

# Safety Data Sheet OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 3.

**Revision date: 06.06.2023** 

Page: 1/10

Trade name: Electronic Switch and Contact Cleaner

#### **SECTION 1: Identification**

Product identifier used on the label:

Product Name: Electronic Switch and Contact Cleaner

Other means of identification:

**Product Code Number:** 40-610

Recommended use of the chemical and restrictions on use:

**Recommended use:** Solvent Cleaner

**Recommended restrictions:** Uses other than as recommended above

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Company Name: IDEAL INDUSTRIES, INC.

Company Address: Becker Place,

Sycamore, IL 60178

**Company Telephone:** Office hours (Mon – Fri)

7AM - 5 PM (CDT)

(815)-895-5181

**Company Contact Name:** Darryl Docter.

Company Contact Email: IDEAL@IDEALINDUSTRIES.COM

**Emergency phone number:** 24 HOUR EMERGENCY NUMBER:

(815)-895-5181.

# **SECTION 2:** Hazard(s) identification

#### Classification of the chemical in accordance with paragraph (d) of §1910.1200:

#### Physical hazards

Flammable aerosol, category 1

#### Health hazards

Aspiration toxicity, category 1 Eye irritation, category 2A

#### Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: DANGER

Revision Date: June 6, 2023 Page 1 of 10

**GHS Hazard statement(s):** Extremely flammable aerosol

May be fatal if swallowed and enters airways

Causes serious eye irritation

**GHS Hazard symbol(s):** 







# **GHS Precautionary statement(s):**

#### **Prevention:**

- Keep away from heat/sparks/open flames/hot surfaces. -No smoking.
- Do not spray on an open flame or other ignition source.
- Pressurized container: Do not pierce or burn, even after use.
- Wash thoroughly after handling.
- Wear eye protection/face protection.

#### **Response:**

- If swallowed: Immediately call a poison center/doctor.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Do NOT induce vomiting
- If eye irritation persists: Get medical advice/attention.

#### Storage:

- Store locked up.
- Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

#### **Disposal:**

• Dispose of contents/container to an approved disposal site in accordance with local/regional/national/international regulations.

#### Hazard(s) not otherwise classified (HNOC):

None known.

# Percentage of ingredient(s) of unknown acute toxicity:

30% of the mixture consists of ingredients of unknown acute toxicity (dermal).

# **SECTION 3: Composition/information on ingredients**

#### Mixture:

Chemical name	CAS#	Concentration (weight %)
Aliphatic Petroleum Solvent	64742-89-8	60 - 70%
1,1-Difluoroethane	75-37-6	20 - 30%
Isopropyl Alcohol	67-63-0	8 - 10%

Note: The balance of the ingredients is not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

# **SECTION 4: First-aid measures**

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

**Inhalation:** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Seek medical advice.

**Skin contact:** Remove contaminated clothing. Wash with water and soap and rinse thoroughly. Seek medical advice if irritation or pain develops.

**Eye contact:** In case of eye contact, rinse with plenty of water for at least 15 minutes. If irritation from exposure to vapor develops, move to fresh air. Get medical attention if symptoms develop.

**Ingestion:** Do NOT induce vomiting. Get medical attention immediately. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

#### Most important symptoms/effects, acute and delayed:

May be fatal if swallowed and enters airways. Causes serious eye irritation.

#### **Indication of immediate medical attention and special treatment needed:**

If any symptoms are observed, contact a physician and give them this SDS sheet. Provide general supportive measures and treat symptomatically.

#### **SECTION 5: Fire-fighting measures**

#### Suitable (and unsuitable) extinguishing media:

In case of fire use dry chemical, CO2, water spray (fog) or foam to extinguish.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

# Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Flammable aerosol. Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often

Revision Date: June 6, 2023 Page 3 of 10

with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

Hazardous combustion products may include the following substances: Carbon monoxide, carbon dioxide (CO2), hydrocarbons, fluorine-based products.

# Special protective equipment and precautions for fire-fighters:

Containers should be cooled with water to prevent vapor pressure build up. Cool containers with flooding quantities of water until well after fire is out. Move containers from fire area if you can do so without risk. For fire involving this material, do not enter any enclosed or confined fire space without proper protective equipment. Use self-contained breathing apparatus with full face shield to protect against the hazardous effects of combustion products and oxygen deficiencies. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

#### **SECTION 6: Accidental release measures**

# Personal precautions, protective equipment and emergency procedures:

No action shall be taken involving any personal risk or without suitable training. Evacuate danger area. Vapors may ignite explosively and spread long distances. Prevent vapor build-up. Remove all ignition sources, Stay upwind and away from spill/release.

For large spillages, notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

#### Methods and materials for containment and cleaning up:

Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required. Dispose of all contaminants according to federal, state, and local regulations. See Section 13 for information on appropriate disposal.

#### **SECTION 7: Handling and storage**

#### **Precautions for safe handling:**

Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

## Conditions for safe storage, including any incompatibles:

Keep container tightly closed in a cool, well-ventilated place. Store in a cool, well-ventilated area, away from incompatible materials. Do not store above 120°F or in direct sunlight. Keep

Revision Date: June 6, 2023 Page 4 of 10

away from incompatible materials (see Section 10) and food / feedstuffs. Protect container(s) against physical damage.

# **SECTION 8: Exposure controls/personal protection**

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

	US OSHA PELs		US ACGIH TLVs		NIOSH OELs	
Substance	TWA (8 hour)	STEL (15 min)	TWA (8 hour)	STEL (15 min)	IDLH	TWA (8hr)
Aliphatic Petroleum Solvent	No data available	No data available	No data available	No data available	No data available	No data available
1,1-Difluoroethane	No data available	No data available	No data available	No data available	No data available	No data available
Isopropyl Alcohol	400 ppm 980 mg/m3	No data available	200 ppm	400 ppm	2000 ppm (10% LEL)	400 ppm 980 mg/m3

# **Appropriate engineering controls:**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended. Concentrations should be monitored hazardous substances in the workplace in accordance with recognized test methods. Mode, method, type and frequency of testing and measurement of harmful factors in the working environment should meet the requirements of local/regional/national laws.

#### Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety goggles recommended where eye contact is possible. Use equipment for eye protection tested and approved under NIOSH standards.

**Skin and hand protection:** None normally required. If worn, use neoprene. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Respiratory protection:** None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Revision Date: June 6, 2023 Page 5 of 10

**General hygiene considerations:** The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Immediately remove all soiled and contaminated clothing. Wash hands after use. Avoid contact with eyes and skin. DO not eat or drink while working.

# **SECTION 9: Physical and chemical properties**

Appearance (physical state, color, etc.):

Physical state: Liquid / aerosol Color: Colorless
Odor: Solvent

Odor threshold:

pH:

Not determined

Not applicable

Melting point/freezing point:

Not determined

**Initial boiling point and** 168.8 F

boiling range:

Flash point: -52 F

**Evaporation rate:** Not determined

Flammability (solid, gas): Extremely flammable aerosol

Upper/lower flammability or explosive limits

Flammability limit – lower %): Not determined Flammability limit – upper (%): Not determined Explosive limit – lower (%): Not determined Explosive limit – upper (%): Not determined Vapor pressure: 44 - 54 psig @ 70F Not determined Vapor density: **Relative density:** 0.7604 g/cm3 **Solubility (ies):** Not determined Partition coefficient (n-octanol/water): Not determined **Auto-ignition temperature:** Not determined **Decomposition temperature:** Not determined Viscosity: Not determined

#### **SECTION 10: Stability and reactivity**

**Reactivity:** No hazardous reactions anticipated under normal storage

and handling conditions.

Chemical stability: Stable under normal ambient and anticipated conditions

of use

**Possibility of hazardous reactions:** May react with strong oxidizers generating heat.

**Conditions to avoid:** Avoid heat, sparks, flames and other sources of ignition.

Do not puncture or incinerate containers. Do not allow

Revision Date: June 6, 2023 Page 6 of 10

the can contents to exceed flash point. Do not warehouse

in subfreezing temperatures.

**Incompatible materials:** Materials to avoid include strong oxidizers.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, hydrocarbons.

# **SECTION 11: Toxicological information**

# **Information on likely routes of exposure:**

**Inhalation:** Expected to be a route of exposure **Ingestion:** Expected to be a route of exposure

**Skin:** Expected to be a route of exposure **Eyes:** Expected to be a route of exposure

#### Symptoms related to the physical, chemical, and toxicological characteristics:

May be fatal if swallowed and enters airways. Causes serious eye irritation.

# Delayed and immediate effects and chronic effects from short or long-term exposure:

No further information is available.

#### Numerical measures of toxicity (such as acute toxicity estimates):

**Acute Toxicity:** Does not meet the criteria for classification.

Substance	Test Type (species)	Value
Aliphatic Petroleum Solvent	LD50 Oral (Rat)	> 5000 mg/kg
	LD50 Dermal (Rabbit)	> 2000 mg/kg
	LC <sub>50</sub> Inhalation (Rat)	> 5610 mg/m3 4h
1,1-Difluoroethane	LD50 Oral (Rat)	> 1500 mg/kg
	LD50 Dermal (Rabbit)	None known
	LC50 Inhalation (Rat)	437500 ppm 4h
Isopropyl Alcohol	LD <sub>50</sub> Oral (Rat)	5840 mg/kg
	LD <sub>50</sub> Dermal (Rabbit)	16.4 mL/kg
	LC <sub>50</sub> Inhalation (Rat)	> 10000 ppm 6h

**Skin corrosion/irritation:** Does not meet the criteria for classification.

**Serious eye damage/eye irritation:** Causes serious eye irritation.

Respiratory or skin sensitization:

Germ cell mutagenicity:

Does not meet the criteria for classification.

