

Freeman 2060 Red Part A (Resin)

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Section 1 Id	entification
Product Identifiers	
Freeman 2060 Red Part A (Resin)	
Relevant Identified Uses of the Substance or Mixture and	I Uses Advised Against
Resin component of semi-rigid polyurethane elaston	
This product is intended for industrial/professional	
	use only.
Details of the Supplier of the Safety Data Sheet	
Freeman Manufacturing & Supply Company	24 Hours on organ metalonk on a number
1101 Moore Road, Avon, OH 44011-4043 USA	24 Hour emergency telephone number:
Telephone: +1 (440) 934-1902	CHEMTREC (800) 424-9300
Email: contactus@freemansupply.com	
Section 2 Hazard	ds Identification
GHS Classification in Accordance with 29 CFR 1910.1200) (05HA HCS)
Acute Toxicity, Inhalation, Category 2	
Skin Corrosion, Category 1C	
Respiratory Sensitization, Category 1	
Skin Sensitization, Category 1	
Skin Sensitizer, Category 1	ninatowy) Catagowy 2
Specific Target Organ Toxicity, Single Exposure (Res	piratory), Category 3
Label Elements	
Danger Hazard Statements	
H314 Causes severe skin burns and eye damage.	
H317 May cause an allergic skin reaction.	
H330 Fatal if inhaled.	
H334 May cause allergy or asthma symptoms or bread	athing difficulties if inhaled.
H335 May cause respiratory irritation.	
H336 May cause drowsiness or dizziness.	
Precautionary Statements	
P260 Do not breathe fumes, vapors, mists or sprays.	
P264 Wash thoroughly after handling.	
P271 Use only outdoors or in a well-ventilated area.	
P272 Contaminated work clothing must not be allow	
P280 Wear protective gloves, protective clothing, ey	
P284 In case of inadequate ventilation, wear respiration	tory protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do	o NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of soap ar	nd water.
P302+P361+P354 IF ON SKIN: Take off immediately	all contaminated clothing. Immediately rinse with water fo
several minutes.	
P304+P340 IF INHALED: Remove person to fresh air	r and keep comfortable for breathing.
	th water for several minutes. Remove contact lenses, if
present and easy to do. Continue rinsing.	······································
P316 Get emergency medical help immediately.	
P319 Get medical help if you feel unwell.	



Freeman 2060 Red Part A (Resin)

Section 2 Hazards Identification continued

P333+P317 If skin irritation or rash occurs: Get medical help.

P342+P316 If experiencing respiratory symptoms: Get emergency medical help immediately.

P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents and container in accordance with local, regional, and national regulations.

Supplemental Information

This material in intended for hand-mix and pour applications. When used in its intended purpose, this material harmful if inhaled. This material should not be heated or used in spray applications. If sprayed, this material is fatal if inhaled. This is one part of a two-part system. Read and understand the hazard information on Part B before using.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Concentration (%)
4,4'Methylenedicyclohexyl Diisocyanate	5124-30-1	20-30
Isophorone Diisocyanate	4098-71-9	10-20

Other ingredients are not listed because they are either not hazardous or are below cutoff/concentration thresholds.

Section 4 First Aid Measures

Description of First Aid Measures

Eye Contact: Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Remove contact lenses if safe and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention immediately. Wash contaminated clothing before reuse. Discard clothing that cannot be decontaminated.

Inhalation: Remove person to fresh air. Get medical attention if symptoms develop or persist. **Ingestion:** Do not induce vomiting unless instructed to do so by a medical professional.

Get medical attention immediately.

Most Important Symptoms/Effects

Fatal if inhaled.

Indication of Immediate Medical Attention/Special Treatment

Get immediate medical attention if inhaled.

Section 5 Fire-Fighting Measures

Extinguishing Media

Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or spread fire.

Specific Hazards

Not classified as flammable or combustible. Product will burn under fire conditions. Combustion products include oxides of carbon, phenolics, aldehydes and other toxic organic compounds.

Special Protective Equipment & Precautions for Fire-Fighters

Wear positive pressure, self-contained breathing apparatus, and full-body protective clothing.



Freeman 2060 Red Part A (Resin)

Sec	ction 6 Accidental Release Measures
and skin contact and avoid breathin Environmental Precautions Avoid releases to the environment. Methods and Materials for Containment	rsonnel from the area. Wear appropriate protective clothing to prevent eye ng vapors.
	Section 7 Handling and Storage
Do not eat, drink, or smoke in the w Safe Storage	id contact with eyes, skin, and clothing. Wash thoroughly after handling. vork area. Keep container closed when not in use. ow 120°F (49°C). Store in original containers. Avoid getting moisture into r closed. Store locked up.
Section 8	8 Exposure Controls/Personal Protection
 Personal Protective Equipment Eye/Face Protection: Wear safety Skin Protection: Wear impervious Wear chemical resistant protective Respiratory Protection: If needed Respirator selection and use should exposures or in an emergency, use Respiratory Protection Standard (2) Other Protective Measures An eye wash facility and washing faand good Industrial Hygiene practi 	 -9): ACGIH TWA 0.005 ppm exhaust ventilation to minimize exposure levels. glasses or goggles. gloves; such as nitrile or butyl rubber. clothing. d, an approved respirator with organic vapor cartridges may be used. d be based on contaminant type, form, and concentration. For higher a supplied-air respirator. Use respirators in accordance with OSHA's 29 CFR 1910.134).
Section	51 5 1 hysical and chemical 1 toper ites
Appearance Odor Odor Threshold pH Melting/Freezing Point Boiling Point Flash Point Evaporation Rate Flammability (Solid, Gas) Upper/Lower Flammability Vapor Pressure	Red Liquid Pungent No data available No data available No data available >300°F (>150°C) No data available Not applicable No data available No data available



