

Section 1 Identification

Product identifiers

Product name: Freeman 1060 Part A (Resin)

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

Identified uses: Component of a polyurethane system

Details of the supplier of the safety data sheet

Freeman Manufacturing and Supply Company
1101 Moore Road, Avon, OH 44011
Telephone (440) 934-1902

HMIS	
H	2
F	1
R	0
PPE	
Sec. 8	

24 Hour emergency telephone number: CHEMTREC (800) 424-9300

Section 2 Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

Acute Toxicity, Inhalation, Category 4
Respiratory Sensitization, Category 1
Skin Sensitization, Category 1
Skin Irritation, Category 2
Eye Irritation, Category 2A

GHS Label elements, including precautionary statements



Signal word

Danger

Hazard Statements

Causes serious eye irritation.
Harmful if inhaled.
May cause allergy, asthma symptoms, or breathing difficulties if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.

Precautionary Statements

Prevention

Keep container tightly closed when not in use.
Wear protective gloves/eye protection/face protection.
Avoid breathing mist, vapors or spray.
Do not eat, drink or smoke when using this product.
Wash skin and face thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
In case of inadequate ventilation wear respiratory protection.

Section 2 Hazards Identification continued

Response

If on skin: Wash with plenty of soap and water.
 If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
 If experiencing respiratory symptoms: Get medical advice/attention.
 If in eyes: Rinse continuously with water for at least 15 minutes.
 Remove contact lenses, if present and easy to do.
 If eye irritation persists: Get medical advice/attention.
 If skin irritation or rash occurs: Get medical advice/attention.
 Take off contaminated clothing and wash before reuse.

Storage

Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents and container to an appropriate waste site in accordance with local and national regulations.

Hazards not otherwise classified (HNOC) or not covered by GHS

None known

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Concentration (%)
4,4'Methylenedicyclohexyl diisocyanate	5124-30-1	10-20
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	1-2.5

Section 4 First Aid Measures

Description of first aid measures

If inhaled

Move person into fresh air. If symptoms persist call a physician. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water. Take off contaminated clothing and shoes immediately. Get medical attention if symptoms occur.

In case of eye contact

Flush eyes with water for at least 15 minutes. Get medical attention if symptoms occur.

If swallowed

Clean mouth with water and drink plenty of water after. Do not give milk or alcoholic beverages. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

Most important symptoms and effects, both acute and delayed

Eye contact: Causes eye irritation.

Inhalation: Harmful if inhaled. May cause respiratory irritation.

Skin contact: Causes skin irritation. May cause sensitization by skin contact.

Ingestion: No data available.

Notes to physician: Symptomatic treatment and supportive therapy as indicated.

Section 5 Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture

Nature of decomposition products not known.

Hazardous thermal decomposition products

Carbon dioxide, carbon monoxide, nitrogen oxides, hydrogen cyanide

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas.
For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Dike and contain spill. Wipe up with absorbent material. Keep in suitable, closed containers for disposal.

Section 7 Handling and Storage

Precautions for safe handling

Do not breathe fumes or vapor. Do not allow material to contact skin.
Provide appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Store at ambient temperatures in closed containers. Do not heat this material above the flash point. Avoid strong acids, strong bases, and strong oxidizing agents.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

Ingredient	OSHA		ACGIH	
	PEL	STEL	TWA	STEL
4,4'Methylenedicyclohexyl Diisocyanate	0.01 ppm	None established	.005 ppm	None established
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate	0.005 ppm	0.02 ppm	.005 ppm	None established

Exposure controls

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits. An eye wash station and safety shower should be located near the workstation.

Section 8 Exposure Controls/Personal Protection continued

Personal protective equipment

Eye/face protection

Use safety glasses equipped with side shields.

Skin protection

Hand protection

Use butyl-rubber, nitrile rubber, or other solvent-resistant gloves. Contaminated gloves should be replaced.

Body protection

Prevent skin contact when handling material.

Respiratory protection

The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.

Safety stations

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General hygienic practices

Avoid breathing vapor or mist. Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling, and before eating, drinking or smoking. Remove contaminated clothing promptly and clean thoroughly before reuse.

