

# **Safety Data Sheet**

# TRADE NAME: TEK-454

## **Envirotek Screen Wash**

#### 1. IDENTIFICATION

**Product Identifier:** Tek-454 **Other Means of Identification:** Screen Wash

**Recommended Use:** Screen printing mesh ink remover

**Product form:** Mixture

**Supplier Identifier** Teknecal Screen Print Supplies Inc.

6-733 Industrielle Street Rockland, Ontario K4K 1T2 613.446.7171 / 800.547.9318

**Emergency Phone # 24/7** CANUTEC 613.996.6666

#### 2. HAZARD IDENTIFICATION

#### **Classification:**

H226 Flammable liquids 3

**H311** Acute toxicity 3 (Dermal)

**H332** Acute toxicity 4 (Inhalation)

**H315** Skin irritant 2

H319 Eye irritant 2A

**H317** Sensitization (Skin) 1

**H360** Reproductive toxicity 1B

H372 STOT RE (Specific target organ toxicity / Repeated exposure) 1

**H304** Aspiration hazard 1

#### **Hazard Pictograms:**









Signal word: **DANGER** 

#### **Hazard Statements:**

**H226** Flammable liquid and vapour.

**H311** Toxic in contact with skin.

H332 Harmful if inhaled.

**H315** Causes skin irritation.

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- **H319** Causes serious eye irritation.
- **H317** May cause an allergic skin reaction.
- **H360** May damage fertility or the unborn child.
- **H372** Causes damage to organs through prolonged or repeated exposure.
- **H304** May be fatal if swallowed and enters airways.

#### **Precautionary Statements:**

- **P201** Obtain special instructions before use.
- **P202** Do not handle until all safety precautions have been read and understood.
- **P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- **P233** Keep container tightly closed.
- **P240** Ground/bond container and receiving equipment.
- **P241** Use explosion-proof electrical/ventilation/lighting equipment.
- **P242** Use only non-sparking tools.
- **P243** Take action to prevent static discharges.
- **P260** Do not breathe dust/fume/gas/mist/vapours/spray.
- **P264** Wash hands, forearms and face thoroughly after handling.
- **P270** Do not eat, drink or smoke when using this product.
- **P271** Use only outdoors or in a well-ventilated area.
- **P272** Contaminated work clothing should not be allowed out of the workplace.
- **P280** Wear protective gloves/protective clothing/eye protection/face protection.
- P308, P313

If exposed or concerned: Get medical advice/attention.

#### P301, P310, P331

IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

#### P302, P352, P361, P364, P333, P313

IF ON SKIN: Wash with plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs; get medical advice/attention.

#### P304, P340, P312

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if victim feels unwell.

#### P305, P351, P338, P337, P313

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists; get medical advice/attention.

#### P403, P235

Store in a well-ventilated place. Keep cool.

- **P405** Store locked up.
- **P501** Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Unknown acute toxicity:** 15% of the mixture consists of ingredients(s) of unknown acute toxicity (Dermal). 61% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours)).

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	%
Alcohols, C9-11, Ethoxylated	68439-46-3	From 10 to 30%
D-Limonene	5989-27-5	From 10 to 30%
2-Butoxyethanol	111-76-2	From 7 to 13%
Diethylene Glycol Monobutyl Ether	112-34-5	From 5 to 10%
1-Methyl-2-Pyrrolidone	872-50-4	From 5 to 10%
Naphtha, Petroleum, Hydrotreated Heavy	64742-48-9	From 3 to 7%
Ethylene Glycol Monobutyl Ether Acetate	112-07-2	From 1 to 5%

#### 4. FIRST-AID MEASURES

**Inhalation:** If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if victim feels unwell.

**Skin Contact:** Wash with plenty of water. Take off contaminated clothing and was it before reuse. If skin irritation or rash occurs, get medical advice/attention.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**Ingestion:** Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

#### Most Important Symptoms and Effects, Acute and Delayed

If inhaled: Harmful if inhaled. May cause irritation to the respiratory tract.

**If on skin:** Toxic in contact with skin. Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause an allergic skin reaction.

**If in eyes:** Causes serous eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**If swallowed:** May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May result in aspiration into the lungs, causing chemical pneumonia.

