# **MATERIAL SAFETY DATA SHEET**

# 1. IDENTIFICATION OF SUBSTANCE AND PREPARATION

Supplier/Manufacturer:

**American Polywater Corporation** 

11222 - 60th Street North

P.O. Box 53

Stillwater, MN 55082 USA Phone: 1-651-430-2270

Fax: 1-651-430-3634

**Polywater Europe BV** 

Mauritsplaat 126 NL-3012CD Rotterdam

Netherlands

Tel: +31 10 233 0578

**Emergency Number:** +1-651-430-2270

# Product Name: Foam Sealant FST (Part A)

Chemical Description: Polyurethane Resin,

Part A of Two-Part System

Product Use: Sealant, Duct Block

# 2. COMPOSITION / INFORMATION ON INGREDIENTS

ComponentCAS #EC #Wt %Polymeric diphenylmethane diisocyanate9016-87-9--100

#### 3. HAZARDS IDENTIFICATION

Emergency Overview: CAUTION: Eye and skin irritant. May cause skin sensitization. In case of

eye contact, flush eyes with water. Wear gloves and safety glasses. Avoid contact with skin. Use with adequate ventilation. Do not ingest. Keep out of

reach of children.

Reacts slowly with water to produce carbon dioxide which may rupture

closed containers. This reaction accelerates at higher temperatures.

**Eye Contact:** Direct eye contact with material or vapors may cause eye irritation.

**Skin Contact:** Moderate irritant: Persons with pre-existing skin disorders may be more

susceptible to skin irritation from this material. Allergic skin reaction:

Symptoms can include redness, swelling, blistering and itching.

Irritation and Sensitization

**Potential:** Prolonged or repeated skin exposure may cause skin sensitization.

**Inhalation (Breathing):** Material has low vapor pressure and inhalation hazard is expected to be

minimal. Vapor exposure may cause irritation of the nose and throat.

Symptoms may include burning sensation, coughing and shortness of breath, or other signs of respiratory distress. May cause allergic respiratory reaction

below exposure guideline in susceptible individuals.

**Ingestion (Swallowing):** Ingestion may cause irritation of the gastrointestinal tract.

#### 4. FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes with large quantity of water for 15 minutes. Seek

medical attention.

**Skin Contact:** Remove contaminated clothing; flush skin thoroughly with soap and water. If

irritation occurs, seek medical attention.

**Inhalation (Breathing):** If irritation of nose or throat develops, move to fresh air. If irritation persists,

seek medical attention.

**Ingestion (Swallowing):** If swallowed, call a physician immediately. Do NOT induce vomiting. If

patient is conscious, wash out mouth with water. Never give anything by mouth to an unconscious person. Do not leave victim unattended. Seek

medical attention.

#### 5. FIRE-FIGHTING MEASURES

Flash Point: >110°C (230°F)

Flammable Limits: Not Available

**Autoignition Temperature:** > 600°C (1112°F)

**Hazardous Decomposition and** 

**By-Products:** Carbon monoxide, carbon dioxide, nitrous oxide, and HCN.

**Extinguishing Media:** Water Fog, Carbon Dioxide, Dry Chemical or Foam.

**Special Precautions:** Full protective equipment including self-contained breathing apparatus

should be used. Water spray may be used to cool fire exposed container to

prevent pressure build-up and possible auto-ignition or rupture.

**Unusual Hazards:** Avoid contact with strong oxidizers and strong acids, as sudden reaction may

result in fire and toxic fumes. Reacts slowly with water to produce carbon dioxide which may rupture closed containers. This reaction accelerates at

higher temperatures.

#### 6. ACCIDENTAL RELEASE MEASURES

Spills expected to be small quantities. Collect excess material with absorbents or wipe with dry towels. Wash with a dilute ammonia solution. Prevent from entering waterways.

# 7. HANDLING AND STORAGE

Keep containers cool, dry, and away from sources of ignition. Keep cartridges capped and sealed. Protect from freezing. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with the product. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Use with adequate ventilation to keep vapor concentration below acceptable

limits. Observe OSHA standard 29 CFR 1910-94, 1910.107, 1910.108. If ventilation is not adequate, use approved chemical/mechanical filters designed to remove a combination of particulate and organic vapors in open and restricted areas. Use approved airline type respirators or hoods in

confined areas. Observe OSHA standard 29 CFR 1910.134.

