

MATERIAL SAFETY DATA SHEET

Hi-Tech HT FLUID PART "A"

Revised July 21, 2014

1. IDENTIFICATION OF SUBSTANCE

PRODUCT DETAILS

TRADE NAME: HT FLUID PART "A"

Company

Progressive Fastening Systems

Phone: (909) 945-5530

1190 N. Del Rio Pl.

Ontario, CA 91764

Fax: (909) 945-3009

www.hitechpolyurea.com

Emergency Telephone Number: Call CHEMTREC Day or Night, Within USA or Canada 1-800-424-9300

Outside USA or Canada: Call 1-703-527-3887 (collect calls accepted)

Use only for hazardous materials (or dangerous goods) incident - spill, leak, fire, exposure, or accident.

2. COMPOSITION / DATA ON COMPONENTS

Chemical characterization

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

Dangerous Components:		
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)	75-100%

Additional information: For the wording of the listed risk phrases refer to section 16.

3. HAZARDS IDENTIFICATION

Hazard Description:

May cause eye and skin irritation. Prolonged contact may cause sensitization.

Information pertaining to particular dangers for man and environment:

The product has to be labeled due to internationally acknowledged calculation procedures using the latest valid versions.

Classification System:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

NFPA ratings (scale 0-4)



Health = 1
Fire = 1
Reactivity = 0

HMIS-ratings (scale 0-4)



Health = 1
Fire = 1
Reactivity = 0

4. FIRST AID MEASURES

After inhalation:

Supply fresh air and to be sure call for a doctor.

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In case of unconsciousness, place patient stably in side position for transportation.

After Skin Contact:

Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Seek medical treatment.

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment:

Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Measure for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7. HANDLING AND STORAGE

Handling:

Information for safe handling:

Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.

Information about protection against explosions and fires:

No special measures required.

Storage:

Requirements to be met by storerooms and receptacles:

Store in a cool dry location.

Information about storage in one common storage facility:

Store away from incompatible materials.

Further information about storage conditions:

Keep receptacle tightly sealed.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7.

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.

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 and skin.

Breathing equipment:

Not required.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Eye protection:

Wear appropriate eye protection to prevent eye contact.

9. PHYSICAL AND CHEMICAL PROPERTIES**General information:**

Form: Liquid
Color: Grey
Odor: Mild

Change in condition:

Melting point/Melting range: Undetermined
Boiling point/Boiling range: Undetermined

Flash point: >94°C (201°F)

Auto igniting: Product is not self-igniting.

Danger of explosion: Product does not present an explosion hazard.

Density at 20°C (68°F): 1.050 g/cm³

Solubility in/ Miscibility with water: Not miscible or difficult to mix.

Solvent Content: 0.0 %
Organic Solvents:

Solids Content: 100.0%

Volatile Organic Compounds: Not determined

10. STABILITY AND REACTIVITY**Thermal decomposition/ conditions to be avoided:**

No decompositions if used according to specifications.

Dangerous reactions:

No dangerous reactions known.

Dangerous products of decomposition:

No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION**Acute toxicity:****Primary irritant effect:**

On the skin: May cause skin irritation.

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

12. ECOLOGICAL INFORMATION

Ecotoxicological effects:

Remark: Toxic for fish

General Notes:

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

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

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

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

13. DISPOSAL CONSIDERATIONS

Product:

Recommendation:

Must not be disposed of as normal garbage. Do not allow product to reach sewage system. It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.

Un-cleaned packaging:

Recommendation:

Disposal must be made according to Federal, State and Local regulations.

14. TRANSPORTATION INFORMATION

DOT regulations: Not Regulated
Hazard class: N/A
Packing group: III
Remarks: Add "Marine Pollutant" to end of proper shipping name if shipping in a bulk container (>119 gallons)
Limited Quantity Exception: No limited quantity exemption applies for this shipping class.

U.S. Domestic Ground Shipments: Same as listed for Standard Shipments above.

U.S. Domestic Ground Non-Bulk (119 gal or less per container) shipments: Same as listed for Standard Shipments above.

