



The Kindt-Collins Company LLC

12651 Elmwood Ave
Cleveland, Ohio 44111

Dynacast Part A

DATE PREPARED: 4/1/04

LAST REVISION: 4/1/04

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Kindt-Collins Company LLC
12651 Elmwood Ave
Cleveland, OH 44111

INFORMATION PHONE: (216) 252-4122
EMERGENCY PHONE: (800) 424-8300
(Chemtrec)

PRODUCT NAME: Dynacast Part A

PRODUCT NUMBER:
UPC NUMBER:

SYNONYMS: Dynacast A

PREPARED BY Kathy Louney-Bilski

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Ingredient %	OSHA PEL	ACGIH TLV
METHYLENE BISPHENYL ISOCYANATE	101688	15	PEL = (C)0.02 ppm((C)0.2mg/M3)	TLV = 0.005ppm(0 mg/M3)
AROMATIC PETROLEUM HYDROCARBON	64742956	3		50 ppm

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW:

POTENTIAL HEALTH EFFECTS

EYE CONTACT: May Cause Tearing

INHALATION: Breathlessness, severe coughing, chest discomfort

INGESTION: Oral LD50 for rats is >15000 MG/KG on MDI

SKIN CONTACT: Minor Irritation May Occure

SIGNS AND SYMPTOMS OF EXPOSURE:

Eye, skin, or respiratory irritation.

4. FIRST AID MEASURES

EYE CONTACT: Flush with Copious Amounts of water for 15 minutes; Contact Physician

INHALATION: Remove victim to fresh air (away from source) If symptoms of over exposure develop, get medical attention.

INGESTION: Do Not Induce Vomiting, Give one Glass of Water or Milk, Contact Physician immediately

SKIN CONTACT: Wash affected area with soap and water. If irritation persists, get medical attention.

AGGRAVATED MEDICAL CONDITIONS:

None Known

SUPPLEMENTAL HEALTH INFORMATION:

Small % of population may develop allergic sensitivity leading to asthma-like symptoms on subsequent exposure below the TLV of MDI

5. FIRE FIGHTING MEASURES**FLAMMABLE PROPERTIES**

FLASH POINT: >300°F COC

FLASH POINT METHOD USED: COC

AUTOIGNITION: N/A

LEL: N/A

UEL: N/A

EXTINGUISHING MEDIA:

Use type ABC extinguisher

SPECIAL FIRE FIGHTING PROCEDURES:

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Avoid water contamination in closed containers or confined areas (carbon dioxide evolved-exothermic, dangerous pressure can develop).

COMBUSTION PRODUCTS:

@500°F- Carbon Nonoxide, Nitrogen Oxides, Traces of Hydrogen Cyanide

6. ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:**

Absorb on absorbent material

7. HANDLING AND STORAGE**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

Use good industrial hygiene and safety practices employed with any industrial chemical

OTHER PRECAUTIONS:

Practice good housekeeping. Clean up spills promptly.

8. EXPOSURE CONTROL/PERSONAL PROTECTION**RESPIRATORY PROTECTION:**

Dust respirators are only necessary when performing operations such as grinding, machining or polishing the cast products

VENTILATION: Face Velocity-60PPM: Use only with adequate ventilation

PROTECTIVE GLOVES: Chemical resistant protective gloves

EYE PROTECTION: A face shield is recommended

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: A chemical resistant apron and other protective gear may be used as needed to reduce chances of contact

WORK / HYGENIC PRACTICES:

Wash thoroughly with soap and water before eating, after each shift, or after any contact with product. Launder work clothes frequently

ENGINEERING CONTROLS: CONTAINERS CONTAMINATED BY MOISTURE SHOULD BE LEFT VENTED

EXPOSURE GUIDELINES:

9. PHYSICAL AND CHEMICAL PROPERTIES

SOLUBILITY IN WATER:	N/A	APPEARANCE AND ODOR:	Brown liquid, slight aromatic odor
BOILING POINT:	>300°F	FREEZING POINT:	N/A
VAPOR PRESSURE	<10mmHg @25°C	PERCENT VOLATILE:	5-10%
EVAPORATION:	(Butyl Acetate=1) <.2	PH:	N/A
POUNDS PER GALLON	N/A	MOLECULAR WEIGHT:	N/A
SPECIFIC GRAVITY:	1.7	VAPOR DENSITY:	8.0
MELTING POINT:	N/A	OTHER PROPERTIES:	VOC 2.9%

10. STABILITY AND REACTIVITY

STABLE: Stable

INCOMPATIBILITY: Water, Strong Bases, Alcohols, and Metal Compounds.

