

**PRODUCT NAME:** ABRO Electronic Contact Cleaner  
**PRODUCT NUMBER/SIZE:** EC-533-R / 5.75oz

**Revision Date:** 3/25/2015

## SECTION 1 Identification of the Substance and of the Company/Undertaking

**MANUFACTURER'S NAME:** ABRO INDUSTRIES, INC.  
**ADDRESS:** 3580 Blackthorn Court  
South Bend, IN 46628  
USA  
**PRODUCT DESCRIPTION:** Cleaning Spray  
**COMPANY PHONE:** 574-232-8289  
**EMERGENCY 24-HR TELEPHONE:** Chemtrec: US/Canada 1-800-424-9300  
International +1-703-527-3887

## SECTION 2 Hazards Identification

### Classification:

Aerosol (Category 1)  
Skin irritation (Category 2)  
Specific target organ toxicity - single exposure (Category 3), Central nervous system  
Aspiration hazard (Category 1)  
Acute aquatic toxicity (Category 2)  
Chronic aquatic toxicity (Category 2)

### Label Pictogram(s):



**Signal Word:** DANGER

**Hazard Phrases:** Extremely flammable aerosol. Pressurized container may burst if heated. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.

**Precautionary Phrases:** Keep away from heat, sparks and open flame. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Collect spillage. Wear protective gloves.

**Response:** IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON

CENTER or doctor. IF ON SKIN wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed, concerned, you feel unwell or if skin irritation occurs: Get medical attention.

**Storage / Disposal:**

Store in a well-ventilated place, keep container tightly closed, cool and locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Dispose of contents/ container to an approved waste disposal plant.

**Other:**

Keep out of reach of children. Read label before use. If medical advice is needed, have product container or label at hand.

**SECTION 3  
Composition/Information on Ingredients**

COMPONENTS	CAS Number	OSHA PEL	ACGIH TLV	Percent by weight
Heptane	142-82-5	500 ppm (2000mg/m <sup>3</sup> )	400 ppm 500 ppm STEL	60-100 %
Aliphatic Hydrocarbons	64741-66-8	200 ppm (300 ppm Ceiling)	20 ppm	1-5 %
Carbon Dioxide	124-38-9	5000 ppm	5000 ppm	1-5 %

\*\* Indicates ingredients that are subject to the reporting requirements of Section 313 of EPCRA and 40 CFR 372. Components of a blended material regulated under section 313 of SARA.

HMIS: Health 1 Flamm.3 React.0      NFPA: Tox.1 Flamm. 3 React. 0

**SECTION 4  
First Aid Measures**

**First Aid Measures**

<b>Immediate Medical Attention:</b>	Treat symptomatically. Remove victim to fresh air.
<b>Eyes</b>	Flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.
<b>Skin</b>	Remove contaminated clothing and shoes. Wash exposed area thoroughly with soap and water for at least 15 minutes. Wash contaminated clothing before reuse.
<b>Ingestion</b>	Aspiration Hazard. Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Seek medical attention
<b>Inhalation</b>	Move to fresh air. If breathing has stopped, administer artificial respiration. Contact physician or emergency facility immediately.

**Signs & Symptoms  
Of Over Exposure:**

Low to moderate degree of toxicity by inhalation. Contact may cause mild eye irritation including stinging, watering and redness. Skin irritant. Contact may cause redness, itching, a burning sensation and skin damage. Prolonged or repeated contact can de-fat the skin, causing drying and cracking of the skin and possibly dermatitis/inflammation. **ASPIRATION HAZARD!** This material can get into the lungs during swallowing or vomiting and cause lung inflammation and damage.

**Special Treatment:**

Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents. Observe victim for signs of cardiac arrhythmias. Pre-existing skin disorders, respiratory, nervous system and heart disorders may be aggravated by exposure.

**SECTION 5  
Fire Fighting Measures**

**Extinguishing media**

Foam, Dry Chemical, CO<sub>2</sub>

**Hazardous Combustion:**

Not Available.

**Protective Equipment and  
Precautions for firefighters:**

Keep containers cool using water spray. Use proper equipment to protect personnel from bursting containers. Wear full firefighting turn-out gear, respiratory protection and self-contained breathing apparatus should be worn.

UNUSUAL HAZARDS: Contents under pressure. Do not expose to temperatures exceeding 120° F as containers may vent, rupture or burst.

**Flammability per Flame  
Projection Test**

EXTREMELY FLAMMABLE

**SECTION 6  
Accidental Release Measures**

**Personal precautions, protective  
equipment and emergency  
procedures:**

Not Available.

**Methods/materials for  
containment and cleanup:**

Soak up spilled liquid with absorbent material. Place in closed metal drum for proper disposal.

