should be provided as conditions warrant. Local exhaust ventilation should comply with OSHA regulations and the American Conference of Industrial Hygienists, Industrial Ventilation - A Manual of Recommended Practice.

8. Exposure Controls / Personal Protection (continued)

Exposure Guidelines
No exposure limits have been established for this material. It is recommended that exposure be kept below the limits for particulates not otherwise classified. OSHA-PEL: 15 mg/M3 8 hr-TWA (total dust) 5 mg/M3 8 hr-TWA (respirable) The American Conference of Governmental Industrial Hygienist (ACGIH) has established a Threshold Limit Value (TLV) (based on an 8-HR TWA exposure) of 1 mg/m3 for the respirable fraction. This TLV applies only to the polymerized form of vinyl chloride and not the vinyl chloride monomer.

The following materials **may be** present in this product when processed during extreme temperatures that are beyond normal operating temperatures, but are not anticipated to exceed exposure limits under normal processing conditions:

Component	OSHA - PEL	ACGIH-TLV
Hydrogen Chloride (HCl)	5ppm ceiling	2ppm ceiling
Calcium Carbonate	15mg/m3 8 hr TWA (total dust) 5mg/m3 hr TWA (respirable)	10mg/m3 8hr TWA

Again, these hazardous components may be released during extreme process temperatures. These components are dependent on processing conditions and should be verified by the processor. Under normal processing conditions, no occupational exposures to vinyl chloride monomer exceeding the established exposure limits for this material are anticipated. The OSHA-PEL for vinyl chloride is 1 ppm over an 8-hr TWA. The OSHA-STEL for vinyl chloride is 5 ppm for any 15-minute period.

9. Physical & Chemical Properties

Properties	Description
Appearance	Pellets of varying size, hardness, and color
Odor	No distinct odor
Boiling Point	N/A (solid)
Melting Point	Varies
Solubility	None
Specific Gravity (Water=1.0)	1.15 – 1.70
Vapor Density (Air=1.0)	N/A
Vapor Pressure	N/A
pH	N/A

10. Stability & Reactivity

13 **Stability**

13.1. Stable under normal conditions.

14 **Polymerization**

14.1. Hazardous polymerization does not occur.

15 **Conditions to Avoid**

15.1. Instantaneous temperatures above 235 C(455 F), prolonged heating at processing temperatures, or excessive shear/heat combinations during processing can generate hazardous decomposition products.

16 **Hazardous Decomposition Products**

16.1. 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.

17 **Incompatible Materials**

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

11. Toxicological Information

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

Animal Toxicity:

Oral: Rat, TDLO 210 gm/kg
Inhalation: Mouse, LC50 140 mg/M3/10M
TDLO = Lowest toxic dose in a given species by a given route of exposure. **LC50** = Concentration that is lethal to 50% of a given species by a given route of exposure.

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

health risk.

12. Ecological Information

Environmental Concerns

1. **Aquatic**
   a. No data available.

2. **Biodegradation**
   a. Not subject to biodegradation.

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

13. Disposal Considerations

Waste Management Information

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

14. Transport Information

1. **Proper Shipping Name**
   a. Polyvinyl Chloride

2. **DOT Hazard Class**
   a. Non-hazardous

3. **DOT Shipping I.D. No.**
   a. None

4. **Packing Group (PG)**
   a. None

5. **Labeling**
   a. None

6. **Reportable Quantities (RQ)**
   a. N/A

15. Regulatory Information

Regulatory information is not meant to be all-inclusive. It is the user's responsibility to ensure compliance with federal, state or provincial and local laws.

SARA Title III

Section 302 and 304 of the Act; Extremely Hazardous Substances (40 CFR 355)

Component	CAS No.	TPQ (lbs)	RQ (lbs)
None	N/A	N/A	N/A

Note: TPQ - Threshold Planning Quantity RQ - Reportable Quantity

Specific state and local requirements regarding reportable quantities should be reviewed prior to chemical use, as they may differ from the federal reportable quantity requirement as stated above.

Section 311

Hazard Categorization (40 CFR 370)

Acute	Chronic	Fire	Pressure	Reactive
Not Listed	N/A	N/A	N/A	N/A

Section 313 Toxic Chemicals (40 CFR 372.65)

This product contains the following EPCRA Section 313 chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986:

Component	CAS No.	WT (%)
Not Listed	N/A	N/A

CERCLA

Section 102(a) Hazardous Substances (40 CFR 302.4)

Component	CAS No.	TPQ (lbs)	RQ (lbs)
None	N/A	N/A	N/A

RCRA

This product, as supplied, is not a hazardous waste according to the USEPA's Toxicity Characteristic Leaching Procedure. Any physical or chemical modification of this product may change the TCLP test results.

TSCA

All components are listed on the TSCA inventory or are exempt.

Proposition 65

This product in its normal state does not contain substances known to the State of California to cause cancer and/or reproductive toxicity.

Canadian Regulations

This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33 and the SDS contains all information required by this regulation.

WHMIS Classification- Not a Controlled Product.

15. Regulatory Information (continued)

OSHA 29 CFR 1910.1017
This compound may contain trace levels (<0.001%) of VCM. Under normal working conditions with adequate ventilation, neither the OSHA-PEL of 1 ppm (8-hr TWA), nor the OSHA-STEL (5.0 ppm) should be exceeded. The workplace should be monitored and if the level exceeds any of the PELs or action levels, refer to 29 CFR 1910.1017.

16. Other Information

IMPORTANT

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state, and local laws and regulations.

PREPARED BY: June 1, 2015	Roland Hoffman
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The date and recommendations presented herein are based upon a review of HOFFMAN PLASTIC COMPOUNDS, INC. files, published SDS's, and standard toxicological reference sources. HOFFMAN PLASTIC COMPOUNDS, INC. makes no guarantee or warranty, either expressed or implied as to the accuracy or completeness of these data and recommendations. This information solely relates to the material designated on this SDS, therefore the data contained in this SDS may not be valid towards the combination with any other materials nor within any process.