



## Safety Data Sheet

# Electrical contact cleaner

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Electrical contact cleaner
<b>Part number</b>	TNDS8007
<b>Product Family</b>	Mixture
<b>Recommended Use</b>	Cleaner.
<b>Restrictions on Use</b>	Not applicable.
<b>Manufacturer</b>	Shrader Canada Limited, 830 Progress Court, Oakville, ON, L6L 6K1, +1.905.847.0222, www.shradercanada.com
<b>Emergency Phone No.</b>	CANUTEC, +1.613.996.6666, Operation hours: 24/7

### SECTION 2. HAZARD IDENTIFICATION

#### Classification

Flammable aerosol - Category 1; Gas under pressure - Compressed gas; Skin irritation - Category 2; Eye irritation - Category 2A; Specific target organ toxicity (single exposure) - Category 3; Aspiration hazard - Category 1

#### Label Elements



Danger

Extremely flammable aerosol.  
Contains gas under pressure; may explode if heated.  
Pressurized container: may burst if heated.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.  
Pressurized container: Do not pierce or burn, even after use.  
May cause drowsiness or dizziness.

Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.  
Do not spray on an open flame or other ignition source.  
Wash hands and skin thoroughly after handling.  
Avoid breathing vapours, spray.  
Use only outdoors or in a well-ventilated area.  
Wear eye protection/face protection.

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IF SWALLOWED: Immediately call a POISON CENTRE or doctor.  
IF ON SKIN: Wash with plenty of water.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Call a POISON CENTRE or doctor if you feel unwell.  
Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.  
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Dispose of contents and container in accordance with local, regional, national and international regulations.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Heptane, branched, cyclic and linear	426260-76-6	60 - 100	
Isopropanol	67-63-0	1 - 5	
Carbon dioxide gas	124-38-9	1 - 5	

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

Move to fresh air. If not breathing, give artificial respiration, immediately call a poison centre.  
Not a hazard under normal conditions of use.

##### Skin Contact

Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). If skin irritation occurs, get medical advice or attention.

##### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice or attention.

##### Ingestion

Do not induce vomiting. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Drink two glasses of water. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Immediately call a Poison Centre or doctor.

##### First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

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

None known.

#### Immediate Medical Attention and Special Treatment

##### Medical Conditions Aggravated by Exposure

None known.

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## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

Small fire: carbon dioxide or dry chemical.

#### Unsuitable Extinguishing Media

Do not use a direct stream of water.

### Specific Hazards Arising from the Product

Extremely flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air. sprayed product will project a flame on contact with an ignition source.

Do not use on vehicles unless cool.

containers may explode if heated.

Vapours are heavier than air. May travel a considerable distance to a source of ignition and flash back to a leak or open container.

Carbon oxides, and other unidentified organic compounds.

### Special Protective Equipment and Precautions for Fire-fighters

Fight fire from a safe distance or a protected location.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

### Environmental Precautions

If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Do not allow into any sewer, on the ground or into any waterway.

### Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

### Other Information

Report spills to local health, safety and environmental authorities, as required.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Do not spray on an open flame or other ignition source. Do not pierce or burn container, even after use. Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs. Do not use on hot vehicles.

Containers of this material may contain hazardous residues when "emptied". Avoid breathing in this product. Avoid repeated or prolonged skin contact with product or with contaminated equipment/surfaces. Do not get in eyes, on skin or on clothing. Only use where there is adequate ventilation. Wash hands thoroughly after handling this material.

### Conditions for Safe Storage

Store at temperatures not exceeding: 40°C.

Keep from freezing.

Keep away from children.

Store in an area that is: cool, dry, well-ventilated.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL [C]	TWA	Ceiling

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Heptane, branched, cyclic and linear	400 ppm	500 ppm	2000 mg/m <sup>3</sup>	Not established
Isopropanol	200 ppm A4	400 ppm	980000 mg/m <sup>3</sup>	Not established
Carbon dioxide gas	5000 ppm	Not established	Not established	Not established

### Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Safety glasses with side shields.  
Contact lenses should not be worn.

#### Skin Protection

Gloves made of: nitrile, neoprene.

#### Respiratory Protection

Not normally required if product is used as directed. If the TLV is exceeded, a NIOSH -approved respirator is advised.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Clear colourless liquid.
<b>Odour</b>	Hydrocarbon
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not applicable
<b>Melting Point/Freezing Point</b>	Not available (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	-8 °C
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Extremely flammable aerosol
<b>Upper/Lower Flammability or Explosive Limit</b>	12.7% (upper); 2% (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	> 1
<b>Relative Density (water = 1)</b>	0.700 at 15 °C
<b>Solubility</b>	Insoluble in water
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	399 °C
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	< 14 centistokes at 40°C (kinematic)
<b>Other Information</b>	
<b>VOC (%)</b>	100
<b>Flame projection</b>	> 100 cm
<b>NFPA Classification</b>	Aerosol, Level 3

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use.

### Chemical Stability

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Normally stable.

#### **Possibility of Hazardous Reactions**

None expected under normal conditions of storage and use.

#### **Conditions to Avoid**

Open flames, sparks, static discharge, heat and other ignition sources.

#### **Incompatible Materials**

Increased risk of fire and explosion on contact with: strong oxidizing agents (e.g. perchloric acid).

#### **Hazardous Decomposition Products**

And other unidentified organic compounds.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

Reports have associated repeated and prolonged occupational overexposure to various organic solvents with internal organ, brain and nervous system damage.