**Environmental precautions:**

Not Available.

**SECTION 7  
Handling and Storage**

**Precautions for  
Safe Handling**

**DANGER: EXTREMELY FLAMMABLE.** Contains n-Heptane. Vapor Harmful. Skin Irritant. Contents under pressure. Read label carefully. Follow the directions for use carefully to avoid injury. Use only in a well-ventilated area. Avoid breathing vapor or mist. Avoid contact with eyes and skin. Do not spray on hot surfaces. Never spray on live wire equipment. Do not eat,

drink or smoke when using. Do not use in confined areas. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Avoid prolonged contact with skin. Wash thoroughly after handling.

**Conditions for Safe Storage**

Do not store at temperatures above 120°F. Do not puncture or incinerate containers. Store away from heat, sparks, open flames, pilot lights, electric arcing and electrical tools. Keep out of reach of children. Store in a cool, dry, well-ventilated area away from incompatible materials. Store in accordance with NFPA 30B for Level 3 Aerosols.

**SECTION 8  
Exposure Controls/Personal Protection**

COMPONENTS	CAS Number	OSHA PEL	ACGIH TLV
Heptane	142-82-5	500 ppm (2000mg/m <sup>3</sup> )	400 ppm 500 ppm STEL
Aliphatic Hydrocarbons	64741-66-8	200 ppm (300 ppm Ceiling)	20 ppm
Carbon Dioxide	124-38-9	5000 ppm	5000 ppm

**Personal Protective Equipment:** Impervious shoe and clothing. Additional engineering controls required.

**Skin:** Wear CHEMICAL GLOVES if repeated skin contact occurs or causes irritation.

**Eyes:** Wear SAFETY GLASSES to prevent eye contact.

**Respiratory:** Use respirator when TLV is exceeded

**SECTION 9  
Physical and Chemical Properties**

<b>Appearance and Physical State:</b>	Colorless, clear liquid in pressurized aerosol spray can.
<b>Odor:</b>	Solvent odor
<b>Odor Threshold:</b>	Not Available.
<b>pH:</b>	Not Available.
<b>Melting Point/Freezing Point:</b>	Not Available.
<b>Initial boiling point &amp; boiling range:</b>	>100°F
<b>Flash Point:</b>	Not Available.
<b>Evaporation rate:</b>	>1.00
<b>Flammability (solid, gas)</b>	Not Available.
<b>Upper/lower flammability or explosive limits</b>	Not Available.
<b>Vapor pressure</b>	Not Available.
<b>Vapor density</b>	Not Available.
<b>Relative density / Specific gravity</b>	0.670 – 0.720g/ml
<b>Solubility</b>	Insoluble
<b>Partition Coefficient n-Octanol/Water</b>	2.7
<b>Auto-ignition Temperature:</b>	Not Available.
<b>Decomposition Temperature:</b>	Not Available.
<b>Viscosity:</b>	Not Available.

<b>%-VOC Content:</b>	96.0%
<b>CARB VOC Category/Standard(%)</b>	EXPORT
<b>OTC Model Rule Category/Standard(%)</b>	EXPORT
<b>US EPA Cons Prod Category/Standard(%)</b>	EXPORT

## SECTION 10 Stability and Reactivity

<b>Reactivity</b>	Not Available.
<b>Chemical Stability:</b>	Product is stable
<b>Possibility of hazardous reactions:</b>	Not Available.
<b>Conditions to avoid (e.g. static discharge, shock or vibration):</b>	Fire, sparks, open flames, temperatures above 120°F
<b>Incompatibilities:</b>	Avoid contact with acids and strong oxidizers
<b>Hazardous decomposition products:</b>	CO, CO <sub>2</sub>
<b>Hazardous polymerization:</b>	Will not occur

## SECTION 11 Toxicological Information

**Likely Routes of Exposure:** Inhalation, skin contact.

### Symptoms:

Low to moderate degree of toxicity by inhalation. Contact may cause mild eye irritation including stinging, watering and redness. Skin irritant. Contact may cause redness, itching, a burning sensation and skin damage. Prolonged or repeated contact can de-fat the skin, causing drying and cracking of the skin and possibly dermatitis/inflammation. ASPIRATION HAZARD! This material can get into the lungs during swallowing or vomiting and cause lung inflammation and damage.