Freeman 2060 Red Part A (Resin)

Section 9 Physical and Chemical Properties

Vapor Density	<0.00048 mm Hg at 20°C
Relative Density	1.06
Solubility	Insoluble
Coefficient: n-Octanol/Water	No data available
Auto-Ignition Temperature	No data available
Decomposition Temperature	No data available
VOC	0.039%, 0.404 g/L
VOC A & B mixed (ASTM D2369)	0.921%, 9.61 g/L
Viscosity	8,000 cP at 25°C

Section 10 Stability and Reactivity

Reactivity: Not normally reactive.

Chemical Stability: Stable under recommended conditions.

Possibility of Hazardous Reactions: Masses of ≥ 1 lb. (0.5 kg) plus aliphatic amine will cause irreversible polymerization with considerable heat build-up. Material will polymerize with sodium hydroxide.

Conditions to Avoid: Avoid excessive heat

Incompatible Materials: Avoid amines, strong acids, bases, and oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may produce carbon monoxide, carbon dioxide, and oxides of nitrogen.

Section 11 Toxicological Information

Acute Toxicity Values

Chemical Name	LC ₅₀ Inhalation (Rat)	LD ₅₀ Oral (Rat)	LD ₅₀ Dermal (Rat)
4,4'-Methylenedicyclohexyl Diisocyanate (5124-30-1)	0.434 mg/L (4 hr.)	18,200 mg/kg	>7,000 mg/kg
Isophorone Diisocyanate (4098-71-9)	0.031 mg/L (4 hr.)	4,814 mg/kg	>7,000 mg/kg

Acute Health Effects

Eye Contact: May cause mild eye irritation.

Skin Contact: Causes severe skin burns and eye damage. May cause allergic skin reaction.

Inhalation: Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. **Ingestion:** No data available.

Chronic Health Effects

Respiratory Sensitization: May cause allergey or asthma symptoms or breathing difficulties if inhaled. **Skin Sensitization:** May cause an allergic skin reaction. air, or other irritants.

Germ Cell Mutagenicity: Components are not classified as mutagens.

Carcinogenicity: Components are not classified as carcinogens.

Reproductive Toxicity: Components are not classified as reproductive toxins.

Specific Target Organ Toxicity, Single Exposure: May cause respiratory irritation, drowsiness, or dizziness. **Specific Target Organ Toxicity, Repeated Exposure:** No data available.

Aspiration Hazard: No data available



Freeman 2060 Red Part A (Resin)

Section 12 Ecological Information

Ecotoxicity: Avoid release to the environment

Chemical Name	Test	Species	Result
	LC50 (96 hrs.)	Brachydanio Rerio	8.1 mg/L
4,4'-Methylenedicyclohexyl	EC50 (48 hrs.)	Daphnia Magna	8.3 mg/L
Diisocyanate	ErC50 (72 hrs.)	Scenedesmus Subspicatus	5.0 mg/L
	EC50 (3 hrs.)	Pseudomonas Putida	191 mg/L
	LC50 (96 hrs.)	Danio Rerio	>72 mg/L
	LC50 (96 hrs.)	Cyprinus Carpio	>208 mg/L
Isophorone Diisocyanate	EC50 (48 hrs.)	Daphnia Magna	27 mg/L
Isophorone Diisocyanate	ErC50 (72 hrs.)	Desmodesmus Subspicatus	70 mg/L
	EC10 (6 hrs.)	Psudomonas Putida	554 mg/L
	EC50 (3 hrs.)	Activated Sludge	263 mg/L

Persistence and Degradability

Chemical Name	Test	Period	Result
4,4'-Methylenedicyclohexyl Diisocyanate	Aerobic (Directive 92/69/EEC)	28 days	0%
Isophorone Diisocyanate	Aerobic	28 days	0%

Bioaccumulative Potential

Chemical Name	Test	Result	Potential
4,4'-Methylenedicyclohexyl Diisocyanate	Calculated (BCF)	10.186	Not expected

Mobility in Soil

Chemical Name	Soil/Water Partition Coefficient (K _{0C})
4,4'-Methylenedicyclohexyl Diisocyanate	110-672

Section 13 Disposal Considerations

Disposed of unused contents in accordance with national and local regulations. Dispose of container in accordance with national and local regulations. Ensure the use of properly authorized waste management companies, where appropriate.

Section 14 Transport Information

DOT/IMDG

Not regulated for transport

IATA

UN3334, Aviation regulated liquid, n.o.s. (dicyclohexylmethane-4-4'-diisocyanate), 9, III.

Section 15 Regulatory Information

U.S. Federal Regulations

CERCLA 103 Reportable Quantity: Dibutyl phthalate RQ 10lb. Some states have more stringent reporting requirements.



