

# 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: Type TR™  
Cleaner/Degreaser  
Saturated Wipe or Towel Package**

**Chemical Description:** Non-flammable Solvent  
Azeotrope

**Product Use:** Towelette Saturated with Cleaning  
Preparation

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS #</u>	<u>EC #</u>	<u>Wt</u>
1-Bromopropane	106-94-5	203-445-0	< 30 gm/towel (>95%)
Stabilizers	proprietary	--	< 2 gm/towel (<5%)

Components listed as proprietary are considered trade secret in accordance with the OSHA Hazard and Communication Standard (29 CFR 1910.1200). Identity of proprietary components will be made available as provided in this standard.

## 3. HAZARDS IDENTIFICATION

- Emergency Overview:** Use with adequate ventilation; vapors harmful. Irritating to eyes, respiratory system and skin. Avoid contact with skin and eyes. Wear gloves. In case of eye contact, flush eyes with water. Keep out of reach of children. Industrial use only.
- Eye Contact:** Direct eye contact with vapors or splashes may cause eye irritation.
- Skin Contact:** 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):** Prolonged exposure to excessively high vapor concentrations can result in central nervous system depression (e.g., drowsiness, dizziness, loss of coordination, and fatigue) and may cause adverse effects in the liver, lung, and kidney. Persons with impaired lung function may experience additional breathing difficulties due to the irritant properties of this material.
- Ingestion (Swallowing):** Maximum amount in a single saturated towel is less than 30 grams of solvent. Not expected to be acutely toxic.

#### 4. 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):** Less than 30 grams solvent per package. 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.

#### 5. FIRE-FIGHTING MEASURES

- Flash Point (bulk liquid):** None (TCC) for solvent (bulk).
- Flammable Limits (bulk liquid):** Approximately 3-8% in air.
- Autoignition Temperature:** Not Available
- Hazardous Decomposition and By-Products:** Include hydrogen bromide, bromine, oxides of carbon and oxides of nitrogen.
- Extinguishing Media:** In case of fire, use extinguishing media suitable for surrounding conditions, possibly water, foam, carbon dioxide, or dry agent.
- Special Precautions:** Towelettes will ignite. If burning, smother or isolate from other flammable materials.
- Unusual Hazards:** Vapors are heavier than air and may travel considerable distances.

#### 6. ACCIDENTAL RELEASE MEASURES

No spill hazard with saturated towel package.

#### 7. HANDLING AND STORAGE

Keep containers and cartons containing saturated wipes tightly closed. Keep containers and cartons cool, dry, and away from sources of ignition. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with the product. Use good personal hygiene practice. Use of pre-saturated towel limits exposure. All wipes should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>Respiratory Protection:</b>	Normal ventilation is adequate. Towelette limits solvent vapor exposure. 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.						
<b>Protective Gloves:</b>	The use of impermeable gloves is recommended to prevent drying and possible irritation. Use of chemically resistant gloves such as Nitrile for short-term exposure, or Viton or Silvershield for extended exposures is suggested.						
<b>Eye Protection:</b>	None necessary. Wipe package eliminates splash hazard. Do not allow wipe/towel to directly contact eyes.						
<b>Other Protective Equipment:</b>	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.						
<b>Exposure Limits and Recommendations:</b>	<table> <thead> <tr> <th><u>Chemical Component</u></th> <th><u>OSHA PEL</u></th> <th><u>ACGIH TLV</u></th> </tr> </thead> <tbody> <tr> <td colspan="3">An AEL (acceptable exposure limit) of 25 ppm has been recommended by the United States EPA. OES/LTEL 100 ppm (525mg/m<sup>3</sup>)</td> </tr> </tbody> </table>	<u>Chemical Component</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	An AEL (acceptable exposure limit) of 25 ppm has been recommended by the United States EPA. OES/LTEL 100 ppm (525mg/m <sup>3</sup> )		
<u>Chemical Component</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>					
An AEL (acceptable exposure limit) of 25 ppm has been recommended by the United States EPA. OES/LTEL 100 ppm (525mg/m <sup>3</sup> )							

