

SAFETY DATA SHEET – SET

AirRepair® Sealant Kit

Product ID numbers: AR-KIT97, AR-KIT99, ARXXX (Where XXX is the package code.)

Date Compiled: 24 August 2017



Supplier/Manufacturer:

American Polywater Corporation
11222 - 60th Street North
Stillwater, MN 55082 USA
Tel: 1-651-430-2270
Email: sds@polywater.com

Polywater Europe BV
Zuidhaven 9-11 Unit B2
4761 CR Zevenbergen
Netherlands
Tel: +31 (0)10 2330578
Email: sds@ polywater.com

Emergency telephone numbers

INFOTRAC: 1-800-535-5053 (USA) 1-352-323-3500 (INT'L)

This product is a kit or a multi-part product with independent components. An SDS for each component is included. Kit may include all or some components. Do not separate SDSs.

Contains

AR-A AirRepair Part A SDS
AR-B AirRepair Part B SDS
AR-STICK AirRepair Putty Stick SDS
AR-PRIMER AirRepair Primer (PW-1) SDS
RP Rapid Power Cleaning Towelette

SDSs are classified according to EU Regulation (EC) No 1272/2008 and Australia WHS Regulation (2011).

Each Kit may or may not contain all SDS components

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.

SAFETY DATA SHEET

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

1.1 Product identifier

Product Name:
AirRepair® Leak Sealant (Part A)
Part Number: 84191

Product ID numbers: AR-KIT97, AR-KIT99, or AR-XXX (Where XXX is the package code.)

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Sealant/adhesive resin, Part A of 2-Part Sealant

List of advices against: Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

Polywater Europe BV
Zuidhaven 9-11 Unit B2
4761 CR Zevenbergen
Netherlands
Tel: +31 (0)10 2330578
Email: sds@polywater.com

American Polywater Corporation
11222 - 60th Street North
Stillwater, MN 55082 USA
Tel: 1-651-430-2270
Email: sds@polywater.com

Local Contact Information

1.4 Emergency telephone numbers

INFOTRAC: 1-800-535-5053 (USA) 1-352-323-3500 (INT'L)

National Poison Information Centre (NVIC): +31(0)30 274 8888
(Professional use for acute poisoning only, Netherlands.)

Local poison control information.

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to EU Regulation (EC) No 1272/2008 and Australia WHS Regulation (2011).

Skin Irrit 2 H315

Skin Sens 1 H317

Eye Irrit 2 H319

Aquatic Tox Chronic 2 H411

2.2 Label elements

Contains: Bisphenol A-epichlorohydrin polymer



Pictograms:

Signal word: Warning

Hazard Statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects

Precautionary Statements:

- P280 Wear protective gloves, protective clothing and eye protection.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P273 Avoid release to the environment
- P391 Collect spillage.
- P501 Dispose of container in accordance with local regulations

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

<u>Component</u>	<u>CAS #</u>	<u>EC #</u>	<u>Wt. %</u>	<u>GHS/CLP Classification</u>
Bisphenol A-epichlorohydrin polymer	25068-38-6	500-033-5	30 - 50	Skin Irrit 2, H315 Skin Sens 1, H317 Eye Irrit 2, H319 Chronic Aquatic Tox, H411

4. First Aid Measures

4.1 Description of 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 for at least 15 minutes. If irritation or allergic reaction 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):** No emergency medical treatment necessary

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.

No information available.

5. Firefighting Measures

5.1 Extinguishing media:

Water fog or fine spray, dry chemical carbon dioxide, or foam.

5.2 Special hazards arising from the substance or mixture

Dense smoke is emitted when burned without sufficient oxygen.

Hazardous decomposition and by-products:

CO₂, CO, phenolics. May contain other combustion products of varying composition which may be toxic or 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. Water fog may be used to cool fire exposed container to prevent pressure build-up and possible auto-ignition or rupture. Direct water stream may spread fire.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate area. Use appropriate safety equipment.

6.2 Environmental precautions:

Avoid release to the environment. Prevent spill from entering drainage/sewer systems, waterways, basements or confined areas. Refer to Section 12 for more information.

6.3 Methods materials for containment and cleaning up:

Absorb spill with sand or absorbents. Residual resin may be removed using steam or hot soapy water. Collect as much of the spilled material as possible using non-sparking tools and transfer to a container. Seal the container. Residual material can be removed with solvent.

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

Avoid personal contact with the product. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Wash thoroughly after handling. Wash contaminated clothing before reuse. For industrial or professional use only.

7.2 Conditions for safe storage, including incompatibilities

Keep containers cool, dry, and away from sources of ignition. Keep containers and cartridges capped and sealed. Protect from freezing. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

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:

Contains no components with established Occupational Exposure Limit (OEL) values.

A Derived No Effect Level (DNEL) of 12.25 mg/m³ has been established for Acute Inhalation. (ECHA EC No 1907/2006)

8.2 Exposure controls

Respiratory protection:

Normal ventilation is adequate. If exposure exceeds recommended limits, respirator protection is recommended. Wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced. Use a respirator or gas mask with cartridges for organic vapors (NIOSH or CE approved) with particulate pre-filter, P100 or AP2.

Protective gloves:

The use of chemically resistant gloves is recommended to prevent skin contact. Suitable materials include nitrile (included in most kits), neoprene, ethyl vinyl alcohol (EVAL), PVC. Use a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374). NOTE: The selection of specific glove for the application should account for other chemicals in the environment, physical requirements and potential user reaction to the glove material.

Eye protection:

Safety glasses recommended.

Other protective equipment:

Use protective cream if skin contact is likely. Remove and wash contaminated clothing before reuse. Discard contaminated shoes.

9. Physical and Chemical

9.1 Information of basic physical and chemical properties

Appearance: Dark gray or black paste.

Odor threshold:	Not available
pH:	Does not apply
Freezing point:	Not available
Boiling point:	Not available
Flash point:	>400°F / >200°C (PMCC)
Evaporation rate:	Not available
Flammability (solid, gas):	Not available
Upper/lower flammability or explosive limits:	Not available
Vapor pressure:	Not available
Vapor density (Air = 1):	>1
Specific gravity (H₂O = 1):	1.25 @ 25°C
Solubility in water:	Not available
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

9.2 Other Information

Volatiles (Weight %):	0%
VOC Content:	0 g/l

10. Stability and Reactivity

10.1 Reactivity:

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:

Stable

10.3 Possibility of hazardous reactions:

Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid:

Avoid high temperatures above 300 °C (572 °F). Decomposition can occur above 350 °C (662 °F). Generation of gas during decomposition can cause pressure to build in closed systems.