Freeman 2060 Red Part A (Resin)

Section 15 Regulatory Information

Superfund Amendments and Reauthorization Act (SARA), Section 311/312: See Section 2 Section 313 Toxic Chemicals: N120 Diisocyanates, 4,4'-Methylenedicyclohexyl Diisocyanate (5124-30-1) Section 302 Extremely Hazardous Substances (TPQ): None

U.S. State Regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product does not contain chemicals known to the State of California to cause cancer and/or other reproductive harm. www.P65Warnings.ca.gov

Chemical Inventories

U.S. Toxic Substances Control Act (TSCA): All intentionally added components are listed.

Section 16 Other Information

Training Advice

All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.

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.

Issue Date: August 24, 2021 Previous Revision Date: January 5, 2024 Date of Current Revision: December 17, 2024



Freeman 2060 Part A (Clear Resin)

Section 1 Identification

	Identification
Product Identifiers	
Freeman 2060 Part A (Clear Resin)	
Relevant Identified Uses of the Substance or Mixture a	nd Usas Advisad Against
Resin component of semi-rigid polyurethane elasto	
This product is intended for industrial/professiona	
Details of the Supplier of the Safety Data Sheet	ar use only.
Freeman Manufacturing & Supply Company	
1101 Moore Road, Avon, OH 44011-4043 USA	24 Hour emergency telephone number:
Telephone: +1 (440) 934-1902	CHEMTREC (800) 424-9300
Email: contactus@freemansupply.com	CHEMTREC (000) +2+ 7500
Linan. contactus@ncemansupply.com	
Section 2 Haza	ards Identification
GHS Classification in Accordance with 29 CFR 1910.12(00 (OSHA HCS)
Acute Toxicity, Inhalation, Category 2	
Skin Corrosion, Category 1C	
Respiratory Sensitization, Category 1	
Skin Sensitization, Category 1	
Skin Sensitizer, Category 1	
Specific Target Organ Toxicity, Single Exposure (Re	espiratory), Category 3
Label Elements	
Danger	
Hazard Statements	
H314 Causes severe skin burns and eye damage.	
H317 May cause an allergic skin reaction.	
H330 Fatal if inhaled.	
H334 May cause allergy or asthma symptoms or br	reathing difficulties if inhaled.
H335 May cause respiratory irritation.	
H336 May cause drowsiness or dizziness.	
Precautionary Statements	
P260 Do not breathe fumes, vapors, mists or spray	'S.
P264 Wash thoroughly after handling.	
P271 Use only outdoors or in a well-ventilated area	
P272 Contaminated work clothing must not be allo	
P280 Wear protective gloves, protective clothing, e	eye protection and face protection.
P284 In case of inadequate ventilation, wear respir	
P301+P330+P331 IF SWALLOWED: Rinse mouth. I	
P302+P352 IF ON SKIN: Wash with plenty of soap	
several minutes.	ly all contaminated clothing. Immediately rinse with water for
P304+P340 IF INHALED: Remove person to fresh a	
	vith water for several minutes. Remove contact lenses, if
present and easy to do. Continue rinsing.	
P316 Get emergency medical help immediately.	
P319 Get medical help if you feel unwell.	



Freeman 2060 Part A (Clear Resin)

Section 2 Hazards Identification continued

P333+P317 If skin irritation or rash occurs: Get medical help.

P342+P316 If experiencing respiratory symptoms: Get emergency medical help immediately.

P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents and container in accordance with local, regional, and national regulations.

Supplemental Information

This material in intended for hand-mix and pour applications. When used in its intended purpose, this material harmful if inhaled. This material should not be heated or used in spray applications. If sprayed, this material is fatal if inhaled. This is one part of a two-part system. Read and understand the hazard information on Part B before using.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Concentration (%)
4,4'Methylenedicyclohexyl Diisocyanate	5124-30-1	20-30
Isophorone Diisocyanate	4098-71-9	10-20

Other ingredients are not listed because they are either not hazardous or are below cutoff/concentration thresholds.

Section 4 First Aid Measures

Description of First Aid Measures

Eye Contact: Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Remove contact lenses if safe and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention immediately. Wash contaminated clothing before reuse. Discard clothing that cannot be decontaminated.

Inhalation: Remove person to fresh air. Get medical attention if symptoms develop or persist. **Ingestion:** Do not induce vomiting unless instructed to do so by a medical professional.

Get medical attention immediately.

Most Important Symptoms/Effects

Fatal if inhaled.

Indication of Immediate Medical Attention/Special Treatment

Get immediate medical attention if inhaled.

Section 5 Fire-Fighting Measures

Extinguishing Media

Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or spread fire.

