

Material Safety Data Sheet

HobbyCast 100 Part A

Date of Preparation: May 2, 2001

Revision:

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: HobbyCast 100 Part A

Chemical Formula: N/A

CAS Number: N/A

Other Designations: N/A

General Use: Polyurethane Elastomer

Manufacturer: Freeman Manufacturing and Supply Company, 1101 Moore Road, Avon, OH 44011,
Phone (440)934-1902, FAX (440)934-7200, Hours of Operation 8-5, Emergency Phone Number 800-424-9300

HMIS

H 2

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PPE†

†Sec. 8

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt
#221290880-5052P (Trade Secret)	-	40-45
Polymethylene polyphenylisocyanate	9016-87-9	30-35
4,4' Methylene bis(phenylisocyanate)	101-68-8	20-25

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
#221290880-5052P	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Polymethylene polyphenylisocyanate	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
4,4' Methylene bis(phenylisocyanate)	0.02 ppm	none estab.	0.005 ppm	none estab.	none estab.	none estab.	none estab.

Section 3 - Physical and Chemical Properties

Physical State: Liquid

Appearance and Odor: Brown liquid

Odor: Characteristic odor.

Vapor Pressure: <0.00001 mm Hg at 25 °C

Vapor Density (Air=1): 8.6

Specific Gravity (H₂O=1, at 4 °C): 1.09

Water Solubility: Negligible

Boiling Point: None Determined

Freezing/Melting Point: None Determined

Viscosity: 3 poise

% Volatile: Nil

Evaporation Rate: Not Applicable

Section 4 - Fire-Fighting Measures

Flash Point: 390 °F (200°C)

Flash Point Method: COC

LEL: Not established

UEL: Not established

Flammability Classification: Non-Flammable

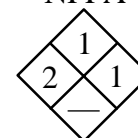
Extinguishing Media: Water Fog, Dry Chemical, and Carbon Dioxide Foam

Unusual Fire or Explosion Hazards: Hazardous decomposition products may be formed. Avoid water contamination in closed containers or confined areas as exothermic heat and carbon dioxide can evolve.

Fire-Fighting Instructions: Fire fighters should wear self-contained breathing apparatus. Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

NFPA



Section 5 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization can occur.

Chemical Incompatibilities: Strong bases, water, amines, alcohols

Conditions to Avoid: Avoid contamination with water and other materials that react with Isocyanates.

Hazardous Decomposition Products: MDI vapors, hydrogen cyanide gas, oxides of nitrogen, carbon monoxide and carbon dioxide.

Section 6 - Health Hazard Information

Potential Health Effects

Primary Entry Routes: Inhalation and Dermal

Target Organs: Lungs, skin

Acute Effects

Inhalation: Vapors are minimal due to low vapor pressure; if sprayed as an aerosol excessive concentrations are attainable that could be hazardous on single exposure. Excessive exposure can cause irritation to respiratory tract and irritation of the eyes. Effects may be delayed. Decreased ventilatory capacity has been associated with exposure to similar isocyanates.

Eye: May cause irritation, redness, tearing, and blur vision. Prolonged vapor contact may cause conjunctivitis.

Skin: Contact will cause irritation, reddening, swelling, rash, scaling, or blistering. Prolonged or repeated contact can cause moderate dermatitis.

Ingestion: May have corrosive effects on the linings of the mouth and stomach: symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.

Carcinogenicity: IARC, NTP, and OSHA do not list any components of this product as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure: Skin allergies and respiratory disorders

Emergency and First Aid Procedures

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water; remove contaminated clothing and launder before reuse; seek medical attention if rash develops.

Ingestion: Do not induce vomiting unless instructed by a physician. Contact physician immediately.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 7 - Spill, Leak, and Disposal Procedures

Spill /Leak Procedures: Only properly protected personnel should remain in the spill area; dike and contain spill; absorb or scrape up excess into suitable container for disposal; wash area with dilute ammonia solution. Stop or reduce discharge if it can be done safely.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Disposal Considerations

Disposal: This material must be disposed of in accordance with applicable Federal, state and local regulations.

Toxicological Information: **Eye Effects:** Irritation
Skin Effects: Irritation

Mutagenicity: None Determined
Teratogenicity: None Determined

Ecological Information: None established

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

CERCLA Hazardous Substance (40 CFR 302.4) listed specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112: None

Clean Air Act: SOCOMI Chemical: 4,4' Methylene bis(phenylisocyanate)

Hap Code: XOY

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): None

Revision:**HobbyCast 100 Part A****SARA Toxic Chemical (40 CFR 372.65):**

This product contains the following chemical that are subject to release reporting requirements under section 313 of SARA Title III.

Chemical Name	CAS Number	% by Weight
Polymethylene polyphenylisocyanate	9016-87-9	35 Max
4,4' Methylene bis(phenylisocyanate)	101-68-8	25 Max

TSCA Inventory Status (40 CFR710): All components of this formulation are listed in the TSCA Inventory.

State Regulations:

California Proposition 65: This product does not intentionally contain any chemicals which have been identified by the state of California to cause cancer, birth defects, or other reproductive harm.

Florida, Massachusetts, Minnesota, Pennsylvania, and Washington Substance List:

Ingredient Name	CAS Number	% wt
4,4' Methylene bis(phenylisocyanate)	101-68-8	25 Max

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA.

Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Special Precautions and Comments

Handling Precautions: Minimize breathing of vapors and avoid prolonged or repeated contact with skin. Wear proper protective equipment. If ventilation is not sufficient, wear proper respiratory equipment. Avoid moisture contamination. Reseal partial containers. Use good general housekeeping procedures.

Storage Requirements: Store in cool, dry, well-ventilated area.

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DOT Transportation Data (49 CFR 172.101):

DOT	IATA	IMDG
Not Classified	Not Classified	Not Classified

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Disclaimer: The information contained in this MSDS is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Freeman Mfg. & Supply Co, it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.