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1.) Identification of the Mixture and of the Company

Product identifier: Aervoe 890 Cutting Oil - Aerosol

Product name: 890 Cutting Oil

AERVOE

Relevant identified uses of the substance: Use Aervoe Cutting Oil on turret lathes, gear cutters, broaches, and automatic screw machines, and for sawing, tapping, machining, threading, and drilling. Effective on both ferrous and nonferrous metals.

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

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

2. Hazards identification

Classifications

| Physical Hazards: | Aerosol - Category 2 Flam. Gas 1 Press. Gas |
|---------------------------|---|
| Health Hazards: | N/AV |
| Environmental Hazards: | N/AV |
| Labeling | |
| Signal Word: | Warning |
| Hazard Statements: | H220 – Extremely flammable gas H223 – Flammable aerosol H229 – Pressurized container: may burst if heated |
| Precautionary Statements: | P101 - If medical advice is needed, have product container or label at hand P102 - Keep out of reach of children P103 - Read label before use |

AERVOE

Safety Data Sheet (SDS)

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- P210 Keep away from heat/sparks/open flames/hot surfaces no smoking
- P211 Do not spray on an open flame or other ignition source
- P251 Pressurized container: Do not pierce or burn, even after use
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray
- P262 Do not get in eyes, on skin, or on clothing
- P264 Wash ... thoroughly after handling
- P280 Wear protective gloves/eye protection/face protection
- P303+P361+P353 If on skin or hair, remove/takeoff immediately all contaminated clothing. Rinse skin with water/shower.
- P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F
- P501 Dispose of contents/container in accordance with local/regional/national/international regulation
- P273 Avoid release to the environment.



Symbols/Pictograms:

3. Composition / Information on Ingredients

Composition

| Chemical | Synonyms | CAS Number | EINECS Number | Weight Percent | Hazard Category | H-Code |
|----------|----------|---------------|------------------|-------------------|-----------------|--------|
| Dimethyl | DME | 115-10-6 | 204-065-8 | 5-10% | Flam. Gas 1 | H220 |
| Ether | | | | | Press. Gas | |

Other Product Information

Chemical Identity: Mixture

4.) First Aid Measures

| General Advice: | If symptoms persist, always call a doctor. |
|-------------------------|--|
| Inhalation First Aid: | 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. |
| Skin Contact First Aid: | Wash with soap and water. Remove contaminated clothing and |
| | shoes. Get medical attention immediately. Wash clothing before |
| | reuse. |
| Eye Contact First Aid: | If contact with eyes, immediately flush eyes with plenty of water |
| | for at least 15 minutes, while holding eyelids open. Get medical |
| | attention immediately. |



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| Ingestion First Aid: | 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. |
|-------------------------------------|---|
| Most Important Symptoms/Effects: | Exposure may cause slight irritation to the skin, eyes, and respiratory tract. Excessive exposure may cause central nervous system effects. |

5. Fire Fighting Measures

| Flammable Properties: Auto Ignition Temperature: | Aerosol Not Available |
|---|---|
| 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. |
| pressu NIOS | vater spray to cool containers exposed to heat or fire to prevent irre build up. In the event of a fire, wear full protective clothing and H- approved self-contained breathing apparatus with full face piece ted 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.
- 5.) Always dispose of waste materials in accordance with all EU, National and Local Regulations.

7. Handling and Storage

Handling:

Flammable Aerosol, use in a well ventilated area. Do not use near sources of ignition. Do not to eat, drink and smoke while working with this material. Wash hands after use.

Conditions for safe storage, including any incompatibilities:

Store out of direct sunlight.

Storage Temperature: 32° to 120° F (0° to 49° C).

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No known incompatibilities.

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 | ACGIH TLV (TWA) | ACGIH TLV (STEL) | OSHA PEL (TWA) | OSHA PEL (STEL) |
|----------------------|---------------|--------------------|---------------------|----------------------|--------------------|
| Dimethyl Ether | 115-10-6 | N/AV | N/AV | N/AV | N/AV |

*Values are based on the 2014 Guide to Occupational Exposure Values by ACGIH

9. Information on Basic Physical and Chemical Properties

| Appearance: Milky white liquid | Odor: Mild |
|---------------------------------------|---------------------------------------|
| 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: Slower than n-Butyl |
| | Acetate |
| Flammability Solid/Gas: Flammable gas | LEL: 3.4% UEL: 18% |
| Vapor Pressure: N/AV | Vapor Density: Heavier Than Air |
| Relative Density: N/AV | Solubility: Negligible |
| Partition Coefficient: N/AV | Auto-ignition Temperature: N/AV |
| n-octanol/ water: N/AV | |
| Decomposition Temperature: N/AV | Viscosity: N/AV |
| Explosive Properties: N/AV | Oxidizing Properties: N/AV |

10. Stability & Reactivity



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Possibility of hazardous reactions: Hazardous polymerization will not occur under normal conditions Chemical stability: Stable 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

Routes of exposure: Eyes, skin, ingestion, and/or inhalation

| Acute toxicological data: | (Dimethyl Ether) LC50:164,000 ppm / 4 hr(Rat) |
|--|--|
| