

SAFETY DATA SHEET

Flowable Bending & Finishing Putty

Section 1. Identification

Product identifier : Flowable Bending & Finishing Putty
Product code : PF 128
Other means of identification : Not available.
Product type : Liquid.

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

Not applicable.

Supplier's details : Pro Form Products Ltd.
604 McGeachie Drive
Milton, Ontario L9T3Y5

Emergency telephone number (with hours of operation) : CHEMTREC 24 Hour Emergency Phone(s):
USA & Canada 800-424-9300
International +1 703 741-5970

Section 2. Hazard identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (inhalation) - Category 4
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 1A
TOXIC TO REPRODUCTION - Category 1B
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: Flammable liquid and vapor.
Causes skin irritation.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation.
May cause cancer.
May damage fertility or the unborn child.
Causes 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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wear protective gloves, protective clothing and eye or face protection.

Section 2. Hazard identification

- Response** : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
- Storage** : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

Ingredient name	Synonyms	% (w/w)	Identifiers	
Vinyl benzene	Benzene, ethenyl-; Ethenylbenzene; Vinylbenzene; Styrol; Styrene monomer; Phenylethylene; Styrene, monomer; Styrene - monomer; Cinnamol; Cinnamene; Styrolene	≥10 - ≤30	CAS: 100-42-5	
titanium dioxide	Titanium oxide; Titanium oxide (TiO ₂); Titanium peroxide; Rutile; C.I. Pigment White 6	≥1 - ≤5	CAS: 13463-67-7	
N-Methyl pyrrolidone	1-methyl-2-pyrrolidone; 2-Pyrrolidinone, 1-methyl-; n-Methylpyrrolidone; NMP; N-Methyl-2-pyrrolidinone; 1-methylpyrrolidin-2-one; dielectric coating, buffering mechanical stress, consisting of a radically photopatternable polyamide-precursor with unsaturated carbon in the side-chains which is convertible into a polyimide, in form of a solution from N-methyl-2-pyrrolidone (CAS RN 872-50-4) or N-ethyl-2-pyrrolidon (CAS RN 2687-91-4) with a polymer content by weight of more than 10 % or more; 1-methyl-2-pyrrolidinone; M-pyrol; Methyl-2-Pyrrolidone, n-; n-methyl-2-pyrrolidine	≥0.1 - ≤1	CAS: 872-50-4	
Quartz	α-quartz, non-respirable; quartz, non-respirable	≥0.1 - ≤1	CAS: 14808-60-7	
N,N-dimethylacetamide	Acetamide, N,N-dimethyl-; Dimethyl acetamide; DMAC; acetic acid dimethylamide; DMA; N,N'-DIMETHYLACETAMIDE; Acetyldimethylamine; N, N-dimethylacetamide; N,N-DIMETHYLPHENYLENEDIAMINE (O,M,P)	≥0.1 - ≤1	CAS: 127-19-5	

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

- | | |
|---------------------|---|
| Eye contact | : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. |
| Inhalation | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Skin contact | : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| Ingestion | : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |

Most important symptoms/effects, acute and delayed

Potential acute health effects

- | | |
|---------------------|---|
| Eye contact | : Causes serious eye irritation. |
| Inhalation | : Harmful if inhaled. May cause respiratory irritation. |
| Skin contact | : Causes skin irritation. |
| Ingestion | : No known significant effects or critical hazards. |

Over-exposure signs/symptoms

- | | |
|---------------------|---|
| Eye contact | : Adverse symptoms may include the following:
pain or irritation
watering
redness |
| Inhalation | : Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations |
| Skin contact | : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations |

Section 4. First-aid measures

- Ingestion** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 metal oxide/oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Vinyl benzene	CA Saskatchewan Provincial (Canada, 4/2021) STEL 15 minutes: 40 ppm. TWA 8 hours: 20 ppm. CA British Columbia Provincial (Canada, 8/2025) Carc 2A. TWA 8 hours: 10 ppm. STEL 15 minutes: 20 ppm. CA Ontario Provincial (Canada, 6/2019) TWA 8 hours: 35 ppm. STEL 15 minutes: 100 ppm.

Section 8. Exposure controls/personal protection

titanium dioxide

CA Quebec Provincial (Canada, 2/2024)TWA_{EV} 8 hours: 50 ppm.