**Protective Gloves:** The use of natural rubber gloves is recommended to prevent skin contact.

**Eye Protection:** Eye protection is recommended especially if the material is used in ways

where it could contact the eyes.

Other Protective Equipment: Use protective cream if skin contact is likely. Remove and wash

contaminated clothing before reuse. Discard contaminated shoes.

Exposure Limits and Manufacturer
Recommendations: Chemical Component OSHA PEL ACGIH TLV Recommended

Polymeric diphenylmethane Not Not

diisocyanate Determined Determined .005 ppm

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown liquid.

Odor Threshold: Not Available

Vapor Density (Air = 1): 8.5

Specific Gravity ( $H_2O = 1$ ): 1.23 @ 25°C / 77°F

Solubility in Water: Reacts slowly.

**Boiling Point:** > 300°C (572°F) decomposes

Freezing Point: Not Available

**Evaporation Rate:** >1 (N-butyl acetate = 1)

Vapor Pressure: < 0.001 mm Hg @ 20°C

Coefficient of Water/Oil

**Distribution:** Not Available

**pH:** Not Applicable

Volatiles (Weight %): 0 grams/l

VOC Content: 0%

**Viscosity:** 250 cps. @ 25°C / 77°F

# 10. STABILITY AND REACTIVITY

Stability: Stable

**Conditions to Avoid:** Avoid heat, flame, high humidity and water contamination.

Materials to Avoid: Water, alcohols, amines, acids, alkalis, metal compounds.

**Hazardous Decomposition and** 

**By-Products:** CO<sub>2</sub>, CO, aldehydes, acids and other organic substances may be formed

during combustion or elevated temperature (>300°C) degradation.

Conditions Under Which Hazardous Polymerization May

Occur: When Resin (Part A) is mixed with Reactant (Part B), heat is generated.

Use caution if combining a large quantity of materials.

#### 11. TOXICOLOGICAL INFORMATION

**Toxicity to Animals:** Polymeric diphenylmethane

diisocyanate LD<sub>50</sub> (oral rat) >5000 mg/kg

LD<sub>50</sub> (dermal rabbit) >5000 mg/kg

Chronic Exposure: Not Available

Carcinogenic Status: This substance has not been identified as a carcinogen or probable

carcinogen by NTP, IARC, or OSHA, nor have any of its components.

Reproductive Toxicity: Not Available

Mutagenicity: Not Available

Teratogencity: Not Available

**Toxicologically Synergistic** 

Products: Not Available

# 12. ECOLOGICAL INFORMATION

**Mobility:** No information available.

**Bioaccumulation:** No information available.

**Ecotoxicity:** No information available.

Aquatic Toxicity: Polymeric diphenylmethane

diisocyanate 96-hour LC<sub>50</sub>: >1000 mg/l Zebra Fish

24-hour EC<sub>50</sub>: >1000 mg/l Daphnia magna

96-hour EC<sub>50</sub>: >100 mg/l E.Coli

#### 13. DISPOSAL CONSIDERATIONS

Dispose of product in accordance with National and Local Regulations.

# 14. TRANSPORTATION INFORMATION

UN Number: Not Listed

**UN Proper Shipping Name:** Not Applicable

Class and Subsidiary Risk: Not Applicable

Packing Group: Not Applicable

TDG: Not Regulated

ICAO/IATA-DGR: Not Regulated

IMDG: Not Regulated

ADR/RID: Not Regulated

# 15. REGULATORY INFORMATION

# **USA Federal and State**

All components are listed on the TSCA inventory.

Hazard Categories for SARA Acute Yes Yes No No No No

CERCLA/SARA Sec 302 SARA Sec. 313

Components
Polymeric diphenylmethane diisocyanate

CERCLA/SARA Sec 302 SARA Sec. 313

Hazardous Substance RQ No No No Yes (1%)

# **European Union**

Product is classified as hazardous according to European Directives 88/379/EEC and 67/548/EEC and EU Regulation (EC) No 1272/2008.

**Risk Phrases:** R20: Harmful by inhalation.

R36/37/38: Irritating to eyes, respiratory system, and skin.

R42: May cause sensitization by inhalation.

**Safety Phrases:** S22/S23: Do not breathe dust or vapors.

S24/25: Avoid contact with skin and eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

S28: After contact with skin, wash immediately with plenty of water.