Section 9 Physical and Chemical Properties

Appearance	Amber liquid
Odor	Slight
Odor threshold	No data available
pH	No data available
Boiling point	>200°C (>392°F)
Flash point (Pensky-Martens)	>150°C (>300°F)
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability	No data available
Vapor Pressure	No data available
Vapor density	No data available
Relative density (g/cc)	1.05
Water Solubility	Reacts violently with water
Coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	>200°C (>392°F)
Viscosity	No data available

Section 10 Stability and Reactivity

Reactivity

Stable under recommended storage conditions.

Chemical stability

No decomposition if stored and applied as directed.

Section 10 Stability and Reactivity continued

Possibility of hazardous reactions

Avoid contact with moisture or other materials that react with isocyanates.
 Polymerization may occur at temperatures above 350°F.

Conditions to avoid

Heat and open flames.

Incompatible materials

Water, alcohols, amines, bases, and acids.

Hazardous decomposition products

Thermal oxidative decomposition can produce carbon oxides, and nitrogen oxides.

Section 11 Toxicological Information

Information on toxicological effects

Acute Oral toxicity	>5,000 mg/kg (Calculated)
Acute Inhalation toxicity	1.1 mg/l, 4 hours, dust/mist (Calculated)
Acute Dermal toxicity	No data available
Skin corrosion/irritation	Irritant
Serious eye damage/eye irritation	Irritant
Respiratory or skin sensitization	Skin sensitizer and respiratory sensitizer
Germ cell mutagenicity	No data available
Carcinogenicity	

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed carcinogen.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.

Reproductive toxicity	Not expected to be a hazard
Specific target organ toxicity - single exposure	May cause respiratory irritation
Specific target organ toxicity - repeated exposure	No data available

Section 12 Ecological Information

Toxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT & vPvB assessment	No data available

Section 13 Disposal Considerations

Contact a licensed disposal company for detailed recommendations.
Follow applicable Federal, State, and local regulations.

Section 14 Transport Information

DOT: Not Regulated
IMDG: Not Regulated
IATA: Not Regulated

Section 15 Regulatory Information

US Federal Regulations

SARA 311/312 Codes: Acute toxicity, Skin corrosion or irritation,
Serious eye damage or irritation, Respiratory or skin sensitization
SARA 313 Toxic Chemical (40 CFR 372.65):
4,4'Methylenedicyclohexyl Diisocyanate (5124-30-1)
3-Isocyanatomethyl-3,5,5-Trimethylcyclohexyl Isocyanate (4098-71-9)
TSCA Inventory Status: All ingredients listed on TSCA inventory requirements.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

State Regulations

California Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Section 16 Other Information

Disclaimer

The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict of liability arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

Date of last issue: 06/20/2018
Revision date: 02/15/2019

Freeman 1060 Part B (Black Hardener)

Section 1 Identification

Product identifiers

Product name: Freeman 1060 Part B (Black Hardener)

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

Identified uses: Component of a polyurethane system

Details of the supplier of the safety data sheet

Freeman Manufacturing and Supply Company
 1101 Moore Road, Avon, OH 44011
 Telephone (440) 934-1902

HMIS	
H	3
F	1
R	0
PPE	
Sec. 8	

24 Hour emergency telephone number: CHEMTREC (800) 424-9300

Section 2 Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

- Acute Toxicity, Oral, Category 4
- Acute Toxicity, Inhalation, Category 4
- Skin Sensitization, Category 1
- Germ Cell Mutagenicity, Category 2
- Carcinogenicity, Category 2
- Reproductive Toxicity, Category 1B
- Specific Target Organ Toxicity, Single Exposure, Oral, Category 2 (Liver)
- Specific Target Organ Toxicity, Repeated Exposure, Oral, Category 1 (Liver)
- Specific Target Organ Toxicity, Repeated Exposure, Oral, Category 2 (Kidney)
- Acute Aquatic Hazard, Category 1
- Chronic Aquatic Hazard, Category 1

GHS Label elements, including precautionary statements



Signal word

Danger

Hazard Statements

- Harmful if swallowed.
- May cause an allergic skin reaction.
- Suspected of causing genetic defects.
- Suspected of causing cancer.
- May damage fertility or the unborn child.
- May cause damage to organs (Liver) if swallowed.
- Causes damage to organs (Liver) through prolonged or repeated exposure if swallowed.
- May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.
- Very toxic to aquatic life with long lasting effects.

Freeman 1060 Part B (Black Hardener)

Section 2 Hazards Identification continued

Precautionary Statements

Prevention

- Use personal protective equipment as required.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Avoid release to the environment.
- Do not breathe vapor. Do not eat, drink or smoke when using this product.
- Use only outdoors or in well-ventilated area.
- Wash hands thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.

Response

- Get medical attention if you feel unwell.
- IF exposed or if you feel unwell: Call a POISON CENTER or physician.
- IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.
- IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.
- If skin irritation or rash occurs: Get medical attention.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Wash contaminated clothing before reuse.
- Collect spillage.

Storage

- Store in a well-ventilated place. Keep cool.

Disposal

- Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified (HNOC) or not covered by GHS

None known

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Concentration (%)
Dibutyl phthalate	84-74-2	50 - 70
4,4'-methylenebis(2-ethylaniline)	19900-65-3	30 - 50

Section 4 First Aid Measures

Description of first aid measures

If inhaled

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Get medical attention if symptoms occur.

In case of skin contact

- Wash with plenty of soap and water. Remove contaminated clothing and shoes. If skin irritation persists, call a physician.

In case of eye contact

- Flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, call a physician.

Freeman 1060 Part B (Black Hardener)

Section 4 First Aid Measures continued

If swallowed

Induce vomiting immediately and call a physician. Keep respiratory tract clear. Never give anything by mouth to an unconscious person. Take victim immediately to the hospital.

Most important symptoms and effects, both acute and delayed

Eye contact: No known significant effects or critical hazards.

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact: May cause an allergic skin reaction.

Ingestion: Harmful if swallowed.

Notes to physician: Treat symptomatically.

Section 5 Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture

Do not allow run-off from firefighting to enter drains or water courses.

Hazardous thermal decomposition products

Carbon dioxide, carbon monoxide, nitrogen oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Collect contaminated fire extinguishing water separately. Do not discharge into drains. Dispose of in accordance with local regulations.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas.

For personal protection see section 8.

Environmental precautions

Do not let product enter drains. If product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up

Dike and contain spill. Soak up with inert absorbent material (e.g. sand, silica gel, sawdust).

Keep in suitable, closed containers for disposal.

Section 7 Handling and Storage

Precautions for safe handling

Do not breathe fumes or vapor. Do not allow material to contact skin. See section 8 for personal protective equipment. Provide appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Store at ambient temperatures in closed containers. Recommended storage temperature: 2-40°C (35-104°F). No known incompatible materials.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

Ingredient	OSHA		ACGIH	
	PEL	STEL	TWA	STEL
Dibutyl phthalate	5 mg/m ³	None established	5 mg/m ³	None established

Exposure controls

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment

Eye/face protection

Use safety goggles.

Skin protection

Hand protection

Use impervious gloves. Discuss suitability with manufacturer of gloves. Contaminated gloves should be replaced.

Body protection

Prevent skin contact when handling material. Wear impervious clothing.

Respiratory protection

The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.

Safety stations

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General hygienic practices

Avoid breathing vapor or mist. Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling, and before eating, drinking or smoking. Remove contaminated clothing promptly and clean thoroughly before reuse.

Section 9 Physical and Chemical Properties

Appearance	Black liquid
Odor	Mild
Odor Threshold	No data available
pH	No data available
VOC	0.058% (w/w)
Freezing point	No data available
Boiling point	No data available
Flash point (Pensky-Martens)	>182°C (>359°F)
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability	No data available
Vapor pressure	No data available

Section 9 Physical and Chemical Properties continued

Vapor density	No data available
Relative density (g/cc)	1.06
Water solubility	Slightly soluble
Coefficient: n-octanol/ water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

Section 10 Stability and Reactivity

Reactivity

Stable under recommended storage conditions.