Does not meet the criteria for classification.

Does not meet the criteria for classification.

**Reproductive toxicity:**Does not meet the criteria for classification. **STOT – Single exposure:**Does not meet the criteria for classification.

STOT – Repeat exposure: Does not meet the criteria for classification

Revision Date: June 6, 2023 Page 7 of 10

**Aspiration hazard:** 

May be fatal if swallowed and enters airways.

If the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

ACGIH	IARC	NTP	OSHA
Not listed	Not listed	Not listed	Not listed
Not listed	Not listed	Not listed	Not listed
A4 - Not Classifiable as a Human	Group 3 (Not Classifiable)	Not listed	Not listed
	Not listed  A4 - Not Classifiable	Not listed  A4 - Not Classifiable as a Human  Classifiable)  Classifiable)	Not listed Not listed Not listed  A4 - Not Classifiable as a Human Classifiable)  Not listed Not listed

# **SECTION 12: Ecological information**

**Ecotoxicity (aquatic and terrestrial, where available):** 

**Product data:** None known **Ingredient Information:** 

Substance	Test Type	Species	Value
Aliphatic Petroleum Solvent	LL <sub>50</sub>	Fish - Oncorhynchus mykiss	10 mh/L
	EL <sub>50</sub>	Aquatic Invertebrates - Daphnia magna	4.5 mg/L
	EL <sub>50</sub>	Algae - Pseudokirchneriella subcapitata	4700 mg/L 72h
1,1-Difluoroethane	LC50	Fish - Oncorhynchus mykiss	719.611 mg/L 96h
	LC50	Aquatic Invertebrates - Daphnia magna	364.06 mg/L 48h
	EC50	Algae - Green Algae	168.276 mg/L 96h
Isopropyl Alcohol	LC50	Fish – Pimephales promelas	9640 mg/L 96 h
	EC50	Aquatic Invertebrates - Daphnia magna	13299 mg/L 48 h
	EC <sub>50</sub>	Algae Desmodesmus subspicatus	> 1000 mg/L 96h

# Persistence and Degradability:

Not determined

#### **Bioaccumulative Potential:**

Not determined

#### **Mobility in Soil:**

Not determined.

Revision Date: June 6, 2023 Page 8 of 10

# Other adverse effects (such as hazardous to the ozone layer):

1,1-Difluoroethane is classified as an ozone depleting substance.

# **SECTION 13: Disposal considerations**

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

#### Product

Dispose of waste materials in accordance with applicable local and national laws and regulations. Where possible, recycling is preferred to disposal or incineration. Contact the proper local authorities.

## **Contaminated packaging**

Since emptied containers retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

# **SECTION 14: Transport Information**

# **US Department of Transportation Classification (49CFR)**

UN 1950, Aerosols, 2.1.

#### IMDG (Transport by sea)

UN 1950, Aerosols, 2.1.

#### IATA (Country variations may apply)

UN 1950, Aerosols, 2.1.

Limited Quantities: Less than or equal to 1 Liter

#### **Environmental hazards**

Marine pollutant: No

#### Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

Not applicable

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

None known

#### **SECTION 15: Regulatory Information**

#### **USA:**

**United States Federal Regulations:** This SDS complies with the OSHA, 29 CFR 1910.1200. The product is classified as hazardous under OSHA.

**Toxic Substances Control Act (TSCA)** – All of the ingredients are listed on the U.S. EPA TSCA Inventory List.

Revision Date: June 6, 2023 Page 9 of 10

# Emergency Planning and Community Right To-Know Act (EPCRA) Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

None of the components are listed

# SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370 (amended 2018)):

Flammable (gases, aerosols, liquids or solids) Serious eye damage or eye irritation Aspiration toxicity.

# Section 313 Toxic Chemicals (40 CFR 372.65):

Isopropyl Alcohol - 1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

#### **STATE REGULATIONS:**

This SDS contains specific health and safety data that is applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state.

# California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986: None listed

**Massachusetts Right to Know:** None of the components are listed on the Massachusetts Right to Know list.

**New Jersey Right to Know** 1,1-Difluoroethane and Isopropyl Alcohol are listed on the New Jersey Right to Know List.

**Pennsylvania Right to Know:** Isopropyl Alcohol is listed on the Pennsylvania Right to Know List.

#### **SECTION 16: Other Information**

Revision Date: June 6, 2023

#### DISCLAIMER:

To the best of our knowledge, the information contained herein is accurate. However IDEAL INDUSTRIES INC. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist

Revision Date: June 6, 2023 Page 10 of 10