Printing date 10/28/2019 Reviewed on 10/28/2019

#### 1 Identification

· Product identifier

· Trade name: Hi-Tech PE 65 B

Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Progressive Fastening Systems

Hi-Tech Systems

1190 N. Del Rio Place

Ontario CA, 91764

www.hitechpolyurea.com

Phone (909) 945-5530 Fax (909) 945-3009

- · Information department: Product Safety Department
- · Emergency telephone number:

INFOTRAC (24 HOURS) USA 1 800-533-5053 / INTERNATIONAL 1-352-323-3500

USE ONLY FOR HAZARDOUS MATERIALS OR DANGEROUS GOODS INCIDENT - SPILLS, LEAKS, FIRE,

EXPOSURE, OR ACCIDENT CN 109479

#### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · Label elements
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

GHS08

- · Signal word Warning
- · Hazard-determining components of labeling:

diethylmethylbenzenediamine

*Bis*(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate

· Hazard statements

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

(Contd. on page 2)

Printing date 10/28/2019 Reviewed on 10/28/2019

Trade name: Hi-Tech PE 65 B

(Contd. of page 1)

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Get medical advice/attention if you feel unwell.

If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2Fire = 1

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

#### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.

	· Dangerous components:		
Ī	68479-98-1	diethylmethylbenzenediamine	10.0%
Ī	41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	0.1-0.2%

#### 4 First-aid measures

- · Description of first aid measures
- · General information:

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.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)

Printing date 10/28/2019 Reviewed on 10/28/2019

Trade name: Hi-Tech PE 65 B

(Contd. of page 2)

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

#### 5 Fire-fighting measures

- · 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.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- Environmental precautions: 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

	•	
· <i>PAC-1</i> :		
102-60-3	1,1',1"',1"'-ethylenedinitrilotetrapropan-2-ol	34 mg/m³
1305-78-8	calcium oxide	6 mg/m <sup>3</sup>
· PAC-2:		
102-60-3	1,1',1"',1"'-ethylenedinitrilotetrapropan-2-ol	370 mg/m³
1305-78-8	calcium oxide	110 mg/m³
· <i>PAC-3</i> :		
102-60-3	1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol	2,200 mg/m³
1305-78-8	calcium oxide	660 mg/m³

#### 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.

(Contd. on page 4)

Printing date 10/28/2019 Reviewed on 10/28/2019

Trade name: Hi-Tech PE 65 B

(Contd. of page 3)

· Specific end use(s) No further relevant information available.

#### 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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 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.

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

- IIS

Printing date 10/28/2019 Reviewed on 10/28/2019

Trade name: Hi-Tech PE 65 B

(Contd. of page 4)

· Information on basic physical and chemical properties				
General Information				
Appearance:	7 1			
Form:	Liquid Clear			
Color: Odor:	Clear slight odour			
Odor threshold:	Not determined.			
pH-value:	Not determined.			
Change in condition				
Melting point/Melting range:	Undetermined.			
Boiling point/Boiling range:	94 °C (201.2 °F)			
Flash point:	200 °C (392 °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:	Not determined.			
Density:	Not determined.			
Relative density	Not determined.			
Vapor density	Not determined.			
Evaporation rate	Not determined.			
Solubility in / Miscibility with				
Water:	Not miscible or difficult to mix.			
Partition coefficient (n-octanol/wat	t <b>er):</b> 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.			

### 10 Stability and reactivity

- · 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.

(Contd. on page 6)

Printing date 10/28/2019 Reviewed on 10/28/2019

Trade name: Hi-Tech PE 65 B

(Contd. of page 5)

· Hazardous decomposition products: No dangerous decomposition products known.

#### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:					
ATE (Acute Toxicity Estimate)					
Oral	LD50	7,380 mg/kg (rat)			
Dermal	LD50	>20,000 mg/kg (rat)			

#### 68479-98-1 diethylmethylbenzenediamine

 Oral
 LD50
 738 mg/kg (rat)

 Dermal
 LD50
 >2,000 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:

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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

#### 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 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

US

Printing date 10/28/2019 Reviewed on 10/28/2019

Trade name: Hi-Tech PE 65 B

(Contd. of page 6)

### 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:

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

· Recommendation: Disposal must be made according to official regulations.

UN-Number	
DOT	not regulated
IMDG, IATA	UN3082
UN proper shipping name	
DOT	not regulated
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUINO.O.S. (diethylmethylbenzenediamine, Bis(1,2,2,6,6-pentamethyl-
	piperidyl) sebacate), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUI
	N.O.S. (diethylmethylbenzenediamine)
Transport hazard class(es)	
DOT	
Class	not regulated
Class	9 Miscellaneous dangerous substances and articles
Label	9
2	
Packing group	
Packing group DOT	not regulated
Packing group	
Packing group DOT	not regulated
Packing group DOT IMDG, IATA Environmental hazards: Marine pollutant:	not regulated III Symbol (fish and tree)
Packing group DOT IMDG, IATA Environmental hazards: Marine pollutant:	not regulated III
Packing group DOT IMDG, IATA Environmental hazards: Marine pollutant: Special marking (IATA):	not regulated III Symbol (fish and tree)
Packing group DOT IMDG, IATA Environmental hazards: Marine pollutant: Special marking (IATA): Special precautions for user	not regulated III  Symbol (fish and tree) Symbol (fish and tree)  Warning: Miscellaneous dangerous substances and articles 90
Packing group DOT IMDG, IATA Environmental hazards: Marine pollutant: Special marking (IATA):	not regulated III  Symbol (fish and tree) Symbol (fish and tree)  Warning: Miscellaneous dangerous substances and articles

Not applicable.

(Contd. on page 8)

Printing date 10/28/2019 Reviewed on 10/28/2019

Trade name: Hi-Tech PE 65 B

	(Contd. of page 7
· Transport/Additional information:	
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S. (DIETHYLMETHYLBENZENEDIAMINE), 9, III

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- ·Sara
- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

- · 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)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

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).

(Contd. on page 9)

(Contd. of page 8)

### Safety Data Sheet acc. to OSHA HCS

Printing date 10/28/2019 Reviewed on 10/28/2019

Trade name: Hi-Tech PE 65 B

#### · Hazard pictograms





GHS07

#### · Signal word Warning

#### · Hazard-determining components of labeling:

diethylmethylbenzenediamine

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate

#### · Hazard statements

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure.

#### · Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Get medical advice/attention if you feel unwell.

If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see on this label).

*If eve irritation persists: Get medical advice/attention.* 

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 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.

#### · Date of preparation / last revision 10/28/2019 / -

#### · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

(Contd. on page 10)

Printing date 10/28/2019 Reviewed on 10/28/2019

Trade name: Hi-Tech PE 65 B

(Contd. of page 9)

Skin Sens. 1: Skin sensitisation – Category 1 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2 • \* Data compared to the previous version altered.