Chemical stability

No decomposition if stored and applied as directed.

Possibility of hazardous reactions

None known.

Conditions to avoid

None known.

Incompatible materials

None known.

Hazardous decomposition products

Thermal oxidative decomposition can produce carbon oxides, and nitrogen oxides.

Section 11 Toxicological Information

Information on toxicological effects

Acute oral toxicity	891.69 mg/kg (calculated)
Acute inhalation toxicity	2.68 mg/l, 4 h (calculated)
Acute dermal toxicity	4,127 mg/kg (calculated)
Skin corrosion/irritation	Non-irritating to the skin.
Serious eye damage/eye irritation	Non-irritating to the eyes.
Respiratory or skin sensitization	May cause skin sensitization
Germ cell mutagenicity	Genotoxic (4,4'-methylenebis(2-ethylaniline))
Carcinogenicity	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
Reproductive toxicity	Dibutyl Phthalate has tested positive for both reproductive toxicity and causing birth defects (animal data only)
STOT - single exposure	(Specific Target Organ Toxicity) Liver
STOT - repeated exposure	(Specific Target Organ Toxicity) Liver and Kidneys
Aspiration toxicity	No data available

Freeman 1060 Part B (Black Hardener)

Section 12 Ecological Information

Toxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT & vPvB assessment	No data available

Section 13 Disposal Considerations

Contact a licensed disposal company for detailed recommendations.
Follow applicable Federal, State, and local regulations.

Section 14 Transport Information

DOT: Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Diethyl Methylene Dianiline, Dibutyl Phthalate,)
Hazard Class: 9
ID No.: UN 3082
Packing Group: III
Label: Marine Pollutant
Remarks: Above applies only to containers over 119 gallons or 450 liters. Not regulated if shipped in packages less than or equal to 119 gallons (450 liters).

IATA: Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Diethyl Methylene Dianiline, Dibutyl Phthalate,)
Hazard Class: 9
ID No.: UN 3082
Packing Group: III
Label: Marine Pollutant
Packing instruction: 964

IMDG: Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Diethyl Methylene Dianiline, Dibutyl Phthalate,)
Hazard Class: 9
ID No.: UN 3082
Packing Group: III
Label: Marine Pollutant

Note: Under 49 CFR 171.4 (c) NONBULK shipments of marine pollutants are not regulated for transport by motor vehicles, rail cars or aircraft. NONBULK shipments of marine pollutants are regulated when transported by vessel (ship).

Section 15 Regulatory Information

US Federal Regulations

SARA 311/312 Codes: Acute toxicity, Respiratory or skin sensitization,
Germ cell mutagenicity, Carcinogenicity, Reproductive toxicity,
Specific target organ toxicity (single or repeated exposure)

Freeman 1060 Part B (Black Hardener)

Section 15 Regulatory Information continued

SARA 313 Toxic Chemical (40 CFR 372.65): Dibutyl phthalate (84-74-2)
TSCA Inventory Status: All ingredients listed on TSCA inventory requirements.
Clean Air Act: The following chemical is listed as HAP under the U.S. Clean Air Act Section 112 (40 CFR 61): Dibutyl phthalate

State Regulations

California Proposition 65: ⚠ WARNING: This product can expose you to chemicals including dibutyl phthalate, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Section 16 Other Information

Disclaimer

The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict of liability arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

Date of last issue: 06/20/2018

Revision date: 02/15/2019

Freeman 1060 Part B (Red Hardener)

Section 1 Identification

Product identifiers

Product name: Freeman 1060 Part B (Red Hardener)

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

Identified uses: Component of a polyurethane system

Details of the supplier of the safety data sheet

Freeman Manufacturing and Supply Company
 1101 Moore Road, Avon, OH 44011
 Telephone (440) 934-1902