#### **Likely Routes of Exposure**

Inhalation.

Skin contact.

Eye contact.

Ingestion.

#### **Acute Toxicity**

<b>Chemical Name</b>	<b>LC50</b>	<b>LD50 (oral)</b>	<b>LD50 (dermal)</b>
Heptane, branched, cyclic and linear	~ 25000 ppm (rat) (4-hour exposure)	> 15000 mg/kg (rat)	Not available
Isopropanol	17000 ppm (rat) (4-hour exposure)	4720 mg/kg (male rat)	12890 mg/kg (rabbit)

LC50: Not applicable.

LD50 (oral): Not applicable.

LD50 (dermal): Not applicable.

#### **Skin Corrosion/Irritation**

Moderate to severe irritant, depending on duration of exposure.

#### **Serious Eye Damage/Irritation**

Moderate to severe irritant.

#### **STOT (Specific Target Organ Toxicity) - Single Exposure**

##### **Inhalation**

High concentrations may cause respiratory irritation and central nervous system depression with results ranging from dizziness and headache to unconsciousness.

##### **Skin Absorption**

May cause defatting and produce dermatitis.

##### **Ingestion**

If large amounts are swallowed symptoms may include nausea, vomiting, stomach cramps and diarrhea.

#### **Aspiration Hazard**

May cause lung damage if aspirated based on physical properties (e.g. kinematic viscosity) and chemical family (hydrocarbon). Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

#### **STOT (Specific Target Organ Toxicity) - Repeated Exposure**

No information was located.

#### **Respiratory and/or Skin Sensitization**

Not known to be a respiratory sensitizer.

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Not known to be a skin sensitizer.

### Carcinogenicity

Chemical Name	ACGIH®	IARC	NTP	OSHA
Heptane, branched, cyclic and linear	Not Listed	Not evaluated	Not Listed	Not Listed
Isopropanol	A4	Group 3	Not Listed	Not Listed

No ingredients of this product have been evaluated for carcinogenicity by the International Agency for Research on Cancer (IARC), the American Conference of Governmental Industrial Hygienists (ACGIH®) or the US National Toxicology Program (NTP).

### Other Information

synergistic products:

isopropanol increases the hepatotoxic effects of chlorinated aliphatic hydrocarbons,

No information was located for: LC50, LD50 (oral), LD50 (dermal), Development of Offspring, Sexual Function and Fertility, Effects on or via Lactation, Germ Cell Mutagenicity, Interactive Effects

## SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

Contents under pressure. The container for this product can present explosion or fire hazards, even when emptied. Do not cut, puncture, or weld on or near this container. Dispose of in accordance with municipal, provincial/state or federal regulations.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	UN1950	Aerosols	2.1	---
IATA (Air)	UN1950	Aerosols, flammable	2.1	---
IMDG (Marine)	UN1950	Aerosols	2.1	---

**Special Precautions** Not applicable

### Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

**Emergency Response Guide No.** 126 EmS F-D, S-U

**Guide No.**

### Other Information

ICAO/IATA PI Y203/203

Product may ship as LTD QTY if TDG, ICAO/IATA or IMDG Limited Quantity provisions are met.

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

#### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

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## CEPA - National Pollutant Release Inventory (NPRI)

(Isopropanol) Part 1A.

### USA

#### Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

#### Additional USA Regulatory Lists

CERCLA: Not applicable.

California Proposition 65: Not applicable.

SARA Title III - Section 302: Not applicable.

SARA Title III - Section 313. (Isopropanol)

Massachusetts Right To Know: Not applicable.

New Jersey Right To Know. (Isopropanol). (Carbon dioxide gas)

Pennsylvania Right To Know. (Isopropanol). (Carbon dioxide gas)

## SECTION 16. OTHER INFORMATION

**NFPA Rating**                      **Health - 2**    **Flammability - 4**                      **Instability - 3**

**SDS Prepared By**                Regulatory Compliance

**Phone No.**                         800.201.9486

**Date of Preparation**            September 30, 2015

**Date of Last Revision**        August 24, 2016

**Revision Indicators**        The following SDS content was changed on August 24, 2016:  
SECTION 16. OTHER INFORMATION; NFPA Rating; Date of Last Revision.

**Key to Abbreviations**        ACGIH® = American Conference of Governmental Hygienists  
CANUTEC = Canadian Transport Emergency Centre  
CAS = Chemical Abstract Service  
CCOHS = Canadian Centre for Occupational Health & Safety  
CNS = Central nervous system  
GESTIS = GESTIS Substance Database  
HSDB® = Hazardous Substances Data Bank  
IARC = International Agency for Research on Cancer  
ICAO = International Civil Aviation Organization  
IMDG = International Maritime Dangerous Goods Code  
LC = Lethal concentration  
LD = Lethal dose  
NFPA = National Fire Protection Association  
NTP = National Toxicology Program  
OSHA = US Occupational Safety and Health Administration  
PPM = Parts per million  
RTECS® = Registry of Toxic Effects of Chemical Substances  
STEL = Short term exposure limit  
TDG = Transportation of Dangerous Goods Regulations (Canada)  
TWA = Time weighted average

**References**                      Material Safety Data Sheet from manufacturer.  
CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).  
HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS).  
ECHA - European Chemical Agency, Classification and Labelling Inventory  
GESTIS Substance Database  
Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).  
OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2015.

**Disclaimer**                        The information contained herein is offered only as a guide to the use and handling of this

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