Printing date 04/09/2018 Reviewed on 04/03/2018

1 Identification

· Product identifier

· Trade name: Hi-Tech Spall RX "B"

· 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

Carc. 2 H351 Suspected of causing cancer.

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

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



GHS08

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

Solvent naphtha (petroleum), heavy arom. naphthalene

· Hazard statements

Combustible liquid.

Suspected of causing cancer.

May be fatal if swallowed and enters airways.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

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

If swallowed: Immediately call a poison center/doctor.

Do NOT induce vomiting.

IF exposed or concerned: Get medical advice/attention.

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

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Store in a well-ventilated place. Keep cool.

Store locked up.

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

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



Health = 0Fire = 2Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0Fire = 2

- · 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:	
64742-94-5	Solvent naphtha (petroleum), heavy arom.	>50-≤100%
	♦ Asp. Tox. 1, H304	1
	naphthalene	>2.5-<10%
	🕸 Carc. 2, H351; 🕂 Acute Tox. 4, H302; Flam. Liq. 4, H227	1
95-63-6	1,2,4-trimethylbenzene	≥0.1-≤2.5%
	Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	

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 at least 15 minutes under running water.
- · After swallowing:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if victim is unconscious or having convulsions. 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.

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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: Prevent seepage into sewage system, workpits and cellars.
- · 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

· PAC-1:		
102-60-3	1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol	34 mg/m³
91-20-3	naphthalene	15 ppm
95-63-6	1,2,4-trimethylbenzene	140 ppm
· PAC-2:		
102-60-3	1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol	370 mg/m³
91-20-3	naphthalene	83 ppm
95-63-6	7-63-6 1,2,4-trimethylbenzene	
· <i>PAC-3</i> :		
102-60-3	1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol	$2,200 \text{ mg/m}^3$
91-20-3	naphthalene	500 ppm
95-63-6	1,2,4-trimethylbenzene	480 ppm

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.

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- · 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:

When stored between 60-80 $^{\circ}$ F in sealed containers, typical shelf life is 12 months from the date of manufacture. Keep receptacle tightly sealed.

· 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

C	1	41	• •	
· Components with	ıımıı vaiues	tnat reautre	monitoring	at the workhlace:

91-20-3 naphthalene

PEL Long-term value: 50 mg/m³, 10 ppm

REL Short-term value: 75 mg/m³, 15 ppm

Long-term value: 50 mg/m³, 10 ppm

TLV Long-term value: 52 mg/m³, 10 ppm

Skin; BEI

95-63-6 1,2,4-trimethylbenzene

REL Long-term value: 125 mg/m³, 25 ppm

TLV Long-term value: 123 mg/m³, 25 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.

Wash hands before breaks and at the end of work.

- · 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

· 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: Wear face shield if splashing hazard exists.
- · **Body protection:** Protective work clothing

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

Color: According to product specification

· Odor: Characteristic
· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 207.8 °C (406 °F)

• Flash point: $66 \, ^{\circ}C \, (150.8 \, ^{\circ}F)$

· Flammability (solid, gaseous): Not applicable.

• Ignition temperature: 540 °C (1,004 °F)

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

· Explosion limits:

Lower:Not determined.Upper:7.0 Vol %

· Vapor pressure: Not determined.

• Density: Not determined.
• Relative density Not determined.
• Not determined.

· Vapor density at 20 °C (68 °F)

• Evaporation rate Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined. **Kinematic:** Not determined.

· Solvent content:

Organic solvents: 1.4 % VOC content: 1.44 %

14.4 g/l / 0.12 lb/gl

· 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.

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· 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 Avoid moisture
- · Incompatible materials:

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:

· LD/LC50	LD/LC50 values that are relevant for classification:			
ATE (Acua	ATE (Acute Toxicity Estimate)			
Oral	LD50	9,465 mg/kg (rat)		
Dermal	LD50	99,285 mg/kg (rat)		
Inhalative	LC50/4 h	765 mg/l		
91-20-3 na	91-20-3 naphthalene			
Oral	LD50	490 mg/kg (rat)		
Dermal	LD50	5,000 mg/kg (rat)		
95-63-6 1,.	2,4-trimeth	nylbenzene		
Oral	LD50	5,000 mg/kg (rat)		
	D ' ' ' ' (CC)			

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
91-20-3 naphthalene	2 <i>B</i>
· NTP (National Toxicology Program)	
91-20-3 naphthalene	R
· 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.

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· Additional ecological information:

· General notes: Not known to be hazardous to water.

· Results of PBT and vPvB assessment

- · **PBT**: Not applicable. · **vPvB**: Not applicable.
- · 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. 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.

UN-Number	
DOT	not regulated
IMDG, IATA	UN3082
UN proper shipping name	
DOT	not regulated
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUII
	N.O.S. (NAPHTHALENE, CRUDE, 1,2,4-trimethylbenzene
	MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID
	N.O.S. (NAPHTHALENE, CRUDE, 1,2,4-trimethylbenzene)
Transport hazard class(es)	
DOT	
Class	not regulated
IMDG, IATA	
Class	9 Miscellaneous dangerous substances and articles
Label	9
Packing group	
DOT	not regulated
IMDG, IATA	III
Environmental hazards:	Product contains environmentally hazardous substance naphthalene
Marine pollutant	
Marine pollutant: Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree)

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	(Contd. of page
· Danger code (Kemler):	90
· EMS Number:	F- A , S - F
· Stowage Category	A
· Transport in bulk according to Annex	II of
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· IMDG	
· Limited quantities (LQ)	5L
Excepted quantities (EQ)	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 SUBSTANCES
o	LIQUID, N.O.S. (NAPHTHALENE, CRUDE, 1,2,4 TRIMETHYLBENZENE), 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):
- 91-20-3 naphthalene

95-63-6 1,2,4-trimethylbenzene

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

91-20-3 naphthalene

· 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)			
91-20-3 naphthalene	C, CBD		
95-63-6 1,2,4-trimethylbenzene	II		
· TLV (Threshold Limit Value established by ACGIH)			

91-20-3 naphthalene A4

· 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).

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Safety Data Sheet acc. to OSHA HCS

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Trade name: Hi-Tech Spall RX "B"

· Hazard pictograms



· Signal word Danger

· Hazard-determining components of labeling:

Solvent naphtha (petroleum), heavy arom.

naphthalene

· Hazard statements

Combustible liquid.

Suspected of causing cancer.

May be fatal if swallowed and enters airways.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

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

If swallowed: Immediately call a poison center/doctor.

Do NOT induce vomiting.

IF exposed or concerned: 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 / 4
- · 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

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

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REL: Recommended Exposure Limit

Flam. Liq. 3: Flammable liquids – Category 3

Flam. Liq. 3. Flammable liquids – Category 3
Flam. Liq. 4: Flammable liquids – Category 4
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

Carc. 2: Carcinogenicity – Category 2 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

* Data compared to the previous version altered.