



Safety Data Sheet

SECTION 1: Product and Company Identification

1.1. Product identifier

Product Number Cryobond 837 Part A
Product Name Cryogenic Coating
Product Class Solvent Coating

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

1.2.1. Relevant identified uses

Use of the substance/preparation Cryogenic Coating

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

VALPAC, INC.
1400 Industrial Park Road
Federalsburg, MD 21632
1-410-754-7390

1.4. Emergency telephone number

Emergency number 1-800-535-5053 (INFOTRAC)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

| <u>Hazard Class</u> | <u>Category</u> | <u>Hazard Statement</u> |
|---|-----------------|-------------------------|
| Flammable Liquid | 2 | H225 |
| Skin Irritation | 2 | H315 |
| Eye Irritation | 2 | H319 |
| Reproductive Toxicity | 2 | HE361d |
| Specific Target Organ Toxin – Single Exposure | 3 | H336 |
| Specific Target Organ Toxin – Repeat Exposure | 2 | HE373 |
| Aspiration Toxicity | 1 | H304 |

If applicable, full text of H-phrases appear in "Label elements" below

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

GHS Labeling Elements

This mixture is classified as hazardous according to OSHA-2012 (GHS) classification criteria.

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Hazard pictograms



GHS08 GHS02 GHS07

Signal word

DANGER

Hazard statements

H225 – Highly flammable liquid and vapor
H315 – Causes skin irritation
H319 – Causes serious eye irritation
H361d – Suspected of damaging the unborn child
H336 – May cause drowsiness or dizziness
H373 – May cause damage to central nervous system through prolonged or repeated exposure
H304 – May be fatal if swallowed and enters airways

Precautionary statements
(prevention)

P210 – Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P240 – Ground/bond container and receiving equipment
P280 – Wear protective gloves/protective clothing/eye/face protection
P264 – Wash thoroughly after handling
P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P260 – Do not breathe fumes, mists or vapors.
P271 – Use only outdoors or in a well-ventilated area

Response statements (response)

P370+P378 – In case of fire: Use chemical foam, carbon dioxide (CO₂), water fog or dry chemical
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.
P332+P313 – If skin irritation occurs: Get medical advice/attention.
P362 – Take off contaminated clothing and wash before reuse.
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 – If eye irritation persists: Get medical advice/attention.
P308+P313 – IF exposed or concerned: Get medical advice/attention.
P304+P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 – Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 – Do NOT induce vomiting.

Response statements (storage and disposal)

P403+P235 – Store in a well-ventilated place. Keep cool.
P405 – Store locked up.
P501 – Dispose of contents/container in accordance with federal, state and local regulations.

2.3. Other hazards/labeling information

No additional information available.

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SECTION 3: Composition/information on ingredients

Hazardous Ingredients

| Name | CAS # | %/wt. |
|-------------------------------|------------|-------|
| Aromatic petroleum distillate | 64742-95-6 | 15-20 |
| Toluene | 108-88-3 | 10-15 |

SECTION 4: First aid measures

4.1. Description of first aid measures

IF INHALED

Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

IF ON SKIN OR CLOTHING

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. IF irritation develops or persists, call a poison control center or doctor for treatment advice.

IF IN EYES

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call poison control center or doctor for treatment advice if irritation develops or persists.

IF SWALLOWED

Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. 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.

First-aid measures – general

No action shall be taken involving any personal risk or without suitable training. 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

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

May cause eye and skin irritation (redness of skin and eyes, tearing).

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Chemical foam, carbon dioxide (CO₂), water fog or dry chemical
Unsuitable extinguishing media High volume water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard During a fire, toxic and irritating gases may be generated, including carbon dioxide, and carbon monoxide.
Explosion hazard Product is not explosive.
Reactivity The product is stable at normal handling- and storage conditions.

5.3. Advice for firefighters

Firefighting instructions To fight large fires, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full-face piece operated in the positive pressure/demand mode. Full firefighting turnout gear (bunker gear): Any air respirator supplied with full face piece and operated in a pressure-demand or other positive pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full face piece.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

6.1.1. For non-emergency personnel

Protective equipment Wear appropriate personal protective equipment (PPE).
Emergency procedures Avoid contact with spilled material

6.1.2. For emergency responders

Protective equipment Wear appropriate personal protective equipment (PPE).

6.2. Environmental precautions

Prevent material from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if without risk. Move containers from spill area. 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. 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 (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same

hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Put on appropriate personal protective equipment (see section 8). 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. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Store in original container. Store in a cool, dry place. Keep separated from incompatible substances. Store in a cool and well-ventilated room. 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. Keep out of the reach of children.

SECTION 8: Exposure controls/personal protection

8.1. Personal protective equipment

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirators. Respiratory protection programs must comply with 29 CFR § 1910.134.

General Hygiene Considerations: 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.

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8.2. Exposure controls

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.