HAZARDOUS DECOMPOSITION OR BY PRODUCTS: Carbon Monoxide, Nitrogen Oxides, and trace amounts of Hydrogen Cyanide.

HAZARDOUS POLYMERIZATION: May Occur

11. TOXICOLOGY INFORMATION

THRESHOLD LIMIT VALUE: .02 PPM ON MDL MIXTURE

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, on the ground, or in any body of water.

14. TRANSPORTATION INFORMATION

DOT CLASS:	DIPHENYLMETHANE - 4,4, - DIISOC
HAZARD CLASS:	N/A
UN NUMBER:	N/A
PACKING:	N/A
GUIDE NUMBER:	N/A
PROPER SHIPPING NAME:	DIPHENYLMETHANE - 4,4, - DIISOC

15. REGULATORY INFORMATION

EC Classification:

SARA Title III

Section 302 : Extremely Hazardous (If Section is blank - then it is N/A (not applicable))

Chemical Name	CAS number	Wt. %
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per 40 CFR 372.45(f) toxic chemicals if so listed here in the mixture do not exceed the specified upper bound concentration value listed as Wt%

Section 311-312: Hazardous Categorization (If Section is blank - then it is N/A (not applicable))

Chemical Name	CAS number	Wt. %
METHYLENE BISPHENYL ISOCYANATE	101688	15
AROMATIC PETROLEUM HYDROCARBON	64742956	3

Section 313: Toxic Chemical (If Section is blank - then it is N/A (not applicable))

Chemical Name	CAS number	Wt. %
METHYLENE BISPHENYL ISOCYANATE	101688	15

WHIMIS (If Section is blank - then it is N/A (not applicable))

Chemical name	CAS number	Wt. %
METHYLENE BISPHENYL ISOCYANATE	101688	15

Proposition 65 (If Section is blank - then it is N/A (not applicable))

METHYLENE BISPHENYL ISOCYANATE	101688	15
Chemical name	CAS number	Wt. %

16. OTHER INFORMATION

HMIS INFORMATION: HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 1 PROTECTIVE: F

DISCLAIMER

The information contained herein is based on the data available to The Kindt-Collins LLC and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. We assume no responsibilities for injury from the use of this product described herein.

We only warrant to you, but no other persons, that the product herein shall conform to our Quality Assurance specifications on the date of shipment to you. Any technical advise, information, or recommendations given to you is given gratis without any warranty, expressed or implied.



The Kindt-Collins Company LLC

12651 Elmwood Ave
Cleveland, Ohio 44111

Dynacast Part B

DATE PREPARED: 4/2/04

LAST REVISION: 4/2/04

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Kindt-Collins Company LLC
12651 Elmwood Ave
Cleveland, OH 44111

INFORMATION PHONE: (216) 252-4122

EMERGENCY PHONE: (800) 424-9300
(Chemtrec)

PRODUCT NAME: Dynacast Part B

PRODUCT NUMBER:

UPC NUMBER:

SYNONYMS: Dynacast B

PREPARED BY Kathy Louney-Bilski

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Ingredient %	OSHA PEL	ACGIH TLV
AROMATIC PETROLEUM HYDROCARBON	64742936	7		50 ppm

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: Non-Regulated

POTENTIAL HEALTH EFFECTS

EYE CONTACT: May Cause Tearing

INHALATION: N.E

INGESTION: N.E

SKIN CONTACT: Minor Irritation May Occur

SIGNS AND SYMPTOMS OF EXPOSURE:

Eye, skin, or respiratory irritation.

4. FIRST AID MEASURES

EYE CONTACT: Flush with Copious Amounts of water for 15 minutes; Contact Physician

INHALATION: Remove From Contaminated Area, Administer Oxygen

INGESTION: Do not induce vomiting, give one glass of water or milk; Contact Physician

SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.