S37: Wear suitable gloves.

S51: Use only in well ventilated areas.

Symbol: Xn: Harmful

Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. It does not contain Substances of Very High Concern (SVHC).

#### Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Classification: Class D, Division 2B

Canadian DSL: All ingredients listed.

#### **Australia**

All components are listed on the AICS.

Hazardous according to criteria of NOHSC Australia. Product classified as harmful (Xn).

**Contact Information:** ADAPT Australia Ptv. Ltd.

11 - 19 Global Drive

Tullamarine Victoria 3043 Telephone Number. 03 9330 0666

Emergency Telephone Number: 0421 277 889

# **16. OTHER INFORMATION**

NFPA Ratings: Health: 2

Fire: 1 Reactivity: 1

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel during spill, fire or similar emergencies. Hazard ratings are based on physical and toxic properties of combustion or decomposition.

Revision Date: November 11, 2013

**Revision Number:** 3

Reviewed By: S. H. Dahlke

The information and recommendations contained herein are believed to be reliable. However, the supplier makes no warranties, express or implied, concerning the use of this product. The buyer must determine conditions of safe usage and assumes all risk and liability in handling this product.

FST-A:MSDS

# MATERIAL SAFETY DATA SHEET

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Mauritsplaat 126 NL-3012CD Rotterdam

Netherlands

Tel: +31 10 233 0578

**Emergency Number:** +1-651-430-2270

# Product Name: Foam Sealant FST (Part B)

Chemical Description: Sealant Hardener,

Part B of Two-Part System

Product Use: Sealant, Duct Block

# 2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS#	EC#	Wt %
Polyether polyol mixture	Proprietary		60 - 80
2-propanol, 1-chloro-, Phosphate (3:1)	13674-84-5	237-158-7	20 - 30
Tertiary amine compounds	Proprietary		1 - 5

#### 3. HAZARDS IDENTIFICATION

**Emergency Overview:** CAUTION: Eye and skin irritant. Wear gloves and safety glasses.

Avoid contact with eyes and skin. Avoid breathing vapors. Use with

adequate ventilation. Keep out of reach of children.

**Eye Contact:** Direct eye contact with material or vapors may cause eye irritation.

**Skin Contact:** May cause skin irritation.

Irritation and Sensitization Potential: May cause or aggravate dermatitis and asthma. Not considered a skin

sensitizer.

**Inhalation (Breathing):**May cause respiratory irritation.

Ingestion (Swallowing): Harmful if swallowed.

#### 4. FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes with large quantity of water for 15 minutes.

Seek medical attention.

**Skin Contact:** Remove contaminated clothing; flush skin thoroughly with soap and

water. If irritation occurs, seek medical attention.

**Inhalation (Breathing):** If irritation of nose or throat develops, move to fresh air. If irritation

persists, seek medical attention.

Ingestion (Swallowing): If swallowed, call a physician immediately. Induce vomiting only as

directed by a physician. If patient is conscious, wash out mouth with water. Never give anything by mouth to an unconscious person. Do

not leave victim unattended. Seek medical attention.

#### 5. FIRE-FIGHTING MEASURES

Flash Point: >177°C (350°F) Pensky-Martens CC

Flammable Limits: Not Available

Autoignition Temperature: Not Available

**Hazardous Decomposition and** 

By-Products: Carbon monoxide, carbon dioxide, and nitrogen oxides.

**Extinguishing Media:** Water Fog, Carbon Dioxide, Dry Chemical or Foam.

**Special Precautions:** Full protective equipment including self-contained breathing apparatus

should be used. Water spray may be used to cool fire exposed container to prevent pressure build-up and possible auto-ignition or

rupture.

Unusual Hazards: None known.

#### 6. <u>ACCIDENTAL RELEASE MEASURES</u>

Spills expected to be small quantities. Collect excess material with absorbents or wipe with dry towels. Wash with a dilute ammonia solution. Prevent from entering waterways.

# 7. HANDLING AND STORAGE

Keep containers cool, dry, and away from sources of ignition. Keep cartridges capped and sealed. Protect from freezing. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with the product. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Exhaust ventilation recommended. Organic vapor cartridge or fresh air

supplied respirator (NIOSH approved) may be necessary for certain applications. Observe OSHA regulations for respirator use (29 CFR

1910.134).

Protective Gloves: The use of nitrile or neoprene gloves is recommended to prevent skin

contact.

