

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

MANUFACTURER:	Diamapro Systems, Inc.	EMERGENCY PHONE:	1-800-424-9300
ADDRESS :	325 West Front Street	INFORMATION PHONE:	1-800-622-2048
	Erie, PA 16507	NAME OF PREPARER:	Safety Director

PRODUCT NAME: Diamapro Diamapro Joint Fill 90 A component
PRODUCT CODE: DPDJ90A

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS08 Health Hazard

Resp. Sens. 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carc. 2	H351 Suspected of causing cancer.
STOT RE 2	H373 May cause damage to organs through prolonged or repeated exposure.

GHS07



Acute Tox. 4	H332 Harmful if inhaled.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2A	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
STOT SE 3	H335 May cause respiratory irritation.

Label Elements

GHS Label Elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS07

GHS08

Signal Word Danger

Hazard-determining components of labeling:

4,4'-methylenediphenyl diisocyanate
 methylenediphenyl diisocyanate

Hazard Statements

Harmful if inhaled.
 Causes skin irritation.
 Causes serious eye irritation.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause an allergic skin reaction.
 Suspected of causing cancer.
 May cause respiratory irritation.
 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not breathe dust/fume/gas/mist/vapors/spray.
 Wash thoroughly after handling.

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Use only outdoors or in a well-ventilated area.
 Contaminated work clothing must not be allowed out of the workplace.
 Wear protective gloves/protective clothing/eye protection/face protection.
 [In case of inadequate ventilation] wear respiratory protection.
 If on skin: Wash with plenty of water.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 IF exposed or concerned: Get medical advice/attention.
 Call a poison center/doctor if you feel unwell.
 Specific treatment (see on this label).
 Get medical advice/attention if you feel unwell.
 Take off contaminated clothing and wash it before reuse.
 If skin irritation or rash occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 If experiencing respiratory symptoms: Call a poison center/doctor.
 Wash contaminated clothing before reuse.
 Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification System:

NFPA ratings (scale 0 - 4)

Health = 2
 Fire = 1
 Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH *2
 FIRE 1
 REACTIVITY 0

Other Hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

===== SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS =====

Chemical Characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:		
101-68-8	4,4'-methylenediphenyl diisocyanate	26.6–49%
26447-40-5	methylenediphenyl diisocyanate	0.75–1.16%

===== SECTION 4 - FIRST AID MEASURES =====

Description of First Aid Measures

General Information:

Immediately remove any clothing soiled by the product.
 Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After Inhalation:

Supply fresh air and to be sure call for a doctor.
 In case of unconsciousness place patient stably in side position for transportation.

After Skin Contact:

Immediately wash with water and soap and rinse thoroughly.

After Eye Contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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After Swallowing:

If symptoms persist consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

===== SECTION 5 - FIRE AND EXPLOSION HAZARD DATA =====

Extinguishing Media

Suitable extinguishing agents: Use fire fighting measures that suit the environment.

Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.

Advice for firefighters

Protective equipment: Mouth respiratory protective device.

===== SECTION 6 - ACCIDENTAL RELEASE MEASURES =====

Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.

Environmental precautions:

Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

Protective Action Criteria for Chemicals

PAC-1:		
68092-58-0	Polyurethane Prepolymer	30 mg/m ³
101-68-8	4,4'-methylenediphenyl diisocyanate	0.45 mg/m ³
26447-40-5	methylenediphenyl diisocyanate	29 mg/m ³

PAC-2:		
68092-58-0	Polyurethane Prepolymer	330 mg/m ³
101-68-8	4,4'-methylenediphenyl diisocyanate	5 mg/m ³
26447-40-5	methylenediphenyl diisocyanate	40 mg/m ³

PAC-3:		
68092-58-0	Polyurethane Prepolymer	2,000 mg/m ³
101-68-8	4,4'-methylenediphenyl diisocyanate	55 mg/m ³
26447-40-5	methylenediphenyl diisocyanate	240 mg/m ³

===== SECTION 7 - HANDLING AND STORAGE =====

Handling:
Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.

Information about protection against explosions and fires: Keep respiratory protective device available.

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Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:
Information about storage in one common storage facility:
Further information about storage conditions:
Specific end use(s)

No special requirements.
 Not required.
 Keep receptacle tightly sealed.
 No further relevant information available.

===== SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION =====

Additional information about design of technical systems:

No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit. At this time, the remaining constituent has no known exposure limits.