HMIS	
H	3
F	1
R	0
PPE	
Sec. 8	

24 Hour emergency telephone number: CHEMTREC (800) 424-9300

Section 2 Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

- Acute Toxicity, Oral, Category 4
- Acute Toxicity, Inhalation, Category 4
- Skin Sensitization, Category 1
- Germ Cell Mutagenicity, Category 2
- Carcinogenicity, Category 2
- Reproductive Toxicity, Category 1B
- Specific Target Organ Toxicity, Single Exposure, Oral, Category 2 (Liver)
- Specific Target Organ Toxicity, Repeated Exposure, Oral, Category 1 (Liver)
- Specific Target Organ Toxicity, Repeated Exposure, Oral, Category 2 (Kidney)
- Acute Aquatic Hazard, Category 1
- Chronic Aquatic Hazard, Category 1

GHS Label elements, including precautionary statements



Signal word

Danger

Hazard Statements

- Harmful if swallowed.
- May cause an allergic skin reaction.
- Suspected of causing genetic defects.
- Suspected of causing cancer.
- May damage fertility or the unborn child.
- May cause damage to organs (Liver) if swallowed.
- Causes damage to organs (Liver) through prolonged or repeated exposure if swallowed.
- May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.
- Very toxic to aquatic life with long lasting effects.

Section 2 Hazards Identification continued

Precautionary Statements

Prevention

- Use personal protective equipment as required.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Avoid release to the environment.
- Do not breathe vapor. Do not eat, drink or smoke when using this product.
- Use only outdoors or in well-ventilated area.
- Wash hands thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.

Response

- Get medical attention if you feel unwell.
- IF exposed or if you feel unwell: Call a POISON CENTER or physician.
- IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.
- IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.
- If skin irritation or rash occurs: Get medical attention.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Wash contaminated clothing before reuse.
- Collect spillage.

Storage

- Store in a well-ventilated place. Keep cool.

Disposal

- Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified (HNOC) or not covered by GHS

None known

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Concentration (%)
Dibutyl phthalate	84-74-2	30 - 50
4,4'-methylenebis(2-ethylaniline)	19900-65-3	30 - 50

Section 4 First Aid Measures

Description of first aid measures

If inhaled

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Get medical attention if symptoms occur.

In case of skin contact

- Wash with plenty of soap and water. Remove contaminated clothing and shoes. If skin irritation persists, call a physician.

In case of eye contact

- Flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, call a physician.

Section 4 First Aid Measures continued

If swallowed

Induce vomiting immediately and call a physician. Keep respiratory tract clear. Never give anything by mouth to an unconscious person. Take victim immediately to the hospital.

Most important symptoms and effects, both acute and delayed

Eye contact: No known significant effects or critical hazards.

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact: May cause an allergic skin reaction.

Ingestion: Harmful if swallowed.

Notes to physician: Treat symptomatically.

Section 5 Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture

Do not allow run-off from firefighting to enter drains or water courses.

Hazardous thermal decomposition products

Carbon dioxide, carbon monoxide, nitrogen oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Collect contaminated fire extinguishing water separately. Do not discharge into drains. Dispose of in accordance with local regulations.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas.

For personal protection see section 8.

Environmental precautions

Do not let product enter drains. If product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up

Dike and contain spill. Soak up with inert absorbent material (e.g. sand, silica gel, sawdust).

Keep in suitable, closed containers for disposal.

Section 7 Handling and Storage

Precautions for safe handling

Do not breathe fumes or vapor. Do not allow material to contact skin. See section 8 for personal protective equipment. Provide appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Store at ambient temperatures in closed containers. Recommended storage temperature: 2-40°C (35-104°F). No known incompatible materials.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

Ingredient	OSHA		ACGIH	
	PEL	STEL	TWA	STEL
Dibutyl phthalate	5 mg/m ³	None established	5 mg/m ³	None established

Exposure controls

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment

Eye/face protection

Use safety goggles.

Skin protection

Hand protection

Use impervious gloves. Discuss suitability with manufacturer of gloves. Contaminated gloves should be replaced.

Body protection

Prevent skin contact when handling material. Wear impervious clothing.

Respiratory protection

The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.