Specific Hazards

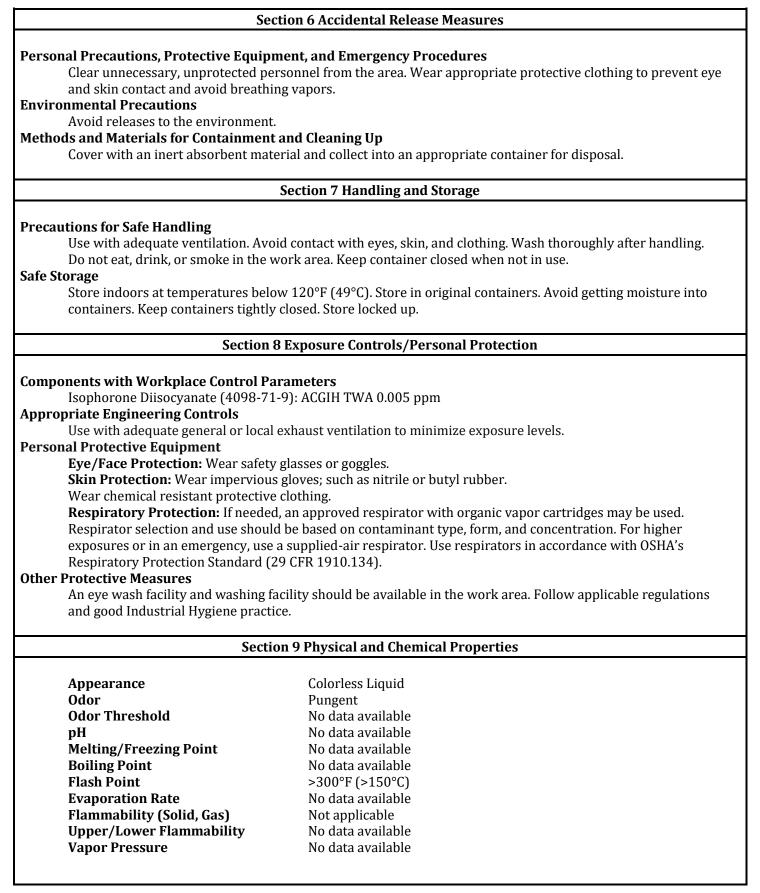
Not classified as flammable or combustible. Product will burn under fire conditions. Combustion products include oxides of carbon, phenolics, aldehydes and other toxic organic compounds.

Special Protective Equipment & Precautions for Fire-Fighters

Wear positive pressure, self-contained breathing apparatus, and full-body protective clothing.



Freeman 2060 Part A (Clear Resin)





Freeman 2060 Part A (Clear Resin)

Vapor Density	<0.00048 mm Hg at 20°C
Relative Density	1.06
Solubility	Insoluble
Coefficient: n-Octanol/Water	No data available
Auto-Ignition Temperature	No data available
Decomposition Temperature	No data available
VOC	0.039%, 0.404 g/L
VOC A & B mixed (ASTM D2369)	0.921%, 9.61 g/L
Viscosity	8,000 cP at 25°C

Section 10 Stability and Reactivity

Reactivity: Not normally reactive.

Chemical Stability: Stable under recommended conditions.

Possibility of Hazardous Reactions: Masses of ≥ 1 lb. (0.5 kg) plus aliphatic amine will cause irreversible polymerization with considerable heat build-up. Material will polymerize with sodium hydroxide.

Conditions to Avoid: Avoid excessive heat

Incompatible Materials: Avoid amines, strong acids, bases, and oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may produce carbon monoxide, carbon dioxide, and oxides of nitrogen.

Section 11 Toxicological Information

Acute Toxicity Values

Chemical Name	LC ₅₀ Inhalation (Rat)	LD ₅₀ Oral (Rat)	LD ₅₀ Dermal (Rat)
4,4'-Methylenedicyclohexyl Diisocyanate (5124-30-1)	0.434 mg/L (4 hr.)	18,200 mg/kg	>7,000 mg/kg
Isophorone Diisocyanate (4098-71-9)	0.031 mg/L (4 hr.)	4,814 mg/kg	>7,000 mg/kg

Acute Health Effects

Eye Contact: May cause mild eye irritation.

Skin Contact: Causes severe skin burns and eye damage. May cause allergic skin reaction.

Inhalation: Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. **Ingestion:** No data available.

Chronic Health Effects

Respiratory Sensitization: May cause allergey or asthma symptoms or breathing difficulties if inhaled. **Skin Sensitization:** May cause an allergic skin reaction. air, or other irritants.

Germ Cell Mutagenicity: Components are not classified as mutagens.

Carcinogenicity: Components are not classified as carcinogens.

Reproductive Toxicity: Components are not classified as reproductive toxins.

Specific Target Organ Toxicity, Single Exposure: May cause respiratory irritation, drowsiness, or dizziness. **Specific Target Organ Toxicity, Repeated Exposure:** No data available.

Aspiration Hazard: No data available



Freeman 2060 Part A (Clear Resin)

Section 12 Ecological Information

Ecotoxicity: Avoid release to the environment

Chemical Name	Test	Species	Result
	LC50 (96 hrs.)	Brachydanio Rerio	8.1 mg/L
4,4'-Methylenedicyclohexyl	EC50 (48 hrs.)	Daphnia Magna	8.3 mg/L
Diisocyanate	ErC50 (72 hrs.)	Scenedesmus Subspicatus	5.0 mg/L
	EC50 (3 hrs.)	Pseudomonas Putida	191 mg/L
	LC50 (96 hrs.)	Danio Rerio	>72 mg/L
	LC50 (96 hrs.)	Cyprinus Carpio	>208 mg/L
Isophorone Diisocyanate	EC50 (48 hrs.)	Daphnia Magna	27 mg/L
Isophorone Disocyanate	ErC50 (72 hrs.)	Desmodesmus Subspicatus	70 mg/L
	EC10 (6 hrs.)	Psudomonas Putida	554 mg/L
	EC50 (3 hrs.)	Activated Sludge	263 mg/L