101-68-8 4,4'-methylenediphenyl diisocyanate	
PEL	Ceiling limit value: 0.2 mg/m ³ , 0.02 ppm
REL	Long-term value: 0.05 mg/m ³ , 0.005 ppm Ceiling limit value: 0.2* mg/m ³ , 0.02* ppm *10-min
TLV	Long-term value: 0.005 ppm

Additional information:

The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Store protective clothing separately.
 Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:

Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed goggles

===== SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES =====

Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid
Color: According to product specification

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Odor:	Aromatic
Odor threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	200 °C (392 °F)
Flash point:	150 °C (302 °F)
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 20 °C (68 °F):	0 hPa
Density:	Not determined.
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
Other information	No further relevant information available.

===== SECTION 10 - STABILITY AND REACTIVITY DATA =====

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions

No dangerous reactions known.

Conditions to avoid

No further relevant information available.

Incompatible materials:

No further relevant information available.

Hazardous decomposition products:

No dangerous decomposition products known.

===== SECTION 11 - TOXICOLOGICAL INFORMATION =====

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Inhalative	LC50/4 h	2.99–5.49 mg/l
101-68-8 4,4'-methylenediphenyl diisocyanate		
Oral	LD50	2,200 mg/kg (mouse)

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

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Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

Carcinogenic categories

IARC (International Agency for Research on Cancer)

101-68-8 4,4'-methylenediphenyl diisocyanate 3

NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

===== SECTION 12 - ECOLOGICAL INFORMATION =====

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

===== SECTION 13 - DISPOSAL CONSIDERATIONS =====

Waste treatment methods

Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

===== SECTION 14 - TRANSPORT INFORMATION =====

UN-Number

DOT, IMDG, IATA not regulated

UN proper shipping name

DOT, IMDG, IATA not regulated

Transport hazard class(es)

DOT, ADN, IMDG, IATA
Class not regulated

Packing group

DOT, IMDG, IATA not regulated

Environmental hazards:

Not applicable.

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

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UN "Model Regulation": not regulated

===== SECTION 15 - REGULATORY INFORMATION =====

Safety, health and environmental regulations/legislation specific for the substance or mixture

No further relevant information available.

Sara

Section 355 (extremely hazardous substances):	None of the ingredients is listed.
Section 313 (Specific toxic chemical listings):	101-68-8 4,4'-methylenediphenyl diisocyanate
TSCA (Toxic Substances Control Act):	All components have the value ACTIVE.
Hazardous Air Pollutants	101-68-8 4,4'-methylenediphenyl diisocyanate

Proposition 65

Chemicals known to cause cancer:	None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for females:	None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for males:	None of the ingredients is listed.
Chemicals known to cause developmental toxicity:	None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)	101-68-8 4,4'-methylenediphenyl diisocyanate	D, CBD
TLV (Threshold Limit Value)	None of the ingredients is listed.	
NIOSH-Ca (National Institute for Occupational Safety and Health)	None of the ingredients is listed.	

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

GHS07
GHS08

Signal word Danger

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Hazard statements

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Causes serious eye irritation.
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May cause an allergic skin reaction.
Suspected of causing cancer.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
[In case of inadequate ventilation] wear respiratory protection.
If on skin: Wash with plenty of water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Call a poison center/doctor if you feel unwell.
Specific treatment (see on this label).
Get medical advice/attention if you feel unwell.
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.

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If eye irritation persists: Get medical advice/attention.
 If experiencing respiratory symptoms: Call a poison center/doctor.
 Wash contaminated clothing before reuse.
 Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

===== **SECTION 16 - OTHER INFORMATION** =====

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety
 OSHA: Occupational Safety & Health
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
 Resp. Sens. 1: Respiratory sensitisation – Category 1
 Skin Sens. 1: Skin sensitisation – Category 1
 Carc. 2: Carcinogenicity – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Prepared By: S. Thome
 Revision Date: 5/16/2019

The information herein is based on data considered to be accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results. Also this shall not establish a legally valid contractual relationship.

Vendor assumes no responsibility for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in use of the material.

Our products are intended for sale to industrial and commercial customers. We encourage customers to inspect and test our products before use and to satisfy themselves as to suitability for their specific applications.

Warranty: The manufacturer warrants that products sold comply with specifications as represented and will perform satisfactorily if used according to the directions, or the manufacturer will refund or replace any unused portion thereof, for a period of one year from the date of manufacture. The manufacturer does not make any other warranty, or assume responsibility of any kind, expressed or implied regarding the effect or result of the products use; and assumes no responsibility of injury to vendee or third parties proximately caused by the material if reasonable safety procedures are not adhered to.