10.5 Incompatible materials :

Strong acids or bases (especially primary or secondary aliphatic amines), strong oxidizing agents.

10.6 Hazardous decomposition products:

CO₂, CO, phenolics and other organic substances may be formed during combustion or elevated temperature degradation.

11. Toxicological Information

11.1 Information on toxicological effects:

Acute toxicity

Eye contact:

Direct eye contact with material or vapors may cause eye irritation.

Skin contact:

This product has moderate skin irritation potential. Persons with pre-existing skin disorders may be more susceptible to skin irritation from this material. Prolonged or repeated skin exposure may cause skin sensitization.

Irritation and Sensitization Potential:

May cause allergic skin reaction.

Inhalation (Breathing):

Low vapor pressure makes this route of exposure unlikely.

Ingestion:

Ingestion may cause irritation of the gastrointestinal tract.

Toxicity to Animals:

Bisphenol A Diglycidyl Ether: LD₅₀ (oral rat) >15,000 mg/kg
 LD₅₀ (dermal rabbit) 23,000 mg/kg

Aspiration Hazard:

No aspiration hazard expected.

Chronic Exposure:

Reproductive Toxicity: Not available.
Mutagenicity: Resins based on diglycidyl ether of bisphenol A have proved to be inactive when tested by in-vivo mutagenicity assays. These resins have shown activity in in-vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat-liver cells. The significance of these tests to humans is unknown.
Teratogenicity: Not available.
Specific Target Organ Toxicity (STOT): Not available.
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:

Aquatic Toxicity: May be toxic to aquatic organisms.
 Bisphenol A Diglycidyl Ether: LC₅₀ (96 hr): 2 mg/l Oncorhynchus mykiss (rainbow trout) Semi-static test
 Bisphenol A Diglycidyl Ether: EC₅₀ (48 hr): 1.8 mg/l Daphnia magna (invertebrate) Static test
 Bisphenol A Diglycidyl Ether: ErC₅₀ (72 hr): 11 mg/l Fresh water algae (aquatic plants) Static test
 Bisphenol A Diglycidyl Ether: Chronic Toxicity Value: Daphnia magna (invertebrate), 21 d, number of offspring, NOEC: 0.3 mg/l Semi-static test

12.2 Persistence and degradability:

Based on stringent OECD test guidelines, this material cannot be considered readily biodegradable. Biodegradability depends on environmental conditions.
 Bisphenol A Diglycidyl Ether: OECD Biodegradation Test 302B 12% Biodegradation, 28 d exposure
 Bisphenol A Diglycidyl Ether: Theoretical Oxygen Demand 2.35 mg/mg

12.3 Bioaccumulation potential:

Bioconcentration potential is moderate.

12.4 Mobility in soil:

Potential for mobility in soil is low..

12.5 Results of PBT and vPvB Assessment:

This product is not, nor does it contain a substance that is a PBT or vPvB.

12.6 Other adverse effects:

None known.

13. Disposal Considerations

Do not dump into sewer, on ground or into any body of water. Dispose of product in accordance with National and Local Regulations.

14. Transport Information

DOT:	Not Regulated
UN Number:	3077
UN Proper Shipping Name:	Environmentally hazardous substance, solid, N.O.S. (Bisphenol A)
Class and Subsidiary Risk:	9
Packing Group:	III
ICAO/IATA-DGR:	Not Regulated (See Special Provision A197)
IMDG:	Not Regulated (See IMDG Code 2.10.2.7)
ADR/RID:	9
Other information	For surface shipments within the United States: Not regulated.

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Contains no substance on the REACH candidate list $\geq 0.1\%$ SCL. Does not contain notified substances from the ELINCS List, Directive 92/32/EEC. Contains no REACH substances with Annex XVII restrictions.

Australia

All components are listed on the AICS.
Product is classified as hazardous according to criteria of NOHSC Australia.

USA Federal and State

All components are listed on the TSCA inventory.

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.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for the mixture by the supplier.

16. Other Information

Abbreviations and acronyms:

OSHA = Occupational Safety and Health Administration
CLP = Classification, Labeling and Packaging Regulation
STOT = Specific Target Organ Toxicity
LD₅₀ = Median Lethal Dose
DNEL = Derived No Effect Level
ACGIH = American Conference of Governmental Industrial Hygienists
TSCA = Toxic Substances Control Act (USA)
DSL = Domestic Substances List (Canada)
AICS = Australian Inventory of Chemical Substances

Mixture classification according to Regulation (EC) No 1272/2008:

Classification Procedure

Product Name: AirRepair® Paste (Part A) Type AR

Revision Date: 7 August 2017

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Harmful to aquatic life with long lasting effects.

Calculation method.
Calculation method.
Calculation method.
Calculation method.

Revision Date: 7 August 2017
Revision Number: 7 EU
Supersedes: 21 July 2015
Other: Not Applicable
Indication of Changes: Reviewed with minor format updates.
Written in accordance with the provisions of REACH Annex II (EU No 453/2010) and Australia WHS Regulation (2011). (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.

SAFETY DATA SHEET

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

1.1 Product identifier

Product Name:
AirRepair® Leak Sealant (Part B)
Part Number: 84193

Product ID numbers: AR-KIT97, AR-KIT99, or AR-XXX (Where XXX is the package code.)

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Sealant/adhesive resin, Part B of 2-Part Sealant

List of advices against: Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

Polywater Europe BV
Zuidhaven 9-11 Unit B2
4761 CR Zevenbergen
Netherlands
Tel: +31 (0)10 2330578
Email: sds@polywater.com

American Polywater Corporation
11222 - 60th Street North
Stillwater, MN 55082 USA
Tel: 1-651-430-2270
Email: sds@polywater.com

Local Contact Information

1.4 Emergency telephone numbers

INFOTRAC: 1-800-535-5053 (USA) 1-352-323-3500 (INT'L)

National Poison Information Centre (NVIC): +31(0)30 274 8888
(Professional use for acute poisoning only, Netherlands.)
Local poison control information.

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to EU Regulation (EC) No 1272/2008 and Australia WHS Regulation (2011).
Skin Irritation, Cat 2, H315
Eye Irritation, Cat 2, H319
Skin Sensitization, Cat 1, H317

2.2 Label elements

Contains: Polymer of C-18 Unsaturated Fatty Acid Dimers, 1,3-bis[3-(Dimethylamino)propyl] urea, Triethylenetetramine, Diethylene glycol bis (3-aminopropyl) ether



Pictograms:

Signal word: Warning

Hazard Statements:

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

Precautionary Statements:

- P264 Wash thoroughly after handling.
- P280 Wear protective gloves, protective clothing and eye protection.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P332 + P313 If skin irritation occurs: Get medical attention..
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P337 + P313 If eye irritation persists. Get medical attention.

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

<u>Component</u>	<u>CAS #</u>	<u>EC #</u>	<u>Wt. %</u>	<u>GHS/CLP Classification</u>
Polymercaptan	Proprietary	--	30 - 40	Skin Irrit 2, H315 Eye Dam 2, H319 Skin Irrit 2, H315
Polymer of C-18 Unsaturated Fatty Acid Dimers with TETA & TOFA	68082-29-1	500-191-5	5 - 10	Skin Sens 1, H317 Eye Irrit 2A, H319 Skin Irrit 2, H315 Eye Dam 2, H319
1,3-bis[3-(Dimethylamino)propyl] urea	52338-87-1	257-861-2	2 - 5	Eye Irrit. 2, H319
Polymer of C-18 Unsaturated Fatty Acid Dimers	68541-13-9	--	2 - 5	Acute Tox. 4, H312 Skin Corr. 1AB, H314 Skin Sens. 1 H317 Aquatic Chronic 3 H412
Triethylenetetramine	112-24-3	203-950-6	< 1	Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Irrit 2, H319
Diethylene glycol bis (3-aminopropyl) ether	4246-51-9	224-207-2	< 1	Skin Sens. 1, H317 Eye Irrit 2, H319

4. First Aid Measures

4.1 Description of 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 for at least 15 minutes. If irritation or allergic reaction 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):** Wash out mouth with water. Do not induce vomiting. If victim is unconscious, place on the left side with head down. Never give anything by mouth to an unconscious person. 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.

No information available.

5. Firefighting Measures

5.1 Extinguishing media:

Water fog or fine spray, dry chemical carbon dioxide, or foam.

5.2 Special hazards arising from the substance or mixture

Dense smoke is emitted when burned without sufficient oxygen.

Hazardous decomposition and by-products:

Oxides of carbon, oxides of sulfur, oxides of nitrogen. May contain other combustion products of varying composition which may be toxic or 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. Water fog may be used to cool fire exposed container to prevent pressure build-up and possible auto-ignition or rupture. Direct water stream may spread fire.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate area. Use appropriate safety equipment.

6.2 Environmental precautions:

Avoid release to the environment. Refer to Section 12 for more information.

6.3 Methods materials for containment and cleaning up:

Absorb spill with sand or absorbents. Residual resin may be removed using steam or hot soapy water. Collect as much of the spilled material as possible using non-sparking tools and transfer to a container. Seal the container. Residual material can be removed with solvent.

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

Avoid personal contact with the product. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Wash thoroughly after handling. Wash contaminated clothing before reuse. For industrial or professional use only.

7.2 Conditions for safe storage, including incompatibilities

Keep containers cool, dry, and away from sources of ignition. Keep containers and cartridges capped and sealed. Protect from freezing. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

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:

Contains no components with established Occupational Exposure Limit (OEL) values.

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:

The use of chemically resistant gloves is recommended to prevent skin contact. Suitable materials include nitrile (included in most kits), neoprene, ethyl vinyl alcohol (EVAL), PVC.

Eye protection:

Safety glasses recommended.

Other protective equipment:

Use protective cream if skin contact is likely. Remove and wash contaminated clothing before reuse. Discard

contaminated shoes.

9. Physical and Chemical

9.1 Information of basic physical and chemical properties

Appearance:	White to yellow paste; slight sulfur, pungent odor.
Odor threshold:	Not available
pH:	Does not apply
Freezing point:	Not available
Boiling point:	Not available
Flash point:	>90°C (PMCC)
Evaporation rate:	Not available
Flammability (solid, gas):	Not available
Upper/lower flammability or explosive limits:	Not available
Vapor pressure:	<1 mm Hg @ 20°C
Vapor density (Air = 1):	Not available
Specific gravity (H₂O = 1):	1,17 @ 20°C
Solubility in water:	Negligible
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

9.2 Other Information

Volatiles (Weight %):	0%
VOC Content:	0 g/l

10. Stability and Reactivity

10.1 Reactivity:

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:

Stable

10.3 Possibility of hazardous reactions:

Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid:

Avoid extreme heat and open flame.

10.5 Incompatible materials :

Strong oxidizing agents.

10.6 Hazardous decomposition products:

Oxides of carbon, oxides of sulfur, oxides of nitrogen and other organic substances may be formed during combustion or elevated temperature degradation.

11. Toxicological Information

11.1 Information on toxicological effects:

Acute toxicity

Eye contact:

Direct eye contact with material or vapors may cause eye irritation.

Skin contact:

May cause severe skin irritation, especially on prolonged contact. Prolonged or repeated skin exposure may cause skin sensitization.

Irritation and Sensitization Potential:

This product has high skin irritation potential. It is a sensitizer.

Inhalation (Breathing):

Low vapor pressure makes this route of exposure unlikely. No known significant hazard.

Ingestion:

Material is considered slightly toxic. Ingestion may cause irritation of the gastrointestinal tract, nausea, vomiting, and diarrhea.

Toxicity to Animals:

Polymercaptan amine blend	LD ₅₀ (oral rat) >2000 mg/kg
Polymer of C-18 Unsaturated Fatty Acid Dimers with TETA & TOFA	LD ₅₀ (oral rat) >2000 mg/kg LD ₅₀ (dermal rabbit) >2000 mg/kg
Triethylenetetramine	LD ₅₀ (oral rat) 2780 mg/kg LD ₅₀ (dermal rabbit) 550 mg/kg

Aspiration Hazard:

No aspiration hazard expected.

Chronic Exposure:

Reproductive Toxicity: Not available.

Mutagenicity: Not available.

Teratogenicity: Not available.

Specific Target Organ Toxicity (STOT) Not available.

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:

Aquatic Toxicity: Not available.

12.2 Persistence and degradability: Not available.

12.3 Bioaccumulation potential: Not available.

12.4 Mobility in soil: Not available.

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

12.6 Other adverse effects: None known.

13. Disposal Considerations

Do not dump into sewer, on ground or into any body of water. Dispose of product in accordance with National and Local Regulations.

