



# Material Safety Data Sheet

Date Prepared/Revised: 11/14/2012 Version no.: 01 Supersedes: (11/11/2010)

## 1.) Identification of the Mixture and of the Company

Product identifier: **415 Contact Cleaner - Aerosol**

Product name:  
**415 Contact Cleaner**

Relevant identified uses of the substance: Safe for use on electrical components, connectors, contacts, magnetic tape heads, semiconductor assemblies, office equipment, printer circuits, computer components, relays and controls, telephone equipment typewriters, and TV tuners.

Uses advised against: Do not use on electronic equipment or machinery while in operation.

CAS No.:	<b>Not Applicable (mixture)</b>
Manufacturer/Supplier:	<b>Aervoe Industries Incorporated</b>
Street address/P.O. Box:	<b>1100 Mark Circle</b>
Country ID/Postcode/Place:	<b>Gardnerville, Nevada 89410</b>
Telephone number:	<b>001 (0) 1-775-782-0100</b>
e-mail:	<b>mailbox@aervoe.com</b>
National contact:	<b>Aervoe industries Incorporated</b>
For Product Information:	<b>001 (0) 1-800-227-0196</b>
Emergency telephone number:	<b>001 (0) 1-800-424-9300 (CHEMTREC – 24 hrs)</b> <b>English Language Service</b>

## 2. Hazards identification

This product does not meet the criteria for classification according to Directive 1999/45/EC

Potential health effects: **See Section 11**

Primary routes of entry: **Inhalation, Skin, Eyes, Ingestion**

## 3. Composition / Information on Ingredients

Material	CAS Number	EINECS Number	Weight Percent	Risk and Safety Phrases	Notes
Hexane	110-54-3	203-777-6	60-85%	R11, R38, R48/20, R62, R65, R67, R51/53, S2, S9, S16, S29, S33, S36/37, S61, S62	
Carbon Dioxide	124-38-9	204-696-9	1-5%	N/AV	
Ethyl Alcohol	64-17-5	200-578-6	5-10%	R11, S2, S7, S16, S24/25, S26	
Methanol	67-56-1	200-659-6	1-5%	R11, R23, R24, R25, R39, S1, S2, S7, S16, S36, S37, S45	

For full text of R&S- phrases: see section 16.

**R Code Summation: R11, R23, R24, R25, R38, R39, R48/20, R62, R65, R67, R51/53**

**S Code Summation: S1, S2, S7, S9, S16, S24/25, S26, S29, S33, S36, S37, S36/37, S45, S61, S62**

## 4.) First Aid Measures



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<b>General Advice:</b>	If symptoms persist, always call a doctor.
<b>Inhalation First Aid:</b>	Remove victim to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention immediately.
<b>Skin Contact First Aid:</b>	Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse.
<b>Eye Contact First Aid:</b>	If contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids open. Get medical attention immediately.
<b>Ingestion First Aid:</b>	If swallowed, wash out mouth with water provided the person is conscious. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

## 5. Fire Fighting Measures

Flammable Properties:	Aerosol
Flash Point:	None
Auto Ignition Temperature:	Not Available
Flammable Limits in Air:	
% by Volume:	LEL: 1.1% UEL: 36%
Suitable extinguishing media:	Carbon dioxide, dry chemical, water spray.
Unsuitable extinguishing media:	None known
Special hazards arising from the substance or mixture:	None known
Hazardous combustion products:	Carbon dioxide, Carbon monoxide
Fire & Explosion Hazards:	Closed Containers may rupture due to the buildup of pressure from extreme temperatures.

Advice for fire-fighters: Use water spray to cool containers exposed to heat or fire to prevent pressure build up. In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

## 6. Accidental Release Measures

### PERSONAL PRECAUTIONARY MEASURES:

- 1) Follow personal protective equipment recommendations found in section 8.
- 2) Maintain adequate ventilation.

### SPILL CLEAN-UP PROCEDURES:

- 1.) Evacuate unprotected personnel from the area.
- 2.) Remove sources of ignition if safe to do so.
- 3.) Pickup spilled materials using non-sparking tools and place in an appropriate container for disposal.
- 4.) Contain spill to prevent material from entering sewage or ground water systems.



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5.) Always dispose of waste materials in accordance with all EU, National and Local Regulations.

## 7. Handling and Storage

Flammable Aerosol, use in a well ventilated area.  
Do not use near sources of ignition.  
Store out of direct sunlight.  
Storage Temperature: 32° to 120°F (0° to 49°C)  
Do not to eat, drink and smoke while working with this material.  
Wash hands after use.

## 8. Exposure Controls / Personal Protection

### Appropriate engineering controls:

Ensure adequate ventilation. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits.  
Keep away from sources of ignition.  
Take precautionary measures against static discharge.

### Personal Protection:

Eye & face protection devices such as safety glasses, safety goggles or face shield are recommended.