Persistence and Degradability

Chemical Name	Test	Period	Result
4,4'-Methylenedicyclohexyl Diisocyanate	Aerobic (Directive 92/69/EEC)	28 days	0%
Isophorone Diisocyanate	Aerobic	28 days	0%

Bioaccumulative Potential

Chemical Name	Test	Result	Potential
4,4'-Methylenedicyclohexyl Diisocyanate	Calculated (BCF)	10.186	Not expected

Mobility in Soil

Chemical Name	Soil/Water Partition Coefficient (K _{0C})
4,4'-Methylenedicyclohexyl Diisocyanate	110-672

Section 13 Disposal Considerations

Disposed of unused contents in accordance with national and local regulations. Dispose of container in accordance with national and local regulations. Ensure the use of properly authorized waste management companies, where appropriate.

Section 14 Transport Information

DOT/IMDG

Not regulated for transport

IATA

UN3334, Aviation regulated liquid, n.o.s. (dicyclohexylmethane-4-4'-diisocyanate), 9, III.

Section 15 Regulatory Information

U.S. Federal Regulations

CERCLA 103 Reportable Quantity: Dibutyl phthalate RQ 10lb. Some states have more stringent reporting requirements.





Freeman 2060 Part A (Clear Resin)

Section 15 Regulatory Information

Superfund Amendments and Reauthorization Act (SARA), Section 311/312: See Section 2 Section 313 Toxic Chemicals: N120 Diisocyanates, 4,4'-Methylenedicyclohexyl Diisocyanate (5124-30-1) Section 302 Extremely Hazardous Substances (TPQ): None

U.S. State Regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product does not contain chemicals known to the State of California to cause cancer and/or other reproductive harm. www.P65Warnings.ca.gov

Chemical Inventories

U.S. Toxic Substances Control Act (TSCA): All intentionally added components are listed.

Section 16 Other Information

Training Advice

All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.

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.

Issue Date: August 24, 2021 Previous Revision Date: January 5, 2024 Date of Current Revision: December 17, 2024



Freeman 66 Black Part B (Hardener)

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Section 1 Id	lentification
Product Identifiers Freeman 66 Black Part B (Hardener) Relevant Identified Uses of the Substance or Mixture and	
Hardener component of semi-rigid polyurethane ela	
This product is intended for industrial/professional	use only.
Details of the Supplier of the Safety Data Sheet	
Freeman Manufacturing & Supply Company	
1101 Moore Road, Avon, OH 44011-4043 USA	24 Hour emergency telephone number:
Telephone: +1 (440) 934-1902 Email: contactus@freemansupply.com	CHEMTREC (800) 424-9300
Email: contactus@freemansupply.com	
Section 2 Hazar	ds Identification
GHS Classification in Accordance with 29 CFR 1910.1200) (OSHA HCS)
Acute Toxicity - Dermal, Category 4	
Acute Toxicity – Oral, Category 4	
Acute Toxicity – Inhalation, Category 4	
Eye Irritation, Category 2B	
Reproductive Toxicity, Category 2	
Specific Target Organ Toxicity – Single Exposure Cat	
Hazardous to the Aquatic Environment – Acute Haza	
Hazardous to the Aquatic Environment – Chronic Ha Label Elements	zard, Category 1
Danger	
Hazard Statements	
H302 Harmful if swallowed.	
H312 Harmful in contact with skin.	
H320 Causes eye irritation.	
H332 Harmful if inhaled.	
H335 May cause respiratory irritation.	
H336 May cause drowsiness or dizziness.	1.11
H361 Suspected of damaging fertility or the unborn	cniid.
H400 Very toxic to aquatic life.	
H410 Very toxic to aquatic life with long lasting effect	JLS.
Precautionary Statements P203 Obtain, read and follow all safety instructions l	before use
P261 Avoid breathing fumes, vapors, mists or sprays	
P264 Wash thoroughly after handling.	3.
	oduct
P270 Do not eat, drink, or smoke when using this properties only outdoors or in a well-ventilated area	
P271 Use only outdoors or in a well-ventilated area.	
P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment.	
P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves, protective clothing, ey	
P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment.	e protection, and face protection.



Freeman 66 Black Part B (Hardener)

Section 2 Hazards Identification continued

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P317 Get medical help.
P318 IF exposed or concerned, get medical advice.
P319 Get medical help if you feel unwell.

P330 Rinse mouth.

P337+P317 If eye irritation persists: Get medical help.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents and container in accordance with local, regional, and national regulations.

Supplemental Information

This is one part of a two-part system. Read and understand the hazard information on Part A before using.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Concentration (%)
4,4'- Methylenebis(2-ethylaniline)	19900-65-3	60-70
2,2,4-trimethyl-1,3-pentanediol diisobutyrate	6846-50-0	30-40

Other ingredients are not listed because they are either not hazardous or are below cutoff/concentration thresholds.