STEV 15 minutes: 75 ppm.

CA Alberta Provincial (Canada, 3/2023)

OEL 15 minutes: 40 ppm.

OEL 15 minutes: 170 mg/m³.OEL 8 hours: 85 mg/m³.

OEL 8 hours: 20 ppm.

CA Saskatchewan Provincial (Canada, 4/2021)STEL 15 minutes: 20 mg/m³.TWA 8 hours: 10 mg/m³.**CA British Columbia Provincial (Canada, 8/2025) Carc 2B.**

TWA 8 hours: 10 mg/m³. Notes: The 8-hour TWA listed in the Table is for the total dust. The substance also has an 8-hour TWA of 3 mg/m³ for the respirable fraction.

CA Ontario Provincial (Canada, 6/2019)TWA 8 hours: 10 mg/m³.**CA Quebec Provincial (Canada, 2/2024)**TWA_{EV} 8 hours: 10 mg/m³. Form: total particulate matter.**CA Alberta Provincial (Canada, 3/2023)**OEL 8 hours: 10 mg/m³.**CA Ontario Provincial (Canada, 6/2019)**TWA 8 hours: 400 mg/m³.**CA Quebec Provincial (Canada, 2/2024)****[Silica Crystalline - Tripoli]**TWA_{EV} 8 hours: 0.1 mg/m³. Form: respirable aerosol fraction.**CA Quebec Provincial (Canada, 2/2024)****[Silica Crystalline -Quartz] C2.**TWA_{EV} 8 hours: 0.1 mg/m³. Form: respirable aerosol fraction.**CA Saskatchewan Provincial (Canada, 4/2021) Absorbed through skin.**

STEL 15 minutes: 15 ppm.

TWA 8 hours: 10 ppm.

CA British Columbia Provincial (Canada, 8/2025) Carc 2B, Repr. Absorbed through skin.

TWA 8 hours: 10 ppm.

CA Ontario Provincial (Canada, 6/2019)

Absorbed through skin.

TWA 8 hours: 10 ppm.

CA Quebec Provincial (Canada, 2/2024)

C3. Absorbed through skin.

TWA_{EV} 8 hours: 10 ppm.**CA Alberta Provincial (Canada, 3/2023)**

Absorbed through skin.

OEL 8 hours: 10 ppm.

OEL 8 hours: 36 mg/m³.

N-Methyl pyrrolidone

Quartz

N,N-dimethylacetamide

Biological exposure indices

No exposure indices known.

Section 8. Exposure controls/personal protection

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
<u>Individual protection measures</u>	
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
<u>Skin protection</u>	
Hand protection	: 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. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Liquid.
Color	: Yellow.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not applicable.
Melting point/freezing point	: Technically not possible to measure
Boiling point or initial boiling point and boiling range	: 145 to 145°C (293 to 293°F)
Flash point	: Closed cup: 32°C (89.6°F) [Product does not sustain combustion.]

Section 9. Physical and chemical properties

Evaporation rate	: Not available.
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Lower: 0.9% Upper: 6.1%
Vapor pressure	: 0.2 kPa (1.49 mm Hg)
Relative vapor density	: Not available.
Relative density	: Not available.
Density	: 0.978 g/cm ³
Solubility in water	: Not available.
Miscible with water	: No.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: 490°C (914°F)
Decomposition temperature	: Not applicable.
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.

Particle characteristics

Median particle size	: Not applicable.
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Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name

Vinyl benzene

Result

Rat - Oral - LD50

2650 mg/kg

Toxic effects: Behavioral - Somnolence (general depressed activity) Liver - Other changes

Rat - Inhalation - LC50 Vapor

11800 mg/m³ [4 hours]

Rat - Inhalation - LC50 Gas.