### Skin protection

Wear the appropriate protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

### Respiratory protection:

Use only in an adequately ventilated area. For unknown vapor concentrations use a positive-pressure, pressure-demand, self-contained breathing apparatus (SCBA).

Hazardous Ingredient	CAS Number	TWA	STEL
Carbon Dioxide	124-38-9	5000	30000
Hexane	110-54-3	50	N/AV
Ethyl Alcohol	79-01-6	N/AV	N/AV
Methanol	67-56-1	200	250

## 9. Information on Basic Physical and Chemical Properties

Appearance: Clear	Odor: Hydrocarbon odor
Odor Threshold: N/AV	pH: Not Applicable (solvent Base)
Melting Point: N/AV	Freezing Point: N/AV
Initial Boiling Point: N/AV	Boiling Point Range: N/AV
Flash Point: < 0° F (-18° C)	Evaporation Rate: Faster than n-Butyl Acetate



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Flammability Solid/Gas: Flammable gas	Upper LEL: 1.1% Lower LEL: 36%
Vapor Pressure: N/AV	Vapor Density: Heavier Than Air
Relative Density: N/AV	Solubility: Negligible
Partition Coefficient: n-octanol/ water: N/AV	Auto-ignition Temperature: N/AV
Decomposition Temperature: N/AV	Viscosity: N/AV
Explosive Properties: N/AV	Oxidizing Properties: N/AV

## 10. Stability & Reactivity

Possibility of hazardous reactions: Hazardous polymerization will not occur under normal conditions  
Conditions to avoid: Heat and ignition sources  
Incompatible materials: Strong Oxidizing Agents  
Hazardous decomposition products: Will not occur

## 11. Toxicological Information

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Repeated overexposure can also damage kidneys, lungs, liver, heart and blood

## 12. Ecological Information

Toxicity: **No Data Available**  
Persistence and degradability: **No Data Available**  
Bioaccumulative potential: **No Data Available**  
Mobility in soil: **No Data Available**  
Results of PBT and vPvB assessment: **No Data Available**  
Other adverse effects: **No Data Available**

## 13. Disposal Considerations

**Waste Disposal:** Dispose of material in accordance with EU, national and local requirements. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permitted under applicable rules, regulations and/or laws governing your location.  
**Product / Packaging disposal:** Dispose of packaging in accordance with federal, state and local requirements, regulations and/or laws governing your location.

## 14. Transportation Information

### US DOT

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols	2.1	Not Applicable	Not Applicable	Not Applicable



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## IMDG

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols	2.1	Not Applicable	Not Applicable	Not Applicable

## IATA:

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols	2.1	Not Applicable	Not Applicable	Not Applicable

## 15. Regulatory Information

### Workplace classification:

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200). The Occupational Safety and Health Administration's interpretation of the product's hazard to workers.

### SARA Title 3:

Section 311/312 Categorizations (40 CFR 372): This product is a hazardous chemical under 29 CFR 1910.1200, and is categorized as an immediate and delayed health, and flammability physical hazard. Superfund Amendment and Reauthorization Act (SARA) category. SARA requires reporting any spill of any hazardous substance.

**TSCA status:** All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

**PROP 65 (CA):** Warning: This product may contain chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

## 16. Other Information

List of relevant Risk and Safety phrases:

### R Phrases:

- R11: Highly flammable
- R23: Toxic by inhalation
- R24: Toxic in contact with skin
- R25: Toxic if swallowed
- R38: Irritating to skin
- R39: Danger of very serious irreversible effects
- R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation
- R62: Possible risk of impaired fertility
- R67: Vapours may cause drowsiness and dizziness
- R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**S Phrases:** R11, R23, R24, R25, R38, R39, R48/20, R62, R65, R67, R51/53



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**S Code Summation: S1, S2, S7, S9, S16, S24/25, S26, S29, S33, S36, S37, S36/37, S45, S61, S62**

- S1: Keep locked up
- S2: Keep out of the reach of children
- S7: Keep container tightly closed
- S9: Keep container in a well-ventilated place
- S16: Keep away from sources of ignition - No smoking
- S24/25: Avoid any inhalation, contact with skin and eyes. Wear suitable protective clothing and gloves
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S29: Do not empty into drains
- S33: Take precautionary measures against static discharges
- S36: Wear suitable protective clothing
- S37: Wear suitable gloves
- S36/37: Wear suitable protective clothing and gloves
- S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)
- S61: Avoid release to the environment. Refer to special instructions/safety data sheet
- S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

**National Fire Protection Association (NFPA) ratings**

Health = 2 Flammability = 4 Reactivity = 1

This SDS has been completed in accordance with Regulation (EC) No. 1907/2006

Date of Preparation/Revision: 11/30/2010

Supersedes: (11/11/2010)

To the best of our knowledge, the information contained herein is believed to be accurate. However, the above data does not imply any guarantee or warranty of any kind, expressed or implied. The final determination of the suitability of any material is the sole responsibility of the user. All materials made present un-known hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee these are the only hazards existing.