Section 4 First-Aid Measures

Description of First Aid Measures

Eye Contact: Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Remove contact lenses if safe and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water.

Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Discard clothing that cannot be decontaminated.

Inhalation: Remove person to fresh air. Get medical attention immediately.

Ingestion: Rinse mouth. Do NOT induce vomiting. Get medical attention immediately.

Most Important Symptoms/Effects

Harmful if swallowed and inhaled.

Indication of Immediate Medical Attention/Special Treatment

Get immediate medical attention if swallowed or inhaled.

Section 5 Fire-Fighting Measures

Extinguishing Media

Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or spread fire.

Specific Hazards

Not classified as flammable or combustible. Product will burn under fire conditions. Combustion products include oxides of carbon, phenolics, aldehydes and other toxic organic compounds.



Freeman 66 Black Part B (Hardener)

Section 5 Fire-Fighting Measures

Special Protective Equipment & Precautions for Fire-Fighters

Wear positive pressure, self-contained breathing apparatus, and full-body protective clothing. respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning, or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations. See Section 9 for additional information.

Section 6 Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures

Clear unnecessary, unprotected personnel from the area. Wear appropriate protective clothing to prevent eye and skin contact and avoid breathing vapors. See Section 8 for recommendations.

Environmental Precautions

Avoid release to the environment.

Methods and Materials for Containment and Cleanup

Cover with an inert absorbent material and collect into an appropriate container for disposal.

Section 7 Handling and Storage

Safe Handling

Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not eat, drink, or smoke in the work area. Keep container closed when not in use.

Safe Storage

Store indoors at temperatures below 120°F (49°C). Store in original containers. Avoid getting moisture into containers. Keep containers tightly closed. Store locked up.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

None established

Appropriate Engineering Controls

Use with adequate general or local exhaust ventilation to minimize exposure levels.

Personal Protective Equipment

Respiratory Protection: Wear an approved respirator with organic vapor cartridges whenever exposure to aerosol, mist, spray, fume or vapor exceed the applicable exposure limit(s) of any chemical substance listed in this SDS. Use respirators in accordance with OSHA's Respiratory Protection Standard (29 CFR 1910.134). **Skin Protection:** Wear impervious gloves; such as nitrile or butyl rubber. Wear chemical resistant protective clothing. Use good laboratory/workplace procedures including personal protective clothing: lab coat and protective gloves.

Eye /Face Protection: Wear safety glasses or goggles.

Other Protective Measures

An eye wash facility and washing facility should be available in the work area. Follow applicable regulations and good Industrial Hygiene practice.

Section 9 Physical and Chemical Properties

Appearance Odor Odor Threshold pH

Black Liquid Slight No data available No data available



Freeman 66 Black Part B (Hardener)

Section 9 Physical and Chemical Properties

Melting/Freezing Point
Boiling Point
Flash Point
Evaporation Rate
Flammability (Solid, Gas)
Flammability Limits
Vapor Pressure
Vapor Density
Relative Density
Solubility
Coefficient: n-Octanol/Water
Auto-Ignition Temperature
Decomposition Temperature
Viscosity

No data available
No data available
>100°C (>212°F)
No data available
1.01
Nil to slightly soluble in water
No data available
No data available
No data available
190 cP at 25°C

Section 10 Stability and Reactivity

Reactivity: Not normally reactive.

Chemical Stability: Stable under recommended conditions.

Possibility of Hazardous Reactions: Exothermic reactions including polymerization may occur in contact with strong acids, strong bases, alcohols, strong oxidizing agents, and excessive heat.

Conditions to Avoid: Avoid excessive heat and ignition sources.

Incompatible Materials: Avoid contact with strong oxidizing agents, acids, and bases.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, aldehydes, and oxides of nitrogen.

Section 11 Toxicological Information

Acute Toxicity Values

Chemical Name	LC ₅₀ Inhalation (Rat)	LD ₅₀ Oral (Rat)	LD ₅₀ Dermal (Rabbit)
4,4'-Methylenebis(2-ethylaniline) (CAS 19900-65-3)	1.5 mg/L	500 mg/kg	1,100 mg/kg
2,2,4-trimethyl-1,3-pentanediol diisobutyrate (CAS 6846-50-0):	Not established	>2,000 mg/kg	>2,000 mg/kg

Acute Health Effects

Eve Contact: Causes eve irritation. Skin Contact: Harmful in contact with skin. May causes skin irritation. Inhalation: Harmful if inhaled. May cause respiratory irritation. Ingestion: Harmful if ingested. **Chronic Health Effects Respiratory Sensitization:** Components are not classified as respiratory sensitizers. Skin Sensitization: Components are not classified as skin sensitizers. Germ Cell Mutagenicity: Components are not classified as mutagens. **Carcinogenicity:** Components are not classified as carcinogens. **Reproductive Toxicity:** Suspected of damaging fertility or the unborn child. **Specific Target Organ Toxicity: Single Exposure:** May cause respiratory irritation, drowsiness or dizziness. **Repeated Exposure:** No data available **Aspiration Hazard** No data is available.



Freeman 66 Black Part B (Hardener)

Section 12 Ecological Information

Ecotoxicity: Very toxic to aquatic life with long lasting effects. Do not release into waterways. **Persistence and Degradability:** No data available. **Bioaccumulative Potential:** No data available. **Mobility in Soil:** No data available.

