Printing date 04/09/2018

Reviewed on 04/03/2018

1 Identification

- · Product identifier
- Trade name: <u>Hi-Tech ProMender Flex ''B''</u>
- · Details of the supplier of the safety data sheet

 Manufacturer/Supplier: Progressive Fastening Systems Inc. Hi-Tech Systems 1190 N. Del Rio Place Ontario, CA 91764

Phone (909) 945-5530 Fax (909) 945-3009 www.hitechpolyurea.com

· Information department: Product Safety Department

· Emergency telephone number:

INFOTRAC (24 HOURS) USA 1-800-535-5053 / INTERNATIONAL 1-352-323-3500 USE ONLY FOR HAZARDOUS MATERIALS (OR DANGEROUS GOODS) INCIDENT - SPILLS, LEAKS, FIRE, EXPOSURE, OR ACCIDENT CN109479

2 Hazard(s) identification

· Classification of the substance or mixture

GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

Flam. Liq. 4 H227 Combustible liquid.

· Label elements

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



· Signal word Danger

Hazard-determining components of labeling: Distillates (petroleum), hydrotreated light Solvent naphta (petroleum) heavy aliph.
Hazard statements Combustible liquid.
Causes serious eye irritation. May be fatal if swallowed and enters airways.
Precautionary statements Keep away from flames and hot surfaces. – No smoking. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Immediately call a poison center/doctor.

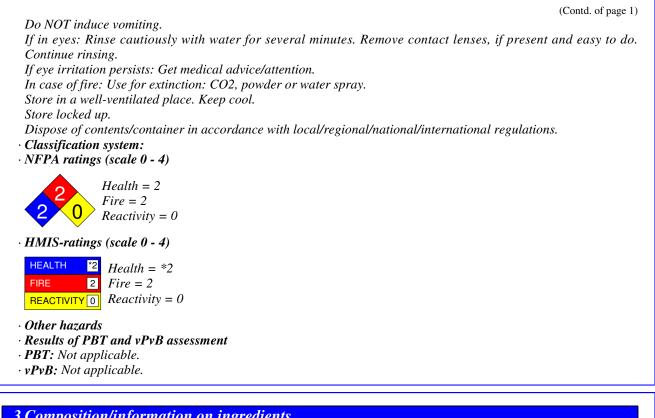
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3 Composition/information on ingredients

· Chemical characterization: Mixtures

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

· Dangerous components:				
64742-47-8	Distillates (petroleum), hydrotreated light Flam. Liq. 3, H226; I Asp. Tox. 1, H304	>10-≤25%		
64742-96-7	Solvent naphta (petroleum) heavy aliph.	>10-≤25%		
	🚸 Asp. Tox. 1, H304			
	calcium oxide	≥1-≤2.5%		
	 Eye Dam. 1, H318			

4 First-aid measures

· Description of first aid measures

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: Drink 200-300ml of water
- · 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.

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5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: water spray, dry powder, carbon dioxide, foam
- Special hazards arising from the substance or mixture Hazards during fire-fighting:
- nitrous gases, fumes/smoke, isocyanate, vapour
- Advice for firefighters
 Protective equipment: Firefighters should be equipped with self-contained breathing apparatus and turn out gear.
- Additional information Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- *Methods and material for containment and cleaning up: Dispose of the collected material according to regulations. 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

102-60-3 1,1',1'''-ethylenedinitrilotetrapropan-2-ol	34 mg/m ³
1305-78-8 calcium oxide	6 mg/m ³
- PAC-2:	
102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol	370 mg/m ³
1305-78-8 calcium oxide	110 mg/m ³
· PAC-3:	
102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol	2,200 mg/m ³
1305-78-8 calcium oxide	660 mg/m ³

7 Handling and storage

· Handling:

- · Precautions for safe handling Ensure thorough ventilation of stores and work area. Protect against moisture.
- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · Conditions for safe storage, including any incompatibilities
- Segregate from foods and animal feeds. Segregate friom acids and bases.
- Storage:
- Requirements to be met by storerooms and receptacles:
- Carbon Steel, (Iron), High density polyethylene (HDPE), Low density polyethylene (LDPE)
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.

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• 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:

1305-78-8 calcium oxide

PEL Long-term value: 5 mg/m³

REL Long-term value: 2 mg/m³

TLV Long-term value: 2 mg/m³

• 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. Avoid contact with the eyes.

Avoid contact with the eyes and skin.

• Breathing equipment: Not required.

• Protection of hands:

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 \cdot **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

· Body protection: Protective work clothing

9 Physical and chemical properties • Information on basic physical and chemical properties • General Information • Appearance: Form: Liquid Color: Clear to slight Cloudy • Odor: slight odour

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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:	61 °C (141.8 °F)	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	210 °C (410 °F)	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
· Explosion limits:		
Lower:	0.5 Vol %	
Upper:	6.5 Vol %	
· Vapor pressure at 20 °C (68 °F):	2 hPa (1.5 mm Hg)	
• Density at 20 °C (68 °F):	0.99576 g/cm³ (8.30962 lbs/gal)	
· 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/wate	er): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
VOC content:	0.00~%	
	0.0 g/l / 0.00 lb/gl	
Solids content:	78.9 %	
• 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

Contact with certain rubbers and plastics can cause brittleness of the substance/product with subsequent loss in strength.

Exothermic reaction. Reacts with strong acids and alkalies. Reacts with oxidizing agents.

• *Conditions to avoid Temperature < 0 degrees Celsius*

Avoid moisture

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• Incompatible materials: acids, oxidizing agents, isocyanates acids, amings, alcohols, water, Alkalines

acids, amines, alcohols, water, Alkalines, strong bases, Products that react with isocyantes

• Hazardous decomposition products: aromatic isocyanates, gases/vapours

carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen cyanide

11 Toxicological information

· Information on toxicological effects

- · Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- \cdot 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 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.
- \cdot **Other adverse effects** No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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

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(Contd. of page 6) Incinerate in a licensed facility. Dispose of in a licensed facility. Do not discharge substance/product into sewer system.

· Uncleaned packagings:

• **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number · DOT, ADN, IMDG, IATA	not regulated			
· UN proper shipping name · DOT, ADN, 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.				
· UN "Model Regulation":	not regulated			

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot 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 ingredients are 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.

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· 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). • *Hazard pictograms*



· Signal word Danger

• *Hazard-determining components of labeling: Distillates (petroleum), hydrotreated light Solvent naphta (petroleum) heavy aliph.*

· Hazard statements

Combustible liquid. Causes serious eye irritation.

May be fatal if swallowed and enters airways.

· Precautionary statements

Keep away from flames and hot surfaces. - No smoking.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

Do NOT induce vomiting.

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

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

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.

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.

· Department issuing SDS: Environment protection department.

· Contact: Safety Department

· Date of preparation / last revision 04/09/2018 / 2

• Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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EINECS: European Inventory of Existing Commercial Chemical Substances	(1.0.1)
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)	
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	
Flam. Liq. 3: Flammable liquids – Category 3	
Flam. Liq. 4: Flammable liquids – Category 4	
Eye Dam. 1: Serious eye damage/eye irritation – Category 1	
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A	
Asp. Tox. 1: Aspiration hazard – Category 1	
• * Data compared to the previous version altered.	