AGGRAVATED MEDICAL CONDITIONS:

N.E.

SUPPLEMENTAL HEALTH INFORMATION:

N/A

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: >300°F COC

FLASH POINT METHOD USED: COC

AUTOIGNITION: N/A

LEL: N/A

UEL: N/A

EXTINGUISHING MEDIA:

Use type ABC extinguisher

SPECIAL FIRE FIGHTING PROCEDURES:

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

N/A

COMBUSTION PRODUCTS:

Smoke, Fumes, Carbon Monoxide

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:

Absorb on absorbent material

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Use good industrial hygiene and safety practices employed with any industrial chemical

OTHER PRECAUTIONS:

Dispose of empty containers in accordance with local, state and federal regulations

8. EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

Use NIOSH approved equipment if airborne exposure is excessive

VENTILATION: 60 PPM: use only with adequate ventilation

PROTECTIVE GLOVES: Chemical resistant protective gloves

EYE PROTECTION: Face shield is recommended

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

A chemical resistant apron and other protective gear may be used as needed to reduce chances of contact.

WORK / HYGENIC PRACTICES:

Wash thoroughly with soap and water before eating, after each shift, or after any possible contact with this product. Launder work clothes frequently.

ENGINEERING CONTROLS: Use only with adequate ventilation

EXPOSURE GUIDELINES:**9. PHYSICAL AND CHEMICAL PROPERTIES**

SOLUABILITY IN WATER:	15-25%	APPEARANCE AND ODOR:	Blue liquid slight aromatic odor
BOILING POINT:	>300°F	FREEZING POINT:	N/A
VAPOR PRESSURE	<10mmHg @ 25°C	PERCENT VOLATILE:	5-10%
EVAPORATION:	(,Butyl Acetate =1) <1	PH:	N/A
POUNDS PER GALLON	N/A	MOLECULAR WEIGHT:	N/A
SPECIFIC GRAVITY:	1.6	VAPOR DENSITY:	N/A
MELTING POINT:	N/A	OTHER PROPERTIES:	VOC 8.9%

10. STABILITY AND REACTIVITY

STABLE: Stable **INCOMPATIBILITY:** N.E.

HAZARDOUS DECOMPOSITION OR BY PRODUCTS: Smoke, Fumes, Carbon Monoxide

HAZARDOUS POLYMERIZATION: Will Not Occur

11. TOXICOLOGY INFORMATION**12. ECOLOGICAL INFORMATION**

Keep out of waterways and sewers.

13. DISPOSAL CONSIDERATIONS

Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, on the ground, or in any body of water.

14. TRANSPORTATION INFORMATION

DOT CLASS:
HAZARD CLASS:
UN NUMBER:
PACKING:
GUIDE NUMBER:
PROPER SHIPPING NAME:

15. REGULATORY INFORMATION

EC Classification: Toxic Substances Control Act (TSCA) all ingredients are on the TSCA chemical substance inventory

SARA Title III

per 40 CFR 372.45(f) toxic chemicals if so listed here in the mixture do not exceed the specified upper bound concentration value listed as Wt%

Section 302 : Extremely Hazardous (If Section is blank - then it is N/A (not applicable))

Chemical Name	CAS number	Wt. %
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Section 311-312: Hazardous Categorization (If Section is blank - then it is N/A (not applicable))

Chemical Name	CAS number	Wt. %
AROMATIC PETROLEUM HYDROCARBON	84742956	7

Section 313: Toxic Chemical (If Section is blank - then it is N/A (not applicable))

Chemical Name	CAS number	Wt. %
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WHIMIS (If Section is blank - then it is N/A (not applicable))

Chemical name	CAS number	Wt. %
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Proposition 65 (If Section is blank - then it is N/A (not applicable))

Chemical name	CAS number	Wt. %
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16. OTHER INFORMATION

HMS INFORMATION: HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0 PROTECTIVE: F

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We only warrant to you, but no other persons, that the product herein shall conform to our Quality Assurance specifications on the date of shipment to you. Any technical advise, information, or recommendations given to you is given gratis without any warranty, expressed or implied.