14. Transport Information

DOT:	Not Regulated
UN Number:	Not Listed
UN Proper Shipping Name:	Not Applicable
Class and Subsidiary Risk:	Not Applicable
Packing Group:	Not Applicable
ICAO/IATA-DGR:	Not Regulated
IMDG:	Not Regulated
ADR/RID:	Not Regulated

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Contains no substance on the REACH candidate list $\geq 0.1\%$ SCL. Does not contain notified substances from the ELINCS List, Directive 92/32/EEC. Contains no REACH substances with Annex XVII restrictions.

Australia

All components are listed on the AICS.
Product is classified as hazardous according to criteria of NOHSC Australia.

USA Federal and State

All components are listed on the TSCA inventory.

Canada

All components are listed on the DSL inventory.
This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for the mixture by the supplier.

16. Other Information

Abbreviations and acronyms:

OSHA = Occupational Safety and Health Administration
CLP = Classification, Labeling and Packaging Regulation
STOT = Specific Target Organ Toxicity
LD₅₀ = Median Lethal Dose
DNEL = Derived No Effect Level
ACGIH = American Conference of Governmental Industrial Hygienists
TSCA = Toxic Substances Control Act (USA)
DSL = Domestic Substances List (Canada)
AICS = Australian Inventory of Chemical Substances

Mixture classification according to Regulation (EC) No 1272/2008:

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.

Classification Procedure

- Calculation method.
- Calculation method.
- Calculation method.

Revision Date: 9 August 2017
Revision Number: 6 EU

Product Name: AirRepair® Paste (Part B) Type AR

Revision Date: 9 August 2017

Supersedes: 21 July 2015

Other: Not Applicable

Indication of Changes: Reviewed with minor format updates.

Written in accordance with the provisions of REACH Annex II (EU No 453/2010) and Australia WHS Regulation (2011). (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.

SAFETY DATA SHEET

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

1.1 Product identifier

Product Name:
AirRepair® Putty Stick (AR-STICK)
Part Numbers: 50822, 51043

Product ID numbers: AR-STICK;
Contained in AR-KIT97, AR-KIT99

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: 2-Part Putty Sealant for temporary repair

List of advices against: Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

Polywater Europe BV
Zuidhaven 9-11 Unit B2
4761 CR Zevenbergen
Netherlands
Tel: +31 (0)10 2330578
Email: sds@polywater.com

American Polywater Corporation
11222 - 60th Street North
Stillwater, MN 55082 USA
Tel: 1-651-430-2270
Email: sds@polywater.com

Local Contact Information

1.4 Emergency telephone numbers

INFOTRAC: 1-800-535-5053 (USA) 1-352-323-3500 (INT'L)

National Poison Information Centre (NVIC): +31(0)30 274 8888
(Professional use for acute poisoning only, Netherlands.)

Local poison control information.

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to EU Regulation (EC) No 1272/2008 and Australia WHS Regulation (2011).

Skin Irrit 2 H315

Skin Sens 1 H317

Eye Irrit 2 H319

Aquatic Tox Chronic 2 H411

2.2 Label elements

Contains: Bisphenol A-epichlorohydrin polymer



Pictograms:

Signal word: Warning

Hazard Statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

- H319 Causes serious eye irritation.
- H411 Harmful to aquatic life with long lasting effects

Precautionary Statements:

- P280 Wear protective gloves, protective clothing and eye protection.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P273 Avoid release to the environment
- P391 Collect spillage.
- P501 Dispose of container in accordance with local regulations

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

<u>Component</u>	<u>CAS #</u>	<u>EC #</u>	<u>Wt. %</u>	<u>GHS/CLP Classification</u>
Bisphenol A-epichlorohydrin polymer	25068-38-6	500-033-5	10 - 30	Skin Irrit 2, H315 Skin Sens 1, H317 Eye Irrit 2, H319 Chronic Aquatic Tox, H411

4. First Aid Measures

4.1 Description of 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 for at least 15 minutes. If irritation or allergic reaction 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):** No emergency medical treatment necessary

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.

No information available.

5. Firefighting Measures

5.1 Extinguishing media:

Water fog or fine spray, dry chemical carbon dioxide, or foam.

5.2 Special hazards arising from the substance or mixture

Dense smoke is emitted when burned without sufficient oxygen.

Hazardous decomposition and by-products:

CO₂, CO, phenolics. May contain other combustion products of varying composition which may be toxic or 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. Water fog may be used to cool fire exposed container to prevent pressure build-up and possible auto-ignition or rupture. Direct water stream may spread fire.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate area. Use appropriate safety equipment.

6.2 Environmental precautions:

Avoid release to the environment. Prevent spill from entering drainage/sewer systems, waterways, basements or confined areas. Refer to Section 12 for more information.

6.3 Methods materials for containment and cleaning up:

Absorb spill with sand or absorbents. Residual resin may be removed using steam or hot soapy water. Collect as much of the spilled material as possible using non-sparking tools and transfer to a container. Seal the container. Residual material can be removed with solvent.

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

Avoid personal contact with the product. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Wash thoroughly after handling. Wash contaminated clothing before reuse. For industrial or professional use only.

7.2 Conditions for safe storage, including incompatibilities

Keep containers cool, dry, and away from sources of ignition. Keep containers and cartridges capped and sealed. Protect from freezing. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

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:

Contains no components with established Occupational Exposure Limit (OEL) values.

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:

The use of chemically resistant gloves is recommended to prevent skin contact. Suitable materials include nitrile (included in most kits), neoprene, ethyl vinyl alcohol (EVAL), PVC.

Eye protection:

Safety glasses recommended.

Other protective equipment:

Use protective cream if skin contact is likely. Remove and wash contaminated clothing before reuse. Discard contaminated shoes.

9. Physical and Chemical

9.1 Information of basic physical and chemical properties

Appearance:	Gray/dark gray, solid putty stick. Pungent, sulfurous odor.
Odor threshold:	Not available
pH:	Not available
Freezing point:	Not available
Boiling point:	Not available
Flash point:	>93°C (PMCC)

Evaporation rate:	Not available
Flammability (solid, gas):	Not available
Upper/lower flammability or explosive limits:	Not available
Vapor pressure:	Not available
Vapor density (Air = 1):	Not available
Specific gravity (H₂O = 1):	2,25
Solubility in water:	Not available
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	>200°C
Viscosity:	Not available (thick putty)

9.2 Other Information

Volatiles (Weight %):	<0.1%
VOC Content:	0 g/l

10. Stability and Reactivity

10.1 Reactivity:

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:

Stable

10.3 Possibility of hazardous reactions:

Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid:

Avoid high temperatures above 300 °C. Decomposition can occur above 350 °C. Generation of gas during decomposition can cause pressure to build in closed systems.