Section 13 Disposal Considerations

Dispose of unused contents (incineration) in accordance with national and local regulations. Dispose of container in accordance with national and local regulations. Ensure the use of properly authorized waste management companies, where appropriate.

Section 14 Transport Information

DOT

UN3082, Environmentally hazardous substance, liquid, n.o.s. (4,4'-Methylenebis(2-ethylaniline), 9, III Non-bulk packages (<119gal or <882lb) are not regulated for transport.

IATA/IMDG

UN3082, Environmentally hazardous substance, liquid, n.o.s. (4,4'-Methylenebis(2-ethylaniline), 9, III, MARINE POLLUTANT

Excepted from IATA and IMDG regulations if shipped in quantities of 5L (1.32gal) or less. (See IATA SP A197 and IMDG 2.10.2.7).

Section 15 Regulatory Information

U.S. Federal Regulations

CERCLA 103 Reportable Quantity: Dibutyl phthalate RQ 10lb.

Some states have more stringent reporting requirements.

Superfund Amendments and Reauthorization Act (SARA), Section 311/312: See Section 2 **Section 313 Toxic Chemicals:** This product does not contain chemicals subject to SARA Title III Section 313 reporting requirements.

Section 302 Extremely Hazardous Substances (TPQ): None

U.S. State Regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product does not contain chemicals known to the State of California to cause cancer and/or other reproductive harm. www.P65Warnings.ca.gov

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV List of substances subject to authorization, Substances of very high concern: n-Butyl phthalate (CAS 84-74-2)

Chemical Inventories

U.S. Toxic Substances Control Act (TSCA): All intentionally added components are listed.

Section 16 Other Information

Training Advice

All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.



Freeman 66 Black Part B (Hardener)

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.

Issue Date: December 1, 2021 Previous Revision Date: March 3, 2023 Date of Current Revision: December 17, 2024



Freeman 66 Part B (Amber Hardener)

Soction 1 Identification

Section 1 I	Identification
Product Identifiers	
Freeman 66 Part B (Amber Hardener)	
Relevant Identified Uses of the Substance or Mixture ar	nd Uses Advised Against
Hardener component of semi-rigid polyurethane el	
This product is intended for industrial/professiona	
Details of the Supplier of the Safety Data Sheet	
Freeman Manufacturing & Supply Company	
1101 Moore Road, Avon, OH 44011-4043 USA	24 Hour emergency telephone number:
Telephone: +1 (440) 934-1902	CHEMTREC (800) 424-9300
Email: contactus@freemansupply.com	
Section 2 Haza	ards Identification
GHS Classification in Accordance with 29 CFR 1910.120	00 (0544 HCS)
Acute Toxicity - Dermal, Category 4	Ju (USHA HCS)
Acute Toxicity - Oral, Category 4 Acute Toxicity – Oral, Category 4	
Acute Toxicity – Inhalation, Category 4	
Eye Irritation, Category 2B	
Reproductive Toxicity, Category 2	
Specific Target Organ Toxicity – Single Exposure Ca	ategory 3
Hazardous to the Aquatic Environment – Acute Haz	
Hazardous to the Aquatic Environment – Chronic H	
Label Elements	
Danger	
Hazard Statements	
H302 Harmful if swallowed.	
H312 Harmful in contact with skin.	
H320 Causes eye irritation.	
H332 Harmful if inhaled.	
H335 May cause respiratory irritation.	
H336 May cause drowsiness or dizziness.	
H361 Suspected of damaging fertility or the unborn	n child.
H400 Very toxic to aquatic life.	ineta
H410 Very toxic to aquatic life with long lasting effe	ects.
Precautionary Statements P203 Obtain, read and follow all safety instructions	s hoforo uso
P203 Obtain, read and follow an safety instructions P261 Avoid breathing fumes, vapors, mists or spray	
P264 Wash thoroughly after handling.	y 3.
P270 Do not eat, drink, or smoke when using this p	product
P271 Use only outdoors or in a well-ventilated area	
	Lt.
	eve protection, and face protection
•	and water.
P273 Avoid release to the environment. P280 Wear protective gloves, protective clothing, e P301+P317 IF SWALLOWED: Get medical help. P302+P352 IF ON SKIN: Wash with plenty of soap a P304+P340 IF INHALED: Remove person to fresh a	eye protection, and face protection. and water.



Freeman 66 Part B (Amber Hardener)

Section 2 Hazards Identification continued

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P317 Get medical help. P318 IF exposed or concerned, get medical advice.

P319 Get medical help if you feel unwell.

P330 Rinse mouth.

P337+P317 If eye irritation persists: Get medical help.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents and container in accordance with local, regional, and national regulations.

Supplemental Information

This is one part of a two-part system. Read and understand the hazard information on Part A before using.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Concentration (%)
4,4'- Methylenebis(2-ethylaniline)	19900-65-3	60-70
2,2,4-trimethyl-1,3-pentanediol diisobutyrate	6846-50-0	30-40

Other ingredients are not listed because they are either not hazardous or are below cutoff/concentration thresholds.

Section 4 First-Aid Measures

Description of First Aid Measures

Eye Contact: Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Remove contact lenses if safe and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water.

Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Discard clothing that cannot be decontaminated.

Inhalation: Remove person to fresh air. Get medical attention immediately.

Ingestion: Rinse mouth. Do NOT induce vomiting. Get medical attention immediately.

Most Important Symptoms/Effects

Harmful if swallowed and inhaled.

Indication of Immediate Medical Attention/Special Treatment

Get immediate medical attention if swallowed or inhaled.

Section 5 Fire-Fighting Measures

Extinguishing Media

Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or spread fire.

Specific Hazards

Not classified as flammable or combustible. Product will burn under fire conditions. Combustion products include oxides of carbon, phenolics, aldehydes and other toxic organic compounds.



Freeman 66 Part B (Amber Hardener)

Section 5 Fire-Fighting Measures

Special Protective Equipment & Precautions for Fire-Fighters

Wear positive pressure, self-contained breathing apparatus, and full-body protective clothing. respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning, or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations. See Section 9 for additional information.

Section 6 Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures

Clear unnecessary, unprotected personnel from the area. Wear appropriate protective clothing to prevent eye and skin contact and avoid breathing vapors. See Section 8 for recommendations.

Environmental Precautions

Avoid release to the environment.

Methods and Materials for Containment and Cleanup

Cover with an inert absorbent material and collect into an appropriate container for disposal.

Section 7 Handling and Storage

Safe Handling

Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not eat, drink, or smoke in the work area. Keep container closed when not in use.

Safe Storage

Store indoors at temperatures below 120°F (49°C). Store in original containers. Avoid getting moisture into containers. Keep containers tightly closed. Store locked up.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

None established

Appropriate Engineering Controls

Use with adequate general or local exhaust ventilation to minimize exposure levels.

Personal Protective Equipment

Respiratory Protection: Wear an approved respirator with organic vapor cartridges whenever exposure to aerosol, mist, spray, fume or vapor exceed the applicable exposure limit(s) of any chemical substance listed in this SDS. Use respirators in accordance with OSHA's Respiratory Protection Standard (29 CFR 1910.134). **Skin Protection:** Wear impervious gloves; such as nitrile or butyl rubber. Wear chemical resistant protective clothing. Use good laboratory/workplace procedures including personal protective clothing: lab coat and protective gloves.

Eye /Face Protection: Wear safety glasses or goggles.

Other Protective Measures

An eye wash facility and washing facility should be available in the work area. Follow applicable regulations and good Industrial Hygiene practice.

Section 9 Physical and Chemical Properties

Appearance Odor Odor Threshold pH Amber Liquid Slight No data available No data available



Freeman 66 Part B (Amber Hardener)

Section 9 Physical and Chemical Properties

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Melting/Freezing Point
Boiling Point
Flash Point
Evaporation Rate
Flammability (Solid, Gas)
Flammability Limits
Vapor Pressure
Vapor Density
Relative Density
Solubility
Coefficient: n-Octanol/Water
Auto-Ignition Temperature
Decomposition Temperature
Viscosity

No data available
No data available
>100°C (>212°F)
No data available
1.01
Nil to slightly soluble in water
No data available
No data available
No data available
190 cP at 25°C

Section 10 Stability and Reactivity

Reactivity: Not normally reactive.

Chemical Stability: Stable under recommended conditions.

Possibility of Hazardous Reactions: Exothermic reactions including polymerization may occur in contact with strong acids, strong bases, alcohols, strong oxidizing agents, and excessive heat.

Conditions to Avoid: Avoid excessive heat and ignition sources.

Incompatible Materials: Avoid contact with strong oxidizing agents, acids, and bases.

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Freeman 66 Part B (Amber Hardener)

Section 12 Ecological Information

Ecotoxicity: Very toxic to aquatic life with long lasting effects. Do not release into waterways. **Persistence and Degradability:** No data available. **Bioaccumulative Potential:** No data available. **Mobility in Soil:** No data available.

Section 13 Disposal Considerations

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Section 14 Transport Information

DOT

UN3082, Environmentally hazardous substance, liquid, n.o.s. (4,4'-Methylenebis(2-ethylaniline), 9, III Non-bulk packages (<119gal or <882lb) are not regulated for transport.

IATA/IMDG

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U.S. Federal Regulations

CERCLA 103 Reportable Quantity: Dibutyl phthalate RQ 10lb.

Some states have more stringent reporting requirements.

Superfund Amendments and Reauthorization Act (SARA), Section 311/312: See Section 2 **Section 313 Toxic Chemicals:** This product does not contain chemicals subject to SARA Title III Section 313 reporting requirements.

Section 302 Extremely Hazardous Substances (TPQ): None

U.S. State Regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product does not contain chemicals known to the State of California to cause cancer and/or other reproductive harm. www.P65Warnings.ca.gov

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV List of substances subject to authorization, Substances of very high concern: n-Butyl phthalate (CAS 84-74-2)

Chemical Inventories

U.S. Toxic Substances Control Act (TSCA): All intentionally added components are listed.

Section 16 Other Information

Training Advice

All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.



Freeman 66 Part B (Amber Hardener)

Section 16 Other Information

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Issue Date: December 1, 2021 Previous Revision Date: March 3, 2023 Date of Current Revision: December 17, 2024