

**SAFETY DATA SHEET****1. Identification of the substance/mixture and of the company****1.1 Product identifier**

**Product Name: Contact Cleaner  
Type KC™**

**Product ID numbers:** KC-2

**1.2 Relevant identified uses of the mixture and uses advised against**

**Identified uses:** Precision cleaning

**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

**1.4 Emergency telephone numbers**

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

**2. Hazards Identification****2.1 Classification of the substance or mixture**

**Classification according to USA OSHA 29 CFR 1910.1200 (2012) and Canada HPR (SOR/2015-17; WHMIS 2015).**

Rep Tox 2      H361f

STOT RE2      H373

**2.2 Label elements**

**Contains:** n-Hexane, Perfluoro compounds



**Pictograms:**

**Signal word:** Warning

**Hazard Statements:**

H361f      Suspected of damaging fertility or the unborn child.

H373      May cause damage to organs through prolonged or repeated exposure if swallowed.

**Precautionary Statements:**

P202

P260      Do not breath vapors or mist.

P280      Wear protective gloves and eye protection.

P308 + P313      If concerned: Get medical advice.

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

**2.3 Other**

**hazards:** No information available.

Do not ha

**3. Composition/Information on Ingredients**

<u>Component</u>	<u>CAS #</u>	<u>EC #</u>	<u>Wt. %</u>
Perfluoro compounds	86508-42-1	--	>90%
n-Hexane	110-54-3	203-777-6	<10%

**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:**

Material will not burn.

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

No unusual fire or explosion hazards are anticipated. No unusual effects are anticipated during fire extinguishing operations. Avoid breathing the products and substances that may result from the thermal decomposition of the product or the other substances in the fire zone.

**Hazardous decomposition and by-products:**

Burning generates carbon monoxide, carbon dioxide, toxic vapor, gas and particulate during combustion. Hydrogen fluoride and perfluoroisobutylene (PFIB) may be formed at elevated temperatures- extreme conditions of heat.

**5.3 Advice for firefighters**

Exposure to extreme heat can give rise to thermal decomposition. Keep containers cool with water spray when exposed to fire to avoid rupture. Wear appropriate, protective clothing, including self-contained, positive pressure or pressure-demand breathing apparatus.

**6. Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures:**

Ventilate area with fresh air.

**6.2 Environmental precautions:**

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

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

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

**6.4 Reference to other sections:**

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

**7. Handling and Storage**

**7.1 Precautions for safe handling**

For industrial or professional use only. 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. Use only outdoors or in a well-ventilated area. Contents may be under pressure, open carefully. Use ventilation to control airborne exposure below occupational exposure limits. If ventilation is not adequate, use respiratory protection equipment.

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

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store away from strong bases 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:**

**n-Hexane (110-54-3)**

Country/Source	Long-term exposure limit – 8 hr. TWA	Short-term exposure limit – 15 min
USA, ACGIH TWA*	50 ppm	--
USA, OSHA PEL	1800 mg/m <sup>3</sup> ; 500 ppm	3600 mg/m <sup>3</sup> ; 1000 ppm
USA, NIOSH	180 mg/m <sup>3</sup> ; 50 ppm	--
Alberta, OEL	50 ppm / 176 mg/m <sup>3</sup>	--
Quebec, OEL	50 ppm / 176 mg/m <sup>3</sup>	--
Saskatchewan, OEL*	50 ppm	62.5 ppm

\* Manitoba, Newfoundland and Labrador, Nova Scotia, and Prince Edward Island are all based on the current ACGIH TLVs. New Brunswick is based on an older version ACGIH. Nunavet and Northwest Territories are based heavily on current ACGIH TLVs.

**Perfluoro compound (86508-42-1)**

Country/Source	Long-term exposure limit – 8 hr. TWA	Short-term exposure limit – 15 min
No OELs have been established for this material		

**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 (neoprene, nitrile rubber, polymer laminate) is recommended to prevent drying and possible irritation.

**Eye protection:**

Safety glasses recommended.