10.5 Incompatible materials :

Strong acids or bases (especially primary or secondary aliphatic amines), strong oxidizing agents.

10.6 Hazardous decomposition products:

CO₂, CO, phenolics and other organic substances may be formed during combustion or elevated temperature degradation.

11. Toxicological Information

11.1 Information on toxicological effects:

Acute toxicity

Eye contact:

Direct eye contact with material or vapors may cause eye irritation.

Skin contact:

This product has moderate skin irritation potential. Persons with pre-existing skin disorders may be more susceptible to skin irritation from this material. Prolonged or repeated skin exposure may cause skin sensitization.

Irritation and Sensitization Potential:

May cause allergic skin reaction.

Inhalation (Breathing):

Low vapor pressure makes this route of exposure unlikely.

Ingestion:

Ingestion may cause irritation of the gastrointestinal tract.

Toxicity to Animals:

Bisphenol A Diglycidyl Ether: LD₅₀ (oral rat) >15.000 mg/kg
 LD₅₀ (dermal rabbit) 23.000 mg/kg

Aspiration Hazard:

No aspiration hazard expected.

Chronic Exposure:

Reproductive Toxicity: Not available.
Mutagenicity: Resins based on diglycidyl ether of bisphenol A have proved to be inactive when tested by in-vivo mutagenicity assays. These resins have shown activity in in-vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat-liver cells. The significance of these tests to humans is unknown.
Teratogenicity: Not available.
Specific Target Organ Toxicity (STOT) Not available.
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:

Aquatic Toxicity: May be toxic to aquatic organisms.
 Bisphenol A Diglycidyl Ether: LC₅₀ (96 hr): 2 mg/l Oncorhynchus mykiss (rainbow trout) Semi-static test
 Bisphenol A Diglycidyl Ether: EC₅₀ (48 hr): 1,8 mg/l Daphnia magna (invertebrate) Static test
 Bisphenol A Diglycidyl Ether: ErC₅₀ (72 hr): 11 mg/l Fresh water algae (aquatic plants) Static test
 Bisphenol A Diglycidyl Ether: Chronic Toxicity Value: Daphnia magna (invertebrate), 21 d, number of offspring, NOEC: 0,3 mg/l Semi-static test

12.2 Persistence and degradability:

Bisphenol A Diglycidyl Ether: Based on stringent OECD test guidelines, this material cannot be considered readily biodegradable. Biodegradability depends on environmental conditions.
 Bisphenol A Diglycidyl Ether: OECD Biodegradation Test 302B 12% Biodegradation, 28 d exposure
 Bisphenol A Diglycidyl Ether: Theoretical Oxygen Demand 2,35 mg/mg

12.3 Bioaccumulation potential:

Bioconcentration potential is moderate.

12.4 Mobility in soil:

Potential for mobility in soil is low..

12.5 Results of PBT and vPvB Assessment:

This product is not, nor does it contain a substance that is a PBT or vPvB.

12.6 Other adverse effects:

None known.

13. Disposal Considerations

Do not dump into sewer, on ground or into any body of water. 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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Contains no substance on the REACH candidate list $\geq 0.1\%$ SCL. Does not contain notified substances from the ELINCS List, Directive 92/32/EEC. Contains no REACH substances with Annex XVII restrictions.

Australia

All components are listed on the AICS.

Product is classified as hazardous according to criteria of NOHSC Australia.

USA Federal and State

All components are listed on the TSCA inventory.

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.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for the mixture by the supplier.

16. Other Information

Abbreviations and acronyms:

OSHA = Occupational Safety and Health Administration

CLP = Classification, Labeling and Packaging Regulation

STOT = Specific Target Organ Toxicity

LD₅₀ = Median Lethal Dose

DNEL = Derived No Effect Level

ACGIH = American Conference of Governmental Industrial Hygienists

TSCA = Toxic Substances Control Act (USA)

DSL = Domestic Substances List (Canada)

AICS = Australian Inventory of Chemical Substances

Mixture classification according to Regulation (EC) No 1272/2008:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Harmful to aquatic life with long lasting effects.

Classification Procedure

Calculation method.
Calculation method.
Calculation method.
Calculation method.

Product Name: AirRepair® Putty Stick

Revision Date: 7 August 2017

Revision Date: 7 August 2017

Revision Number: 6 EU

Supersedes: 21 July 2015

Other: Not Applicable

Indication of Changes: Reviewed with small format updates..

Written in accordance with the provisions of REACH Annex II (EU No 453/2010) and Australia WHS Regulation (2011). (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.

SAFETY DATA SHEET

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

1.1 Product identifier

**Product Name: AirRepair®
Plastic Primer
Part Number PW-1**

Product ID numbers: PW-1

Contained in AirRepair Kits: AR-KIT-1, AR-KIT11, AR-KIT14, AR-KIT14F, AR-KIT97P, AR-KIT99, AR-KITG

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Plastic adhesion promotion

List 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
Stillwater, MN 55082 USA
Tel: 1-651-430-2270
Email: sds@polywater.com

Polywater Europe BV
Zuidhaven 9-11 Unit B2
4761 CR Zevenbergen
Netherlands
Tel: +31 (0)10 2330578
Email: sds@polywater.com

Local Contact Information

1.4 Emergency telephone numbers

INFOTRAC: 1-800-535-5053 (USA) 1-352-323-3500 (INT'L)

National Poison Information Centre (NVIC): +31(0)30 274 8888
(Professional use for acute poisoning only, Netherlands.)

Local Poison Control Information

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to EU Regulation (EC) No 1272/2008 and Australia WHS Regulation (2011).

Flam Liq 2	H225
Skin Irrit. 2	H315
Skin Sens 1	H317
Eye Irrit 2	H320
Acute Tox 4	H332
STOT SE 3	H336
Aq Chronic Tox	H411

2.2 Label elements

Contains:

Low boiling point naphtha, Cyclohexane, Styrene-butadiene polymer (5-15), Limonene polymer (7-13)



Pictograms:

Signal word: Danger

Hazard Statements:

H225	Extremely flammable liquid and vapor.
H315 + H320	Causes skin and eye irritation.
H317	May cause allergic skin reaction.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P210	Keep away from sparks, flames and hot surfaces. No smoking.
P280	Wear protective gloves and eye protection.
P303 + P361 + P353	IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water.
P333 + P313	If skin irritation or rash occurs: get medical attention.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container according to local regulations.