**Immediate Medical Attention and Special Treatment:** Symptoms may be delayed. In case of accident or if victim feels unwell, seek medical advice immediately

#### 5. FIRE-FIGHTING MEASURES

#### **Extinguishing Media**

**Suitable:** Use extinguishing media appropriate for surrounding fire.

Unsuitable: Non known.

**Specific Hazards Arising from the Product:** Flammable liquid and vapour. Products of combustion may include, and are not limited to: oxides of carbon. May form flammable/explosive vapour-air mixture.

**Special Protective Equipment and Precautions for Fire-fighters:** Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Remove all sources of ignition.

**Methods and Materials for Containment and Cleaning Up:** Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment. Sweep or shovel spills into appropriate container for disposal. Provide ventilation. For further information, refer to section 8.

#### 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not breathe dust, fume, gas, mist, spray, vapours. Do not swallow. Handle and open container with

care. When using, do not eat, drink or smoke. Take precautionary measures against static discharge. Proper grounding procedures to avoid static electricity should be followed. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Handle empty containers with care because residual vapours are flammable.

Hygiene measures: Wash contaminated clothing before reuse. Always wash hands after handling the product.

**Conditions for Safe Storage:** Keep out of reach of children. Keep container tightly closed and in a well-ventilated place. Keep cool. Store locked up.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Control parameters:** 

Diethylene Glycol Monobutyl Ether	USA-ACGIH	ACGIH TWA (ppm)	10 ppm (inhalable faction and vapour)
2-Butoxyethanol	USA-ACGIH	ACGIH TWA (ppm)	20 ppm
	USA-ACGIH	Remark (ACGIH)	Eye & URT irr
	USA-ACGIH	Regulatory reference	ACGIH 2017
Ethylene Glycol Monobutyl Ether	USA-ACGIH	ACGIH TWA (ppm)	20 ppm
Acetate			

**Appropriate Engineering Controls:** Ensure good ventilation of the work station.

**Environmental Exposure Controls:** Avoid release to the environment.

### **Individual Protection Measures:**

**Eye/Face Protection:** Wear eye/face protection.

**Skin Protection:** Wear suitable protective clothing and gloves resistant to chemical penetration. **Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.



### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Basic Physical and Chemical Properties** 

Physical state:	Liquid •	Vapour Pressure:	No data available
Appearance:	Clear	Vapour Pressure	
Colour:	Colourless	at 50°C:	No data available
Odour:	Sweet	Relative Density:	No data available
Odour Threshold:	No data available	Solubility:	No data available
PH:	No data available	Partition Coefficient,	
Melting Point:	No data available	n-Octanol/Water:	No data available
Freezing Point:	No data available	Auto-ignition	
<b>Boiling Point:</b>	No data available	Temperature:	No data available
Flash Point:	No data available	Decomposition	
Evaporation Rate:	No data available	Temperature:	No data available
Flammability		Viscosity, kinematic:	No data available
(solid, gas):	No data available	Explosive limits:	No data available

#### 10. STABILITY AND REACTIVITY

Reactivity: No dangerous reactions known under normal conditions of use.

**Chemical Stability:** Stable under normal conditions. May form flammable/explosive vapour-air mixture. **Possibility of Hazardous Reactions:** No dangerous reactions known under normal conditions of use.

Conditions to Avoid: Heat. Incompatible materials. Sources of ignition. Direct sunlight.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** May include, and are not limited to: oxides of carbon. May release flammable gases.

#### 11. TOXICOLOGICAL INFORMATION

Acute toxicity (oral): Not classified.

Acute toxicity (dermal): Toxic in contact with skin.

Acute toxicity (inhalation): Vapour. Harmful if inhaled.