**Other protective equipment:**

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

## 9. Physical and Chemical

### 9.1 Information of basic physical and chemical properties

<b>Appearance:</b>	Clear, colorless liquid.
<b>Odor threshold:</b>	Not available
<b>pH:</b>	Does not apply
<b>Freezing point:</b>	Not available
<b>Boiling point:</b>	56°C (initial)
<b>Evaporation rate:</b>	>1 (n-butyl acetate = 1)
<b>Flash point:</b>	No flashpoint
<b>Flammability (solid, gas):</b>	Not applicable to liquids
<b>Upper/lower flammability or explosive limits:</b>	Not available
<b>Vapor pressure:</b>	~230 mmHg @25°C
<b>Vapor density (Air = 1):</b>	10 - 12 (Air = 1)
<b>Specific gravity (H<sub>2</sub>O = 1):</b>	1.6
<b>Solubility in water:</b>	Nil
<b>Coefficient of Water/Oil Distribution:</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>Viscosity:</b>	Not available

### 9.2 Other Information

<b>Volatiles (Weight %):</b>	100%
<b>VOC Content:</b>	68 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:

None known.

### 10.5 Incompatible materials :

Strong bases and strong oxidizing agents.

### 10.6 Hazardous decomposition products:

Carbon dioxide, carbon monoxide, toxic vapor, gas and particulate during combustion. Hydrogen fluoride, perfluoroisobutylene (PFIB) at elevated temperatures/extreme conditions of heat.

## 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):**

May cause respiratory tract irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**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:**

n-Hexane	LD <sub>50</sub> (oral rat) 25,000 mg/kg
	LC <sub>50</sub> (inhl rat) 48,000, 4 hours
	Dermal: no data available.
Perfluoronated compounds	No data available.

**Chronic Exposure:**

<b>Reproductive Toxicity:</b>	Not classified as a reproductive system toxin.
<b>Mutagenicity:</b>	Not classified as a mutagen.
<b>Teratogenicity:</b>	Not classified as teratogenic or embryotoxic.
<b>Specific Target Organ Toxicity (STOT)</b>	No end point data.
<b>Toxicologically Synergistic Products:</b>	Not available.
<b>Carcinogenic Status:</b>	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:**

<b>Aquatic Toxicity:</b>	Harmful to aquatic life with long lasting effects.
<b>Perluoro compounds</b>	96 h LC <sub>50</sub> Fathead Minnow (fish) >1000 mg/l
	48 h EC <sub>50</sub> Daphnia magna (water flea) >1500 mg/l
<b>n-Hexane</b>	96 h LC <sub>50</sub> Fathead Minnow (fish) 2.5 mg/l
	48 h EC <sub>50</sub> Daphnia magna (water flea) 3,878 mg/l
	3 h EC <sub>50</sub> Fresh water algae 12,840 mg/l

**12.2 Persistence and degradability:**

Perfluoro compounds are photochemically stable and expected to persist in the atmosphere for more than 1000 years.  
 20 day Biological Oxygen Demand: Nil  
 Chemical Oxygen Demand: Nil

**12.3 Bioaccumulation potential:** No other 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:**

<b>Ozone Depletion Potential (ODP):</b>	0
<b>Global Warming Potential (GWP):</b>	>6300

**13. Disposal Considerations**

Dispose of product in accordance with National and Local Regulations.

**14. Transport Information**

<b>US DOT Domestic Ground Transportation:</b>	Not Regulated
<b>UN Number:</b>	Not Listed
<b>UN Proper shipping name:</b>	Not Applicable
<b>Transport hazard class(es):</b>	Not Applicable
<b>Packing group:</b>	Not Applicable
<b>Environmental hazards:</b>	Not Applicable
<b>Special precautions:</b>	None Known
<b>ICAO/IATA-DGR:</b>	Not Regulated
<b>IMDG:</b>	Not Regulated

**15. Regulatory Information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****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></b> Yes	<b><u>Chronic</u></b> No	<b><u>Fire</u></b> No	<b><u>Pressure</u></b> No	<b><u>Reactive</u></b> No
---	----------------------------	-----------------------------	--------------------------	------------------------------	------------------------------

<b><u>Components</u></b>	<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>
n-Hexane	Yes (5000 lbs.)	No	Yes (1%)

<b>NFPA Ratings:</b>	Health:	3
	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.

**California Proposition 65**

WARNING: This product can expose you to n-hexane which is known to the state of California to cause birth defects or other reproductive harm. For more information, go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).

**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.

**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.

**Australia**

All components are listed on the AICS.

Hazardous according to criteria of NOHSC Australia.

**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

LD<sub>50</sub> = 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:** September 21, 2018

**Revision Number:** 4 NA

**Supersedes:** August 24, 2017

**Indication of Changes:** Section 3, 15 updated; format updates and additional California Proposition 65 information. Written in accordance with the provisions of OSHA 1910.1200 App D (2012) and Canada HPR (SOR/2015-17) (WHMIS 2015). (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.