Notes: Aspiration classification not applied due to the physical form of the product.

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

<u>Component</u>	<u>CAS #</u>	<u>Wt. %</u>	<u>GHS/CLP Classification</u>
Low boiling point naphtha	64742-49-0	75 - 90%	Flam Liq 2, H225; Asp Tox 1, H304; Skin Irrit 2, H315 Eye Irrit 2, H320; Acute Tox 4, H332 STOT SE 3, H336
Cyclohexane	110-82-7	5 – 10%	Flam Liq 2, H225; Asp Tox 1, H304; Skin Irrit 2, H315 STOT SE 3, H336; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
Styrene-butadiene polymer (5-15)	9003-55-8	< 3%	Skin Sens 1, H317 Aquatic Chronic 3, H412
Limonene polymer (7-13)	9003-73-0	< 3%	Skin Irrit 2, H315 Eye Irrit 2, H319; Aquatic Chronic 3, H412

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. Remove contact lenses, if present and easy to do. Continue rinsing. 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If irritation persists, seek medical attention.
Ingestion (Swallowing):	Do not induce vomiting or give anything by mouth unless directed to do so by medical personnel. Get medical attention if symptoms appear.

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.

No information available.

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 carbon monoxide, carbon dioxide.

5.3 Advice for firefighters

Wear appropriate, protective clothing, including self-contained, positive pressure or pressure-demand breathing apparatus. 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. 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. 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.

6.3 Methods materials for containment and cleaning up:

Collect towel and absorb any excess material with sand or absorbents.

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. Take precautionary measures against static discharge. 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. Use only outdoors or in a well-ventilated area. For industrial or professional use only.

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:****2-methylpentane (107-83-5)**

Germany DFG*	500 ppm, 1800 mg/m ³ (8 hr)
Austria	200 ppm, 715 mg/m ³ (8 hr); 800 ppm, 2860 mg/m ³ (15 min)
Finland	500 ppm, 1800 mg/m ³ (8 hr); 630 ppm, 2300 mg/m ³ (15 min)
Switzerland	500 ppm, 1800 mg/m ³ (8 hr); 1000 ppm, 3600 mg/m ³ (15 min)
Sweden	200 ppm, 700 mg/m ³ (8 hr); 300 ppm, 1100 mg/m ³ (15 min)

USA (ACGIH, OSHA) 500 ppm (8 hr); 1000 ppm (15 min)

Low boiling point naphtha (64742-89-8)

No information available.

1-methoxypropan-2-ol (107-98-2)

EU Work Program (SCOEL ^{**})	375 mg/m ³ (8hr); 563 mg/m ³ (15 min)
Social Affairs Work Program 1988	375 mg/m ³ (8hr)
REACH DNEL	369 mg/m ³ (8hr)
Germany AGS	100 ppm, 370 mg/m ³ (8 hr)
Denmark WEA	50 ppm, 185 mg/m ³ (8 hr)
Finland	100 ppm, 370 mg/m ³ (8 hr); 150 ppm, 560 mg/m ³ (15 min)
France	50 ppm, 188 mg/m ³ (8 hr); 100 ppm, 375 mg/m ³ (15 min)
UK	100 ppm, 375 mg/m ³ (8 hr); 150 ppm, 560 mg/m ³ (15 min)
Norway	50 ppm, 180 mg/m ³ (8 hr)
Austria	50 ppm, 187 mg/m ³ (8 hr); 50 ppm, 187 mg/m ³ (15 min)
Sweden	50 ppm, 190 mg/m ³ (8 hr); 75 ppm, 300 mg/m ³ (8 hr)
Switzerland	100 ppm, 360 mg/m ³ (8 hr); 200 ppm, 720 mg/m ³ (15 min)
Belgium	100 ppm, 375 mg/m ³ (8 hr); 150 ppm, 568 mg/m ³ (15 min)
Spain	100 ppm, 375 mg/m ³ (8 hr); 150 ppm, 568 mg/m ³ (15 min)
USA (ACGIH)	100 ppm (8 hr); 150 ppm (15 min)

****deutsche forschungsgemeinschaft, German Research Foundation*

*** Scientific Committee for Occupational Exposure Limits*

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.

Suggested Material: Nitrile Rubber
For short term contact (<15 minutes), splashes use 0,2 mm. For full contact use 0,4 mm

Suggested Thickness: 0,4 mm

Exact break-through time has not been determined. Guidance is based on similar chemistry/material.

Maximum wearing time should be determined based on 50 % of the penetration time determined by EN 374 part III.

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:	Slightly viscous liquid; mild odor.
Odor threshold:	Not available
pH:	Does not apply
Freezing point:	Not available
Boiling point:	62°C (initial)
Flash point:	-6°C (TCC)

Evaporation rate:	>2 (n-butyl acetate = 1)
Flammability (solid, gas):	Not applicable to liquids
Flammability limits:	LEL: 1,2%
Vapor pressure:	Not available
Vapor density (Air = 1):	>1 (Air = 1)
Specific gravity (H₂O = 1):	Not determined
Solubility in water:	Not available
Coefficient of Water/Oil Distribution:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

9.2 Other Information

Volatiles (Weight %):	100%
VOC Content:	Not determined

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 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).

Ingestion:

May be harmful if swallowed. 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:

Low boiling point naphtha	LD ₅₀ (oral rat) >5000 mg/kg LD ₅₀ (dermal rabbit) >2000 mg/kg Rabbit 4 hr exposure: Irritating to skin, irritating to eyes
Cyclohexane	LD ₅₀ (oral rat) 6200 mg/kg LD ₅₀ (dermal rat) >2000 mg/kg LC ₅₀ (inhl rat, 4 hrs) 32,9 mg/l Rabbit: Mild irritant

Chronic Exposure:

Reproductive Toxicity:	No data available.
Mutagenicity:	No data available
Teratogenicity:	No data available
Specific Target Organ Toxicity (STOT)	No end point data.
Toxicologically Synergistic Products:	Not available.

Carcinogenic Status:

IARC	No components of this product present at levels greater than or equal to 0,1% is identified as a carcinogen or potential carcinogen by IARC.
OSHA	No components of this product present at levels greater than or equal to 0,1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No components of this product present at levels greater than or equal to 0,1% is identified as a known or anticipated carcinogen by NTP.