**Eye Protection:** Eye protection is recommended especially if the material is used in

ways where it could contact the eyes.

Other Protective Equipment: Use protective cream if skin contact is likely. Remove and wash

contaminated clothing before reuse. Discard contaminated shoes.

Exposure Limits and Recommendations:

Chemical ComponentOSHA PELACGIH TLVPolyether polyol mixtureNot DeterminedNot Determined2-propanol, 1-chloro-, Phosphate (3:1)Not DeterminedNot DeterminedTertiary amine compoundsNot DeterminedNot Determined

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Clear to light amber liquid, mild amine odor. Appearance:

Not Available Odor Threshold:

**Vapor Density (Air = 1):** > 1

1.1 @ 25°C / 77°F Specific Gravity ( $H_2O = 1$ ):

Solubility in Water: Not Available

**Boiling Point:** Not Available

**Freezing Point:** Not Available

**Evaporation Rate:** Not Available

**Vapor Pressure:** Not Available

Coefficient of Water/Oil Distribution: Not Available

pH: Not Available

Volatiles (Weight %): 0%

**VOC Content:** 0 grams/l

650 cps. @ 25°C / 77°F Viscosity:

# 10. STABILITY AND REACTIVITY

Stability: Stable

Avoid high temperatures, moisture, and freezing conditions. **Conditions to Avoid:** 

**Materials to Avoid:** Isocyanates, oxidizers, strong mineral acids, and reactive metals.

**Hazardous Decomposition and** 

Carbon monoxide, carbon dioxide, nitrous oxide, and HCN. **By-Products:** 

**Conditions Under Which Hazardous** 

When Resin (Part A) is mixed with Reactant (Part B), heat is **Polymerization May Occur:** 

generated. Use caution if combining large quantities of material.

# 11. TOXICOLOGICAL INFORMATION

Polyether polyol mixture **Toxicity to Animals:** LD<sub>50</sub> (oral rat) Not Established

LD<sub>50</sub> (dermal rabbit) Not Established

LC<sub>50</sub> (inhl rat) Not Established

2-propanol, 1-chloro-, Phosphate (3:1)

LD<sub>50</sub> (oral rat) 1500 mg/kg

LD<sub>50</sub> (dermal rabbit) 1230 mg/kg

LC<sub>50</sub> (inhl rat) 5 mg/l (4h)

Tertiary amine compounds LD<sub>50</sub> (oral rat) Not Established

LD<sub>50</sub> (dermal rabbit) Not Established

LC<sub>50</sub> (inhl rat) Not Established

Chronic Exposure: Not Available

Carcinogenic Status: This substance has not been identified as a carcinogen or probable

carcinogen by NTP, IARC, or OSHA, nor have any of its components.

Reproductive Toxicity: Not Available

Mutagenicity: Not Available

Teratogencity: Not Available

**Toxicologically Synergistic** 

Products: Not Available

# 12. ECOLOGICAL INFORMATION

**Mobility:** No information available.

**Bioaccumulation:** No information available.

**Ecotoxicity:** No information available.

Aquatic Toxicity: No information available.

# 13. <u>DISPOSAL CONSIDERATIONS</u>

Dispose of product in accordance with National and Local Regulations.

#### 14. TRANSPORTATION INFORMATION

UN Number: Not Listed

**UN Proper Shipping Name:** Not Applicable

Class and Subsidiary Risk: Not Applicable

Packing Group: Not Applicable

TDG: Not Regulated

ICAO/IATA-DGR: Not Regulated

IMDG: Not Regulated

ADR/RID: Not Regulated

# 15. REGULATORY INFORMATION

# **USA Federal and State**

All components are listed on the TSCA inventory.

Hazard Categories for SARA	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Pressure</u>	<u>Reactive</u>
Section 311/312 Reporting	No	No	No	No	No

CERCLA/SARA Sec 302 SARA Sec. 313
Components Hazardous Substance RQ EHS TPQ Toxic Release

Components are not affected by these Superfund regulations.

#### **European Union**

Product is not classified as hazardous according to European Directives 88/379/EEC and 67/548/EEC and EU Regulation (EC) No 1272/2008.

Risk Phrases: Not Applicable

Safety Phrases: S24/25: Avoid contact with skin and eyes.

Symbol: None

Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. It does not contain Substances of Very High Concern (SVHC).

#### Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Classification: NC

Canadian DSL: All ingredients listed.

#### **Australia**

All components are listed on the AICS.

Not considered hazardous according to criteria of NOHSC Australia.

**Contact Information:** ADAPT Australia Pty. Ltd.

11 - 19 Global Drive

Tullamarine Victoria 3043 Telephone Number. 03 9330 0666

Emergency Telephone Number: 0421 277 889

# **16. OTHER INFORMATION**

NFPA Ratings: Health: 1

Fire: 1 Reactivity: 0

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel during spill, fire or similar emergencies. Hazard ratings are based on physical and toxic properties of combustion or decomposition.

Revision Date: November 11, 2013

Revision Number: 3

Reviewed By: S. H. Dahlke

The information and recommendations contained herein are believed to be reliable. However, the supplier makes no warranties, express or implied, concerning the use of this product. The buyer must determine conditions of safe usage and assumes all risk and liability in handling this product.

FSTB: MSDS

# SAFETY DATA SHEET

# 1. Identification of the substance/mixture and of the company

#### 1.1 Product identifier

# Product Name: Type HP<sup>™</sup> Cleaner/Degreaser

Product ID numbers: HP-XXX (Where XXX is the package code.)

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses:Electrical cleaningList of advices against:Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

American Polywater Corporation
11222 - 60th Street North
P.O. Box 53
NL-3012CD Rotterdam

Stillwater, MN 55082 USA Netherlands

Tel: 1-651-430-2270 Tel: +31 10 233 0578

1.4 Emergency telephone numbers

USA Europe

+1-651-430-2270 +31 10 233 0578

#### 2. Hazards Identification

#### 2.1 Classification of the substance or mixture

Classification according to OSHA 29 CFR 1910.1200 and Regulation (EC) No 1272/2008.

Asp. Tox. 1 H304

2.2 Label elements

**Pictograms:** 



Signal word: Danger

**Hazard Statements:** 

H304 May be fatal if swallowed and enters airways

**Precautionary Statements:** 

P102 Keep out of reach of children.

P210 Keep away from flames and hot surfaces. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/attention

P370 + P378 In case of fire: Use water fog, foam, dry chemical or carbon dioxide for extinction.

P403 + P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local regulations.

**2.3 Other hazards:** No information available.

# 3. Composition/Information on Ingredients

Component	CAS#	EC#	<u>Wt. %</u>	GHS/CLP Classification
				Asp. Tox. 1 H304;
				EUH066
Medium Aliphatic				Skin Irrit. 3 H316;
Petroleum Solvent	64742-47-8	265-149-8	< 100	Flam Liq 4 H227
Citrus Terpenes	94266-47-4	304-454-3	< 25	

#### 4. First Aid Measures

# 4.1 Description of first aid measures

Eye Contact: If eye irritation from exposure to vapors develops, move to fresh air. Flush eyes

with clean water. If irritation persists, seek medical attention. For direct eye contact, flush with large quantity of water for 15 minutes. Seek medical attention.

**Skin Contact:** Remove contaminated clothing; flush skin thoroughly with water. If irritation

occurs, seek medical attention.

Inhalation (Breathing): If irritation of nose or throat develops, move to fresh air. If irritation persists, seek

medical attention. If breathing is difficult, provide oxygen. If not breathing, give

artificial respiration. Seek immediate medical attention.

Ingestion (Swallowing): Do not induce vomiting or give anything by mouth. If victim is drowsy or

unconscious, place on the left side with head down. Do not leave victim

unattended. Seek medical attention.

# 4.2 Most important symptoms and effects, both acute and delayed

Refer to Section 11 for more information.

# 4.3 Indication of immediate medical attention and special treatment needed.

Aspiration hazard. If ingested, material may be aspirated into the lungs and cause chemical pneumonitis.

#### 5. Firefighting Measures

#### 5.1 Extinguishing media:

Carbon dioxide, water fog, dry chemical or foam.

#### 5.2 Special hazards arising from the substance or mixture

# Hazardous decomposition and by-products:

Burning generates CO, CO<sub>2</sub> and smoke. Smoke may be acrid and fumes irritating.

#### 5.3 Advice for firefighters

Wear full protective clothing, including self-contained, positive pressure or pressure-demand breathing apparatus. Sealed container can build up pressure when exposed to high heat. Use water spray to cool fire exposed containers.