**Delayed and Immediate Effects:** Not Available.

**Chronic Effects:** Not Available.

### Toxicity Measures:

**HEPTANE**, Branched, Cyclic and Linear:

ORAL LD50: >5g/kg(similar materials)

DERMAL LD50: >2g.kg(similar material)

INHALATION LC50: 65-103g/m<sup>3</sup>/4hr. rat (similar material)

### n-HEPTANE:

ORAL LD50: 17.0g/kg (Rat)

DERMAL LD50: 3400mg/kg, rabbit

INHALATION LC50: 65-103g/m<sup>3</sup> (4-hr., Rat)

**NTP Carcinogen:** No

**IARC Carcinogen:** No

**OSHA Carcinogen:** No

## SECTION 12 Ecological Information

### Ecotoxicity:

#### HEPTANE

If applied to leaves, this product may kill grasses and small plants by interfering with transpiration and respiration. This product is not toxic to fish but may coat gill structures resulting in suffocation if spilled in shallow, running water. Product may be moderately toxic to amphibians by preventing dermal respiration. This product may cause gastrointestinal distress to birds and mammals through ingestion during pelage grooming.

#### **Persistence and Degradability:**

Rapidly biodegradable in aerobic conditions. Degradation of this product in water occurs primarily by microbial action. Based on similar materials, this product will have a significant tendency to partition to air. Hydrocarbons from this product which do partition to air are expected to rapidly photodegrade.

**Bioaccumulation Potential:** No data available

**Mobility in Soil:** Principally to air. Not Evaluated

**Other Adverse Effects:** No data available.

## SECTION 13 Disposal Considerations

#### **Storage and Disposal**

Do not store at temperatures above 120°F. Do not puncture or incinerate containers. Store away from heat, sparks, open flames, pilot lights, electric arcing and electrical tools. Keep out of reach of children. Store in a cool, dry, well-ventilated area away from incompatible materials. Store in accordance with NFPA 30B for Level 3 Aerosols.

#### **Waste Disposal Method:**

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations.

This material, if discarded as produced, would not be a federally regulated RCRA "Listed" hazardous waste. However, it would likely be identified as federally regulated RCRA hazardous waste for the following characteristic(s) show below: See Section 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the MSDS but could affect the hazardous waste determination. Also, use which results in chemical or physical change of this material could subject it to Regulation as a hazardous waste.

Container contents should be completely used and containers should be emptied prior to discard. Container residues and rinseates could be considered to be hazardous wastes.

EPA Waste Number(s):  
-D001 – Ignitability Characteristic

## SECTION 14

### Transport Information

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

<b>U.S. DOT</b>	UN/ID Number:	UN1950
	Proper shipping name:	Aerosols
	Hazard class:	2.1
	Packing Group:	None
	Exceptions:	May be shipped as a limited quantity or consumer commodity
	Environmental Hazards:	None
	Transport in Bulk:	Not Applicable.
	Special Precautions:	ERG#126
<b>IMO/IMDG</b>	UN/ID Number:	UN1950
	Proper shipping name:	Aerosols
	Hazard class:	2.1
	Packing Group:	None
	Exceptions:	May be shipped as a limited quantity
	Environmental Hazards:	None
	Transport in Bulk:	Not Applicable
	Special Precautions:	EmS F-D, S-U
<b>ICAO/IATA</b>	UN/ID Number:	UN1950
	Proper shipping name:	Aerosols, flammable
	Hazard Class:	2.1
	Packing Group:	None
	Exceptions:	May be shipped as a limited quantity or consumer commodity
	Environmental Hazards:	None
	Transport in Bulk:	Not Applicable
	Special Precautions:	None
<b>Canada (TDG)</b>	UN/ID Number:	UN1950
	Proper shipping name:	Aerosols, flammable
	Hazard class:	2.1
	Packing Group:	None
	Exceptions:	May be reclassified as a limited quantity.
	Environmental Hazards:	None
	Transport in Bulk:	Not Applicable
	Special Precautions:	ERG#126

## SECTION 15 Regulatory Information

This product is considered to be hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

U. S. Toxic Substance Control Act (TSCA): All components of this product are listed or are not regulated U.S. Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Sara Title III: CERCLA: YES

TSCA INVENTORY: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

## SECTION 16 Other Information

We believe all information given is accurate. It is offered in good faith but without guarantee. Since conditions of use are beyond our control, user assumes all responsibility and risk.

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### **ABBREVIATIONS:**

NG="NOT GIVEN"

BT="BETWEEN"

<="LESS THAN"

>="GREATER THAN"

ND = Not Determined

NA = Not Applicable

*This information is intended to provide interpretative and authoritative information in regard to the subject matter covered as a service to our clients and has been answered to the best of our ability based on the information provided to us. We do not guarantee the accuracy or completeness of any such interpretation or information, however, nor do we warrant that compliance with any advice we provide will guarantee compliance with any legal or regulatory requirements. Our statements or opinions do not convey legal interpretation and government authorities or legal counsel should be contacted for such a response.*