12. Ecological Information

12.1 Ecotoxicity:

Aquatic Toxicity:

Low boiling point naphtha	96 h LC ₅₀ Oncorhynchus mykiss (Rainbow Trout) 8.2 mg/l 48 h EC ₅₀ Daphnia magna (water flea) 4.5 mg/l 96 h EC ₅₀ Pseudokirchneriella subcapitata (green algae) 3.7 mg/l
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12.2 Persistence and degradability:

Low boiling point naphtha	Expected to be biodegradable 77% biodegradable, 28 d exposure time, method: OECD 301E
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12.3 Bioaccumulation potential:

No information available

12.4 Mobility in soil:

No information available

12.5 Results of PBT and vPvB Assessment:

This product is not, nor does it contain a substance that is a PBT or vPvB.

12.6 Other adverse effects:

None known.

13. Disposal Considerations

Product is ignitable waste. Dispose of product in accordance with National and Local Regulations.

14. Transport Information

US DOT Domestic Ground Transportation:

Not Regulated (See Special Provision 47).

UN Number:

3175
Solids Containing Flammable Liquid, N.O.S., (Contains: Low boiling point naphtha)

UN Proper shipping name:

Class 4.1

Transport hazard class(es):

Packing group:

II

Environmental hazards:	None known
Special precautions:	None known
ICAO/IATA-DGR:	Not Regulated (See Special Provision A46)
IMDG:	Not Regulated (See Special Provision 216)

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Contains no substance on the REACH candidate list $\geq 0.1\%$ SCL. Does not contain notified substances from the ELINCS List, Directive 92/32/EEC. Contains no REACH substances with Annex XVII restrictions.

Australia

All components are listed on the AICS.
Hazardous according to criteria of NOHSC Australia.

USA Federal and State

All components are listed on the TSCA inventory.

Canada

All components are listed on the DSL inventory.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for the mixture by the supplier

16. Other Information

Abbreviations and acronyms:

OSHA = Occupational Safety and Health Administration
CLP = Classification, Labeling and Packaging Regulation
STOT = Specific Target Organ Toxicity
LD₅₀ = Median Lethal Dose
DNEL = Derived No Effect Level
ACGIH = American Conference of Governmental Industrial Hygienists
TSCA = Toxic Substances Control Act (USA)
DSL = Domestic Substances List (Canada)
AICS = Australian Inventory of Chemical Substances

Revision Date:	24 August 2017
Revision Number:	2 EU
Supersedes:	30 June 2015
Other:	Not Applicable
Indication of Changes:	Reviewed in accordance with the provisions of OSHA 29 CFR 1910.1200 (2012) and Canadian Hazardous Products Regulations (SOR/2015-17) (WHMIS 2015).

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.

SAFETY DATA SHEET

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

1.1 Product identifier

**Product Name: Type RP™
Rapid Power Electrical Cleaning Wipe**

Product ID numbers: RP-1, RP-1L
RP-XXX (Where XXX is the package code.)

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Utility Cleaner/Degreaser

List 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
Stillwater, MN 55082 USA
Tel: 1-651-430-2270
Email: sds@polywater.com

Polywater Europe BV
Zuidhaven 9-11 Unit B2
4761 CR Zevenbergen
Netherlands
Tel: +31 (0)10 2330578
Email: sds@ polywater.com

Local Contact Information

1.4 Emergency telephone numbers

INFOTRAC: 1-800-535-5053 (USA) 1-352-323-3500 (INT'L)

National Poison Information Centre (NVIC): +31(0)30 274 8888
(Professional use for acute poisoning only, Netherlands.)
Local Poison Control Information

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to EU Regulation (EC) No 1272/2008 and Australia WHS Regulation (2011).

Flam Liq 2	H225
Skin Irrit. 2	H315
STOT SE 3	H336
Aquatic Chronic Toxicity	H411

2.2 Label elements

Contains: 2-methylpentane, Low boiling point naphtha, 1-methoxypropan-2-ol



Pictograms:

Signal word: Danger

Hazard Statements:

H225	Extremely flammable liquid and vapor.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P210	Keep away from sparks, flames and hot surfaces. No smoking.
P280	Wear protective gloves.
P303 + P361 + P353	IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P403 + P235	Store in a well-ventilated place. Keep cool.
P273	Avoid release to the environment.

Notes: Aspiration classification not applied due to the physical form of the product.

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

<u>Component</u>	<u>CAS #</u>	<u>EC #</u>	<u>Wt. %</u>	<u>GHS/CLP Classification</u>
2-methylpentane	107-83-5	203-523-4	40 - 60%	Flam Liq 2, H225; Asp Tox 1, H304; Skin Irrit 2, H315 STOT SE 3, H336
Low boiling point naphtha	64742-89-8	265-192-2	40 - 60%	Flam Liq 2, H225; Asp Tox 1, H304; Skin Irrit 2, H315 STOT SE 3, H336
1-methoxypropan-2-ol	107-98-2	203-539-1	<10%	Flam Liq 3, H226; STOT SE 3, H336

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 unless directed to do so by medical personnel. Get medical attention if symptoms appear.

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.

No information available.

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 carbon monoxide, carbon dioxide.

5.3 Advice for firefighters

Wear appropriate, 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. 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. 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.

6.3 Methods materials for containment and cleaning up:

Collect towel and absorb any excess material with sand or absorbents.

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. Use only outdoors or in a well-ventilated area. For industrial or professional use only.

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:

2-methylpentane (107-83-5)

Germany DFG*	500 ppm,1800 mg/m ³ (8 hr)
Austria	200 ppm,715 mg/m ³ (8 hr); 800 ppm, 2860 mg/m ³ (15 min)
Finland	500 ppm,1800 mg/m ³ (8 hr); 630 ppm, 2300 mg/m ³ (15 min)
Switzerland	500 ppm,1800 mg/m ³ (8 hr); 1000 ppm, 3600 mg/m ³ (15 min)
Sweden	200 ppm,700 mg/m ³ (8 hr); 300 ppm, 1100 mg/m ³ (15 min)
USA (ACGIH, OSHA)	500 ppm (8 hr); 1000 ppm (15 min)

Low boiling point naphtha (64742-89-8)

No information available.