# 6. Accidental Release Measures

# 6.1 Personal precautions, protective equipment and emergency procedures:

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Use only non-sparking tools to clean up the spill. For a spill in a confined space, provide mechanical ventilation to disperse or exhaust vapors. For emergency responders: use respiratory protection: half-face or full-face respirator with filter(s) for organic vapor for spills in a confined space. Work gloves that are resistant to aromatic hydrocarbons are recommended. Chemical goggles are recommended if splashes or contact with eyes is possible. For small spills: normal antistatic work clothes are usually adequate.

# **6.2 Environmental precautions:**

Avoid release to the environment. Dyke the spill to prevent entry into waterways, sewers, basements or confined areas.

#### 6.3 Methods materials for containment and cleaning up:

Absorb spill with sand or absorbents. Collect as much of the spilled material as possible using non-sparking tools and transfer to a container. Seal the container. Remember, adding an absorbent material does not change the toxicity or flammability hazard.

#### 6.4 Reference to other sections:

Refer to Sections 4, 5, 8, and 13 for more information.

#### 7. Handling and Storage

#### 7.1 Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing vapors or spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wash contaminated clothing before reuse. For industrial or professional use only. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

#### 7.2 Conditions for safe storage, including incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store away from acids and oxidizing agents.

# 7.3 Specific end uses

See technical data sheet on this product for further information.

# 8. Exposure Controls / Personal Protection

# 8.1 Control parameters

# **Exposure limits and recommendations:**

Component Name	Limit	Standard	Source/Note
Medium Aliphatic Petroleum Solvent	100 ppm	ACGIH TWA	United States
Medium Aliphatic Petroleum Solvent	500 ppm	OSHA TWA	United States
Medium Aliphatic Petroleum Solvent	1200 mg/m3	RCP* TWA	ACGIH, Manufacturer

<sup>\*</sup>reciprocal calculation procedure for total hydrocarbons

# 8.2 Exposure controls

#### Respiratory protection:

Normal ventilation is adequate. If exposure exceeds recommended limits, respirator protection is recommended. Use a respirator or gas mask with cartridges for organic vapors (NIOSH-approved) or use supplied air equipment.

#### **Protective gloves:**

For repeated or prolonged skin contact, the use of impermeable gloves is recommended to prevent drying and possible irritation.

# Eye protection:

Safety glasses recommended.

# Other protective equipment:

It is suggested that a source of clean water be available in work area for flushing eyes and skin. Impervious clothing should be worn as needed.

#### 9. Physical and Chemical

# 9.1 Information of basic physical and chemical properties

**Appearance:** Clear, colorless liquid with a very light citrus scent.

Odor threshold:

pH:

Does not apply

Freezing point:

<-58°F (<-50°C)

Boiling point:

365°F (185°C) Initial

**Product Name:** Type HP<sup>™</sup> Cleaner/Degreaser

Flash point: >140°F (>60.5°C), Closed Cup (PMCC)

**Evaporation rate:** <0.1 (n-butyl acetate = 1) **Flammability (solid, gas):** Not applicable to liquids

Upper/lower flammability or

explosive limits: LEL = 0.7% UEL = 6.1%-7.0% Vapor pressure: <1 mm Hg < 134 Pa @ 20%C

Vapor density (Air = 1): > 1.0Specific gravity (H<sub>2</sub>O = 1): 0.79Solubility in water: Nil

Partition coefficient: n-

octanol/water:Not availableAuto-ignition temperature:Not availableDecomposition temperature:Not available

**Viscosity:** 150 – 550 cps. @ 10 rpm.

9.2 Other Information

Volatiles (Weight %): 100% VOC Content: 790 g/l

# 10. Stability and Reactivity

# 10.1 Reactivity:

See remaining headings in Section 10.

#### 10.2 Chemical stability:

Stable

# 10.3 Possibility of hazardous reactions:

None known.

#### 10.4 Conditions to avoid:

Avoid heat, flame, and sparks.

# 10.5 Incompatible materials:

Strong oxidizing agents.

# 10.6 Hazardous decomposition products:

Carbon dioxide, carbon monoxide.

#### 11. Toxicological Information

#### 11.1 Information on toxicological effects:

#### **Acute toxicity**

#### Eye contact:

Direct eye contact may cause eye irritation. This irritation is minimal and expected to be transient.