2770 ppm [4 hours]

Rat - Oral - LD50

3914 mg/kg

Rabbit - Dermal - LD50

N-Methyl pyrrolidone

Section 11. Toxicological information

Quartz

8 g/kg

Rat - Inhalation - LC50 Dusts and mists

12.6 mg/l [4 hours]

N,N-dimethylacetamide

Rat - Oral - LD50

4300 mg/kg

Rabbit - Dermal - LD50

2240 mg/kg

Toxic effects: Skin After topical exposure - Primary irritation**Rat - Inhalation - LC50 Gas.**

2475 ppm [1 hours]

Toxic effects: Gross Metabolite Changes - Weight loss or decreased weight gain

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Product/ingredient name

Result

Vinyl benzene

Rabbit - Skin - Mild irritantAmount/concentration applied: 500 mg**Rabbit - Skin - Moderate irritant**Amount/concentration applied: 100 %

N,N-dimethylacetamide

Rabbit - Skin - Mild irritantDuration of treatment/exposure: 24 hoursAmount/concentration applied: 10 mg

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name

Result

Vinyl benzene

Human - Eyes - Mild irritantAmount/concentration applied: 50 ppm**Rabbit - Eyes - Moderate irritant**Duration of treatment/exposure: 24 hoursAmount/concentration applied: 100 mg**Rabbit - Eyes - Severe irritant**Amount/concentration applied: 100 mg

N-Methyl pyrrolidone

Rabbit - Eyes - Moderate irritantAmount/concentration applied: 100 mg

N,N-dimethylacetamide

Rabbit - Eyes - Mild irritantAmount/concentration applied: 100 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Section 11. Toxicological information

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Classification

Product/ingredient name	IARC	NTP	ACGIH
Vinyl benzene	2A	Reasonably anticipated to be a human carcinogen.	A3
titanium dioxide	2B	-	A3
Quartz	1	Known to be a human carcinogen.	-
N,N-dimethylacetamide	2B	-	A3

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

Vinyl benzene

N-Methyl pyrrolidone

Result

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Specific target organ toxicity (repeated exposure)

Product/ingredient name

Vinyl benzene

Quartz

Result

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

Aspiration hazard

Product/ingredient name

Vinyl benzene

Result

ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Section 11. Toxicological information

- Inhalation** : Harmful if inhaled. May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- Conclusion/Summary [Product]** : Not available.

- General** : Causes damage to organs through prolonged or repeated exposure.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
REVOLUTION FLOW PUTTY	11435.8	N/A	11953.7	50.9	N/A
Vinyl benzene	2650	N/A	2770	11.8	N/A
N-Methyl pyrrolidone	3914	8000	N/A	N/A	N/A
Quartz	N/A	N/A	N/A	N/A	12.6
N,N-dimethylacetamide	4300	1100	1237.5	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name

Vinyl benzene

Result

Acute - LC50 - Fresh water

US EPA

Daphnia - Water flea - *Daphnia magna*

Age: ≤24 hours

23 mg/l [48 hours]

Effect: Mortality

Acute - EC50 - Fresh water

Algae - Green algae - *Raphidocelis subcapitata*

33 mg/l [96 hours]

Effect: Population

titanium dioxide

Acute - LC50 - Fresh water

Fish - Fathead minnow - *Pimephales promelas*

Age: 1 to 14 days

>1000 mg/l [96 hours]

Effect: Mortality

N-Methyl pyrrolidone

Acute - LC50 - Fresh water

US EPA

Fish - Bluegill - *Lepomis macrochirus*

Weight: 1.2 g

832 ppm [96 hours]

Effect: Mortality

Conclusion/Summary [Product]

: Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product]

: Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Vinyl benzene	2.96	13.49	Low
N-Methyl pyrrolidone	-0.46	-	Low
N,N-dimethylacetamide	-0.77	-	Low

Mobility in soil

Section 12. Ecological information

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	TDG Classification	DOT Classification	IMDG	IATA
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
Transport hazard class(es)	3 	3 	3 	3 
Packing group	III	III	III	III
Environmental hazards	No.	No.	No.	No.

Additional information

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).

DOT Classification : **Reportable quantity** 4315.4 lbs / 1959.2 kg [529.21 gal / 2003.3 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

Canadian lists

- Canadian NPRI** : The following components are listed: styrene
CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

- Canada** : Not determined.
United States : All components are listed or exempted.

Section 16. Other information

History

- Date of printing** : 8/20/2026
Date of issue/Date of revision : 8/20/2026
Date of previous issue : No previous validation
Version : 1
Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 HPR = Hazardous Products Regulations
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 N/A = Not available
 SGG = Segregation Group
 UN = United Nations

📌 Indicates information that has changed from previously issued version.

Notice to reader

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