The level of respiratory protection needed should be based on the evaluation of chemical exposures by a health or safety professional. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge and particulate filter or supplied air respirator.

Occupational Exposure Limits for individual ingredients (if available) are listed below.

| Name | CAS # | OSHA (PEL-TWA) | OSHA (PEL-STEL) | ACGIH (TLV-TWA) | ACGIH (TLV-STEL) |
|---------|----------|----------------|-------------------|-----------------|------------------|
| Toluene | 108-88-3 | 200 ppm | 300 ppm - ceiling | 20 ppm | Not established |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--------------------------------|
| Physical state | Liquid |
| Color | Black |
| Odor | Sweet odor |
| Odor threshold | No data available |
| pH | No data available |
| Relative evaporation rate (butyl acetate=1) | 2.2 |
| Melting point | Not applicable |
| Freezing point | No data available |
| Boiling point | Approximately 230 °F (initial) |
| Flash point | 45 °F (7 °C) |
| Self-ignition temperature | 792 °F |
| Decomposition temperature | No data available |
| Flammability (solid, gas) | Not applicable |
| Vapor pressure | Approximately 22 mmHg @ 25 °C |
| Relative vapor density at 20 °C | Approximately 3 (Air = 1) |
| Relative density | 1.15 at 25 °C |
| Solubility | Insoluble |
| Log Pow | No data available |
| Log Kow | No data available |
| Viscosity, kinematic | No data available |
| Viscosity, dynamic | No data available |
| Explosive properties | Non explosive |

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| | |
|----------------------|--------------------|
| Oxidizing properties | None |
| Explosive limits | LEL = 1%, UEL = 9% |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling and storage conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known. Polymerization will not occur.

10.4. Conditions to avoid

Excessive heat, sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Thermal decomposition can produce carbon dioxide & carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Not acutely toxic.

| Acute toxicity estimates | |
|----------------------------|-------------|
| LD50 oral rat | >2000 mg/kg |
| LD50 dermal rabbit | >5000 mg/kg |
| LC50 inhalation rat (mg/l) | >100 mg/L |

| | |
|--|--|
| Skin corrosion/irritation | Causes skin irritation. |
| Serious eye damage/irritation | Causes severe eye irritation. |
| Respiratory or skin sensitization | Not a sensitizer |
| Germ cell mutagenicity | Not classified as a mutagen |
| Carcinogenicity | Not classified as a carcinogen by IARC, NTP, OSHA or IARC. |
| Reproductive toxicity | Suspected of damaging the unborn child |
| Specific target organ toxicity (single exposure) | May cause drowsiness or dizziness |
| Specific target organ toxicity (repeated exposure) | May cause damage to the central nervous system through prolonged or repeated exposure. |
| Aspiration hazard | May be fatal if swallowed and enters airways |

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SECTION 12: Ecological information

12.1. Toxicity

EC50: No data available. Not expected to be toxic to aquatic organisms.

12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential

None expected to bioaccumulate.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14: Transport information

Ground transport – US DOT

UN1133; Adhesives; 3; II

Ground transport – TDG (Canada)

UN1133; Adhesives; 3; II

Transport by sea (IMDG)

UN1133; Adhesives; 3; II ; (7 °C c.c.)

Air transport (IATA)

UN1133; Adhesives; 3; II

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Additional Air, Sea and International Transportation Information

| | |
|--|--------------------------|
| UN-No. | 1133 |
| Proper Shipping Name | Adhesives |
| Transport document description | UN1133; Adhesives; 3; II |
| Flash Point, method (for IMDG documentation) | 7 °C c.c. |
| Class (UN) | 3 |
| Hazard labels (UN) | 3 |



| | |
|-------------------------------|--|
| Packing group (UN) | II |
| Marine Pollutant (Y/N) | No |
| Dangerous for the environment | Not applicable (no additional markings required) |

Note – Consult regulations for specific state, regional and carrier variations.

SECTION 15: Regulatory information

TSCA Inventory:

All components in these products are listed on the TSCA Inventory or are exempt from listing thereunder. If you need more information on the inventory status of this material, contact Valpac at 1-410-754-7390

SARA 313 Regulated Chemical(s): Not applicable

Title III hazard classification:

Acute Health Hazard: Yes
Chronic Health Hazard: Yes
Fire: Yes
Reactivity/Physical hazard: No
Pressure: No

EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Toluene

CERCLA/DOT Reportable Quantities (RQ)

Toluene – 1000 LBS

California Proposition 65

Warning: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

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Canadian Regulatory Information:

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. WHMIS Classification: B2 – Flammable liquid, D2B – Toxic



Additional Regulatory Information:

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA, we recommend you contact us at 1-410-754-7390 to request an export review.

SECTION 16: Other information

NFPA: Health: 2; Flammability: 3; Reactivity: 0; Specific:
HMIS: Health: 2*; Flammability: 3; Physical Hazard: 0; PPE: G

MSDS US

Prepared By: Valpac, Inc.

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