Safety stations

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General hygienic practices

Avoid breathing vapor or mist. Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling, and before eating, drinking or smoking. Remove contaminated clothing promptly and clean thoroughly before reuse.

Section 9 Physical and Chemical Properties

Appearance	Red liquid
Odor	Mild
Odor Threshold	No data available
pH	No data available
VOC	0.058% (w/w)
Freezing point	No data available
Boiling point	No data available
Flash point (Pensky-Martens)	>93°C (>200°F)
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability	No data available
Vapor pressure	No data available

Section 9 Physical and Chemical Properties continued

Vapor density	No data available
Relative density (g/cc)	1.06
Water solubility	Slightly soluble
Coefficient: n-octanol/ water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

Section 10 Stability and Reactivity

Reactivity

Stable under recommended storage conditions.

Chemical stability

No decomposition if stored and applied as directed.

Possibility of hazardous reactions

None known.

Conditions to avoid

None known.

Incompatible materials

None known.

Hazardous decomposition products

Thermal oxidative decomposition can produce carbon oxides, and nitrogen oxides.

Section 11 Toxicological Information

Information on toxicological effects

Acute oral toxicity	943.24 mg/kg (calculated)
Acute inhalation toxicity	2.83 mg/l, 4 h (calculated)
Acute dermal toxicity	4,365 mg/kg (calculated)
Skin corrosion/irritation	Non-irritating to the skin.
Serious eye damage/eye irritation	Non-irritating to the eyes.
Respiratory or skin sensitization	May cause skin sensitization
Germ cell mutagenicity	Genotoxic (4,4'-methylenebis(2-ethylaniline))
Carcinogenicity	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
Reproductive toxicity	Dibutyl Phthalate has tested positive for both reproductive toxicity and causing birth defects (animal data only)
STOT - single exposure	(Specific Target Organ Toxicity) Liver
STOT - repeated exposure	(Specific Target Organ Toxicity) Liver and Kidneys
Aspiration toxicity	No data available

Freeman 1060 Part B (Red Hardener)

Section 12 Ecological Information

Toxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT & vPvB assessment	No data available

Section 13 Disposal Considerations

Contact a licensed disposal company for detailed recommendations.
Follow applicable Federal, State, and local regulations.

Section 14 Transport Information

DOT: Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Diethyl Methylene Dianiline, Dibutyl Phthalate,)
Hazard Class: 9
ID No.: UN 3082
Packing Group: III
Label: Marine Pollutant
Remarks: Above applies only to containers over 119 gallons or 450 liters. Not regulated if shipped in packages less than or equal to 119 gallons (450 liters).

IATA: Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Diethyl Methylene Dianiline, Dibutyl Phthalate,)
Hazard Class: 9
ID No.: UN 3082
Packing Group: III
Label: Marine Pollutant
Packing instruction: 964

IMDG: Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Diethyl Methylene Dianiline, Dibutyl Phthalate,)
Hazard Class: 9
ID No.: UN 3082
Packing Group: III
Label: Marine Pollutant

Note: Under 49 CFR 171.4 (c) NONBULK shipments of marine pollutants are not regulated for transport by motor vehicles, rail cars or aircraft. NONBULK shipments of marine pollutants are regulated when transported by vessel (ship).

Section 15 Regulatory Information

US Federal Regulations

SARA 311/312 Codes:
Acute toxicity, Respiratory or skin sensitization, Germ cell mutagenicity, Carcinogenicity, Reproductive toxicity, Specific target organ toxicity (single or repeated exposure)

Freeman 1060 Part B (Red Hardener)

Section 15 Regulatory Information continued

SARA 313 Toxic Chemical (40 CFR 372.65): Dibutyl phthalate (CAS# 84-74-2)
TSCA Inventory Status: All ingredients listed on TSCA inventory requirements.
Clean Air Act: The following chemical is listed as HAP under the U.S. Clean Air Act Section 12 (40 CFR 61): Dibutyl phthalate

State Regulations

California Proposition 65: ⚠️ WARNING: This product can expose you to chemicals including dibutyl phthalate, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Section 16 Other Information

Disclaimer

The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict of liability arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

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