#### Skin contact:

Prolonged or repeated skin exposure can remove oils, causing redness, drying and cracking. Persons with pre-existing skin disorders may be more susceptible to skin irritation from this material.

# Irritation and Sensitization Potential:

Product may be irritating to skin and eyes. It is not a sensitizer.

#### Inhalation (Breathing):

Concentrated petroleum solvent vapors may cause irritation of the nose and throat. Prolonged exposure to excessively high vapor concentrations can result in central nervous system depression (e.g., drowsiness, dizziness, loss of coordination, and fatigue). Persons with impaired lung function may experience additional breathing difficulties due to the irritant properties of this material.

Revision Date: May 7, 2013

#### Ingestion:

Ingestion of large quantities may cause irritation of the digestive tract, nervous system depression (e.g., drowsiness, dizziness, loss of coordination, and fatigue).

# **Toxicity to Animals:**

Medium Aliphatic

PetroleumSolvent: LD<sub>50</sub> (oral rat) >5000 mg/kg

 $LD_{50}$  (dermal rabbit) >2000 mg/kg  $LC_{50}$  (inhl rat) >4.3mg/L, 4 hours

Citrus Terpenes: LD<sub>50</sub> (oral rat) >5000 mg/kg

LD<sub>50</sub> (dermal rabbit) 5000 mg/kg

RD<sub>50</sub> 1000 ppm

# **Aspiration hazard**

May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material.

# **Chronic Exposure:**

Reproductive Toxicity:Not available.Mutagenicity:Not available.Teratogenicity:Not available.

**Specific Target Organ** 

**Toxicity (STOT)** No end point data.

**Toxicologically Synergistic** 

**Products:** Not available.

**Carcinogenic Status:** This substance has not been identified as a carcinogen or probable

carcinogen by NTP, IARC, or OSHA, nor have any of its components.

#### 12. Ecological Information

# 12.1 Toxicity:

**Ecotoxicity:** No information available. Aquatic Toxicity: No information available.

**12.2 Persistence and degradability:** Expected to be biodegradable.

**12.3 Bioaccumulation potential:**No information available **12.4 Mobility in soil:**No information available.

**12.5 Results of PBT and vPvB**This product is not, nor does it contain a substance that is a PBT or

**Assessment:** vPvB.

**12.6 Other adverse effects:** None known.

# 13. Disposal Considerations

Dispose of product in accordance with National and Local Regulations.

### 14. Transport Information

**UN Number:** Not Listed **UN Proper shipping name:** Not Applicable Transport hazard class(es): Not Applicable Packing group: Not Applicable **Environmental hazards:** None known **Special precautions:** None known TDG: Not Regulated ICAO/IATA-DGR: Not Regulated IMDG: Not Regulated

ADR/RID: Not Regulated

#### 15. Regulatory Information

#### **USA Federal and State**

All components are listed on the TSCA inventory.

Hazard Categories for SARAAcuteChronicFirePressureReactiveSection 311/312 ReportingNoNoYesNoNo

CERCLA/SARA Sec 302 SARA Sec. 313
Hazardous Substance RQ EHS TPQ Toxic Release

Components are not affected by these Superfund regulations.

NFPA Ratings: Health: 1 Fire: 2

Reactivity: 0

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel during spill, fire or similar emergencies. Hazard ratings are based on physical and toxic properties of combustion or decomposition.

#### **European Union**

Components

All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. It does not contain Substances of Very High Concern (SVHC).

#### Canada

All components are listed on the DSL inventory.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Classification: B3

# **Australia**

All components are listed on the AICS.

Hazardous according to criteria of NOHSC Australia. Product classified as harmful (Xn).

**Contact Information:** ADAPT Australia Pty. Ltd.

11 - 19 Global Drive

Tullamarine Victoria 3043 Telephone Number. 03 9330 0666

Emergency Telephone Number: 0421 277 889

#### 16. Other Information

Revision Date: May 7, 2013

Revision Number: 2

Supersedes: May 13, 2010

Indication of Changes: Updated in accordance with the provisions of OSHA 1910.1200 App D and REACH

Annex II (EU No 453/2010). (GHS format)

The information and recommendations contained herein are believed to be reliable. However, the supplier makes no warranties, express or implied, concerning the use of this product. The buyer must determine conditions of safe usage and assumes all risk and liability in handling this product.