**9. PHYSICAL AND CHEMICAL PROPERTIES (bulk liquid)**

<b>Appearance:</b>	A non-linting towel, lightly saturated with clear, colorless liquid.
<b>Odor Threshold:</b>	Very low
<b>Vapor Density (Air = 1):</b>	4.3
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	1.33
<b>Solubility in Water:</b>	2.5 grams per liter
<b>Boiling Point:</b>	160°F / 71 °C (initial)
<b>Freezing Point:</b>	Not Available
<b>Evaporation Rate:</b>	> 2 (n-butyl acetate = 1)
<b>Vapor Pressure:</b>	>140 mm Hg @ 20 °C
<b>Coefficient of Water/Oil Distribution:</b>	Not Available
<b>pH:</b>	Not Applicable
<b>Volatiles (Weight %):</b>	100%
<b>VOC Content:</b>	1330 g/L

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Conditions to Avoid:</b>	Avoid heat, flame or other hot surfaces that could cause thermal decomposition.
<b>Materials to Avoid:</b>	Strong alkalis, oxidizers and reactive metals (i.e. potassium, sodium, etc.).
<b>Hazardous Decomposition Products:</b>	Thermal decomposition products include hydrogen bromide, bromine and oxides of carbon as well as oxides of nitrogen.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicity to Animals:</b>	Medium Aliphatic Petroleum Solvent	LD <sub>50</sub> (oral rat) 4,260 mg/kg LC <sub>50</sub> (inhl rat) 253,000 mg/m <sup>3</sup> /0.5 hr
<b>Chronic Exposure:</b>	Not Available	
<b>Carcinogenic Status:</b>	This substance contains less than 1% 1,2 butylene oxide listed as IARC 2B, "Possibly carcinogenic to humans".	
<b>Reproductive Toxicity:</b>	Product may cause reproductive effects based on animal studies. Target organs include kidneys, CNS, liver, and bone marrow.	
<b>Mutagenicity:</b>	Not Available	
<b>Teratogenicity:</b>	Not Available	
<b>Toxicologically Synergistic Products:</b>	Not Available	

## 12. ECOLOGICAL INFORMATION

<b>Mobility:</b>	Sinks in water.
<b>Bioaccumulation:</b>	Low potential.
<b>Ecotoxicity:</b>	Large volumes may penetrate soil and contaminate groundwater. (Unlikely in towelette package.)
<b>Ozone Depletion Potential:</b>	0.013 - 0.018
<b>Other:</b>	Not readily biodegradable, but low atmospheric lifetime.
<b>Aquatic Toxicity:</b>	1-Bromopropane: 96 h LC <sub>50</sub> Fathead Minnow 67,300 µl/l

## 13. DISPOSAL CONSIDERATIONS

Dispose of product in accordance with National and Local Regulations.

**14. TRANSPORTATION INFORMATION**

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

**15. REGULATORY INFORMATION****USA Federal and State**

All components are listed on the TSCA inventory.

<b>Hazard Categories for SARA Section 311/312 Reporting</b>	<b><u>Acute</u> Yes</b>	<b><u>Chronic</u> Yes</b>	<b><u>Fire</u> No</b>	<b><u>Pressure</u> No</b>	<b><u>Reactive</u> No</b>
<b><u>Components</u></b>					
1,2-Butylene Oxide (CAS# 106-88-7)					
		<b><u>CERCLA/SARA Sec 302 Hazardous Substance RQ</u></b>	<b><u>EHS TPQ</u></b>	<b><u>SARA Sec. 313 Toxic Release</u></b>	
		100 lbs	No	1%	

Type TR™ Cleaner/Degreaser Solvent Wipes contain less than 1% 1,2 Butylene Oxide as a stabilizer. Any release of 100 lbs or greater must be reported (over 1 million TR-1 Solvent Wipes).

**California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**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.

<b>Risk Phrases:</b>	R36/37/38: Irritating to eyes, respiratory system and skin R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation R60: May impair fertility R63: Possible risk of harm to the unborn child R67: Vapors may cause drowsiness and dizziness
<b>Safety Phrases:</b>	S2: Keep out of reach of children S53: Avoid exposure S45: In case or accident or if you feel unwell, seek medical advice immediately.
<b>Symbol:</b>	T: Toxic

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.

**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

<b>NFPA Ratings:</b>	Health:	2
	Fire:	0
	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:** May 10, 2010  
**Revision Number:** 1  
**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.