Emergency Response Guide

(ERG) Number: Not Determine

Land Transport ADR/RID (cross-border):

ADR/RID class: N/A

UN-Number:

Packaging Group: III

Maritime transport IMDG:

IMDG Class: 9

UN Number: 3082

Packaging Group: III

Marine Pollutant: Yes

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)

Air transport ICAO-TI and IATA-DGR

Packaging Group: III

15. REGULATIONS

Sara

Section 355 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below. None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65:

Chemicals known to the State of California (Prop. 65) to cause cancer:

25068-38-6/ reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =700)

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.

Carcinogeny categories:

EPA (Environmental Protection Agency)

None of the ingredients is listed.

IARC (International Agency for Research on Cancer)

13463-67-7 titanium dioxide (3)

NTP (National Toxicology Program)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

13463-67-7 titanium dioxide (A4)

MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupations Safety and Health)

13463-67-7 titanium dioxide

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

Product related hazard information's:

The product has been classified and marked in accordance with directives on hazardous materials.

Hazard Symbols:

Xi Irritant

N Dangerous for the environment

Risk phrases:

36/38 Irritating to eyes and skin.

43 May cause sensitization by skin contact.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

2 Keep out of reach of children

24/25 Avoid contact with skin and eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of water.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

37/39 Wear suitable gloves and eye/face protection.

46 If swallowed, seek medical advice immediately and show this container or label.

57 Use appropriate container to avoid environmental contamination.

60 This material and its container must be disposed of as hazardous waste.

16. OTHER INFORMATION

MSDS Prepared by:
Technical Services

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END OF DATA SHEET

MATERIAL SAFETY DATA SHEET

Hi-Tech HT FLUID PART "B"

Revised July 22, 2014

1. IDENTIFICATION OF SUBSTANCE

PRODUCT DETAILS

TRADE NAME: HT FLUID PART "B"

Company

Progressive Fastening Systems
1190 N. Del Rio Pl.
Ontario, CA 91764

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

Emergency Telephone Number: Call CHEMTREC Day or Night, Within USA or Canada 1-800-424-9300
Outside USA or Canada: Call 1-703-527-3887 (collect calls accepted)

Use only for hazardous materials (or dangerous goods) incident - spill, leak, fire, exposure, or accident.

2. COMPOSITION / DATA ON COMPONENTS

Chemical characterization

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

Dangerous Components:		
694-83-7	Cyclohex-1,2-ylenediamine	25-50%
84852-15-3	4-nonylphenol, branched	25-50%
90-72-2	2,4,6- Tris (dimethylaminomethyl) phenol	≤ 5%

Additional information: For the wording of the listed risk phrases refer to section 16.

3. HAZARDS IDENTIFICATION

Hazard Description: Not Applicable

Information pertaining to particular dangers for man and environment:

The product has to be labeled due to internationally acknowledged calculation procedures using the latest valid versions.

Classification System:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

NFPA ratings (scale 0-4)



Health = 3
Fire = 1
Reactivity = 2

HMIS-ratings (scale 0-4)



Health = 3
Fire = 1
Reactivity = 2

4. 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.

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. If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Immediately call a doctor. Drink copious amounts of water and provide fresh air. Immediately call a doctor. Seek medical treatment.

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment:

Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Measure for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

7. HANDLING AND STORAGE

Handling:**Information for safe handling:**

Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.

Information about protection against explosions and fires:

No special measures required.

Storage:**Requirements to be met by storerooms and receptacles:**

Store in a cool dry location.

Information about storage in one common storage facility:

Store away from incompatible materials.

Further information about storage conditions:

Keep receptacle tightly sealed.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional information about design of technical systems:

No further data; see item 7.

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.

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 and skin.

Breathing equipment:

Not required.

Protection of hands:**Protective Gloves**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Eye protection:

Wear appropriate eye protection to prevent eye contact.

9. PHYSICAL AND CHEMICAL PROPERTIES**General information:**

Form: Liquid
Color: Grey
Odor: Distinctive

Change in condition:

Melting point/Melting range: Undetermined
Boiling point/Boiling range: Undetermined

Flash point:

>94°C (> 201°F)

Auto igniting:

Product is not self-igniting.

Danger of explosion:

Product does not present an explosion hazard.

Density at 20° C (68°F)

0.960 g/cm³

Solubility in/ Miscibility with water:

Not miscible or difficult to mix.