1-methoxypropan-2-ol (107-98-2)

EU Work Program (SCOEL**)	375 mg/m ³ (8hr); 563 mg/m ³ (15 min)
Social Affairs Work Program 1988	375 mg/m ³ (8hr)
REACH DNEL	369 mg/m ³ (8hr)
Germany AGS	100 ppm, 370 mg/m ³ (8 hr)
Denmark WEA	50 ppm, 185 mg/m ³ (8 hr)
Finland	100 ppm, 370 mg/m ³ (8 hr); 150 ppm, 560 mg/m ³ (15 min)

France	50 ppm, 188 mg/m ³ (8 hr); 100 ppm, 375 mg/m ³ (15 min)
UK	100 ppm, 375 mg/m ³ (8 hr); 150 ppm, 560 mg/m ³ (15 min)
Norway	50 ppm, 180 mg/m ³ (8 hr)
Austria	50 ppm, 187 mg/m ³ (8 hr); 50 ppm, 187 mg/m ³ (15 min)
Sweden	50 ppm, 190 mg/m ³ (8 hr); 75 ppm, 300 mg/m ³ (8 hr)
Switzerland	100 ppm, 360 mg/m ³ (8 hr); 200 ppm, 720 mg/m ³ (15 min)
Belgium	100 ppm, 375 mg/m ³ (8 hr); 150 ppm, 568 mg/m ³ (15 min)
Spain	100 ppm, 375 mg/m ³ (8 hr); 150 ppm, 568 mg/m ³ (15 min)
USA (ACGIH)	100 ppm (8 hr); 150 ppm (15 min)

***deutsche forschungsgemeinschaft, German Research Foundation

** Scientific Committee for Occupational Exposure Limits

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.

Suggested Material: Nitrile Rubber

For short term contact (<15 minutes), splashes use 0.2 mm. For full contact use

Suggested Thickness: 0.4 mm

Exact break-through time has not been determined. Guidance is based on similar chemistry/material.

Maximum wearing time should be determined based on 50 % of the penetration time determined by EN 374 part III.

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; mild odor.
Odor threshold:	Not available
pH:	Does not apply
Freezing point:	Not available
Boiling point:	62°C (initial)
Flash point:	-7°C (TCC)
Evaporation rate:	>2 (n-butyl acetate = 1)
Flammability (solid, gas):	Not applicable to liquids
Flammability limits:	LEL: 1,2%
Vapor pressure:	Not available
Vapor density (Air = 1):	>1 (Air = 1)
Specific gravity (H₂O = 1):	0,72
Solubility in water:	Not available
Coefficient of Water/Oil	
Distribution:	Not available
Auto-ignition temperature:	Not available

Decomposition temperature: Not available

Viscosity: Not available

9.2 Other Information

Volatiles (Weight %): 100%

VOC Content: 720 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 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).

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:

2-methylpentane No Data Available

Low boiling point naphtha LD₅₀ (oral rat) >5,000 mg/kg

LD₅₀ (dermal rabbit) >2,000 mg/kg

Rabbit 4 hr exposure: Irritating to skin, irritating to eyes

1-methoxypropan-2-ol LD₅₀ (oral rat) 6,100 mg/kg

LD₅₀ (dermal rabbit) 13,000 mg/kg

LC₅₀ (inhl rat) >6 mg/l

Chronic Exposure:

Reproductive Toxicity: No data available.

Mutagenicity:	No data available
Teratogenicity:	No data available
Specific Target Organ Toxicity (STOT)	No end point data.
Toxicologically Synergistic Products:	Not available.
Carcinogenic Status:	
IARC	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

12. Ecological Information

12.1 Ecotoxicity:	
Aquatic Toxicity:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2-methylpentane	No Data Available
Low boiling point naphtha	96 h LC ₅₀ Oncorhynchus mykiss (Rainbow Trout) 8.2 mg/l 48 h EC ₅₀ Daphnia magna (water flea) 4.5 mg/l 96 h EC ₅₀ Pseudokirchneriella subcapitata (green algae) 3.7 mg/l
1-methoxypropan-2-ol	96 h LC ₅₀ Pimephales promelas (Fathead Minnow) 20,800 mg/l 48 h LC ₅₀ Daphnia magna (water flea) 23,300 mg/l 7 d EC ₅₀ Pseudokirchneriella subcapitata (green algae) > 1000 mg/l
12.2 Persistence and degradability:	Expected to be biodegradable
Low boiling point naphtha	77% biodegradable, 28 d exposure time, method: OECD 301E
1-methoxypropan-2-ol	96% biodegradable, 28 d exposure time, method: OECD 301E
12.3 Bioaccumulation potential:	No information available
12.4 Mobility in soil:	No information available
12.5 Results of PBT and vPvB Assessment:	This product is not, nor does it contain a substance that is a PBT or vPvB.
12.6 Other adverse effects:	None known.

13. Disposal Considerations

Dispose of product in accordance with National and Local Regulations.

14. Transport Information

US DOT Domestic Ground Transportation:	Not Regulated (See Special Provision 47).
UN Number:	3175
UN Proper shipping name:	Solids Containing Flammable Liquid, N.O.S., (Contains: 2-methylpentane, Low boiling point naphtha)
Transport hazard class(es):	Class 4.1
Packing group:	II
Environmental hazards:	None known
Special precautions:	None known

ICAO/IATA-DGR: Not Regulated (See Special Provision A46)

IMDG: Not Regulated (See Special Provision 216)

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Contains no substance on the REACH candidate list $\geq 0.1\%$ SCL. Does not contain notified substances from the ELINCS List, Directive 92/32/EEC. Contains no REACH substances with Annex XVII restrictions.

Australia

All components are listed on the AICS.
Hazardous according to criteria of NOHSC Australia.

USA Federal and State

All components are listed on the TSCA inventory.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for the mixture by the supplier

16. Other Information

Abbreviations and acronyms:

OSHA = Occupational Safety and Health Administration
CLP = Classification, Labeling and Packaging Regulation
STOT = Specific Target Organ Toxicity
LD₅₀ = Median Lethal Dose
DNEL = Derived No Effect Level
ACGIH = American Conference of Governmental Industrial Hygienists
TSCA = Toxic Substances Control Act (USA)
DSL = Domestic Substances List (Canada)
AICS = Australian Inventory of Chemical Substances

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Supersedes: 7 July 2017

Locale: --

Indication of Changes: Sections 1.4, 8.1, 9, 15 updated.

Written in accordance with the provisions of REACH Annex II (EU No 453/2010) and Australia WHS Regulation (2011). (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.