#### **Acute Toxicity**

Chemical Name	LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
Alcohols, C9-11, Ethoxylated	No data available	Rat 1400 mg/kg	No data available
D-Limonene	No data available	Rat 4400 mg/kg	Rabbit >5 g/kg
Diethylene Glycol Monobutyl Ether	No data available	Rat 5660 mg/kg	Rabbit 2700 mg/kg
2-Bytoxiethanol	Rat 486 ppm/4h	Rat 470 mg/kg	Rabbit 99 mg/kg
1-Methyl-2-Pyrrolidone	Rat >5.1 mg/l/4h	Rat 3914 mg/kg	Rabbit 8 g/kg
Naphtha, Petroleum, Hydrotreated Heavy	Rat >8500 mg/m <sup>3</sup> /4h	Rat >6000 mg.kg	Rabbit >3160 mg/kg
Ethylene Glycol Monobutyl Ether Acetate	Rat >400 ppm/4h	Rat 2400 mg/kg	Rabbit 1500 mg/kg

**Skin Corrosion/Irritation:** Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

**STOT - Single Exposure:** Not classified

**STOT - Repeated Exposure:** Causes damage to organs through prolonged or repeated exposure.

**Aspiration Hazard:** May be fatal if swallowed and enters airways. **Respiratory or Skin Sensitization:** May cause an allergic skin reaction.

Germ cell mutagenicity: Not classified.

Carcinogenicity: Not classified.

**Reproductive toxicity:** May damage fertility or the unborn child.

#### Symptoms / effects after:

**Inhalation:** Harmful if inhaled. May cause irritation to the respiratory tract.

**Skin contact:** Toxic. Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause an allergic skin reactions.

**Eye contact:** Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Ingestion:** May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May result in aspiration into the lungs, causing chemical pneumonia.

**Other information:** Likely routes of exposure: ingestion, inhalation, skin and eye.

#### 12. ECOLOGICAL INFORMATION

**Ecology - general:** May cause long-term adverse effects in the aquatic environment.

Chemical Name	LC50 - Fish 1	LC50 - Fish 2	EC50 - Daphnia 1
D-Limonene	0.619-0.796 mg/l/96h – Pimephales	35 mg/l/96h -	No data available
	promelas (flow-through)	Oncorhynchus mykiss	
Diethylene Glycol	1300 mg/l/96h – Lepomis	No data available	>100 mg/l/48h -
Monobutyl Ether	macrochirus (Static)		Daphnia magna
2-Butoxyethanol	1490 mg/l/96h – Lepomis	2950 mg/l/96h Lepomis	>1000mg/l/48h -
	macrochirus (Static)	macrochirus (static)	Daphnia magna
1-Methyl-2-Pyrrolidone	832 mg/l/96h - Lepomis	1072 mg/l/96h -	4897 mg/l/48h -
	macrochirus	Pimephales promelas	Daphnia magna
		(Static)	
Naphtha, Petroleum,	2200 mg/l/96h – Pimephales	No data available	No data available
Hydrotreated Heavy	promelas		
Ethylene Glycol Monobutyl	No data available	No data available	37 mg/l/48h
Ether Acetate			Daphnia magna

Persistence and degradability: Not established.

Bioaccumulative potential: Diethylene Glycol Monobutyl Ether – BCF fish1: No Bioconcentration expected.

2-Butoxyethanol - Partition coefficient n-Octanol/water: 0.81 (at 25°C)

1-Methyl-2-Pyrrolidone - Partition coefficient n-Octanol/water: -0.46 (at 25°C)

Ethylene Glycol Monobutyl Ether Acetate – BCF fish 1: No significant bioaccumulation Ethylene Glycol Monobutyl Ether Acetate – Partition coefficient n-Octanol/water: 1.51

**Mobility in soil:** 2-Butoxyethanol – Partition coefficient n-Octanol/water: 0.81 (at 25°C)

1-Methyl-2-Pyrrolidone – Partition coefficient n-Octanol/water: -0.46 (at 25°C)

Ethylene Glycol Monobutyl Ether Acetate - Partition coefficient n-Octanol/water: 1.51

#### 13. DISPOSAL CONSIDERATIONS

**Disposal Methods:** Dispose in a safe manner in accordance with local/national regulations. Handle empty containers with care because residual vapours are flammable.

#### 14. TRANSPORT INFORMATION

TDG (Canada):

UN Number:Not applicableUN Proper Shipping Name:Not regulatedTransport Hazard Classes:Not applicablePacking Group:Not applicable

**Environmental Hazards:** No

#### 15. REGULATORY INFORMATION

**National regulations:** All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

**International regulations:** No additional information available.

#### 16. OTHER INFORMATION

**Date of Preparation:** June 19th, 2018

**Date of Last Revision** 

**Prepared by:** Teknecal Screen Print Supplies Inc.

Product Identifier: Tek-454

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