Solvent Content:**Organic Solvents:**

0.0 %

Solids content:

100 %

Volatile Organic Compounds:

Not determined

10. STABILITY AND REACTIVITY**Thermal decomposition/ conditions to be avoided:**

No decompositions if used according to specifications.

Dangerous reactions:

No dangerous reactions known.

Dangerous products of decomposition:

No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION**Acute Toxicity:****Primary irritant effect:**

On the skin: Caustic effect on skin and mucous membranes.

On the eye: Strong caustic effect,

Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

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

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12. ECOLOGICAL INFORMATION**Ecotoxicological effects:**

Remark: Very toxic for fish

General Notes:

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

Must not reach bodies of water or drainage ditch undiluted or un-neutralized

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms.

13. DISPOSAL CONSIDERATIONS**Product:****Recommendation:**

Must not be disposed of as normal garbage. Do not allow product to reach sewage system. It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.

Un-cleaned packaging:**Recommendation:**

Disposal must be made according to Federal, State and Local regulations.

14. TRANSPORTATION INFORMATION**DOT regulations:**

Hazard class:

8

Identification number:

UN1760

Packing group:

III

**Proper shipping name
(technical name)**

CORROSIVE LIQUID, N.O.S. (nonylphenol)

Label:

8

Remarks:

Add "Marine Pollutant" to end of proper shipping name if shipping in a bulk container (> 119 gallons).

Limited quantity Exemption:

Limited Quantity applies for inner packages 1 gallon or smaller.

U.S. Domestic Ground Shipments: Same as listed for Standard Shipments above.

U.S. Domestic Ground Non-Bulk

(119 gal or less per container) shipments: Same as listed for Standard Shipments above.

Emergency Response Guide

(ERG) Number:

Not Determine

Land Transport ADR/RID (cross-border):



ADR/RID class: 8 Corrosive substances
UN-Number: 1760
Packaging Group: III
Description of goods: 1760 CORROSIVE LIQUID N.O.S. (nonylphenol)

Maritime transport IMDG:



IMDG Class: 8
UN Number: 1760
Label: 8
Packaging Group: III
Marine Pollutant: Yes
Proper shipping name: CORROSIVE LIQUID, N.O.S. (nonylphenol)

Air transport ICAO-TI and IATA-DGR



ICAO/IATA Class: 8
UN/ID Number: 1760
Label: 8
Packaging Group: III
Proper shipping name: CORROSIVE LIQUID, N.O.S. (nonylphenol)

15. REGULATIONS

Sara

Section 355 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below. None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65:

Chemicals known to the State of California (Prop. 65) 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.

Carcinogenicity categories:**EPA (Environmental Protection Agency)**

None of the ingredients is listed.

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

Product related hazard information's:

The product has been classified and marked in accordance with directives on hazardous materials.

Hazard Symbols:

C Corrosive

N Dangerous for the environment

Hazard-determining components of labelling:

Cyclohex-1,2-ylenediamine

4-nonylphenol, branched.

Risk phrases:

22 Harmful if swallowed.

34 Causes burns

43 May cause sensitization by skin contact.

62 Possible risk of impaired fertility.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

63 Possible risk of harm to the unborn child.

Safety phrases:

2 Keep out of reach of children.

13 Keep away from food, drink and animal feeding stuffs

20 When using do not eat or drink.

25 Avoid contact with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

27/28 After contact with skin, take off immediately, all contaminated clothing, and wash immediately with plenty of water.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

52 Not recommended for interior use on large surface areas.

57 Use appropriate container to avoid environmental contamination.

60 This material and its container must be disposed of as hazardous waste.

64 If swallowed, rinse mouth with water (only if person is conscious).

16. OTHER INFORMATION**MSDS Prepared by:**

Technical Services

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INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK. PROGRESSIVE FASTENING SYSTEMS WILL NOT MAKE ITS PRODUCTS AVAILABLE TO CUSTOMERS FOR USE IN THE MANUFACTURE OF MEDICAL DEVICES WHICH ARE INTENDED FOR PERMANENT IMPLANTATION IN THE HUMAN BODY OR IN PERMANENT CONTACT WITH INTERNAL BODILY TISSUES OR FLUIDS.

END OF DATA SHEET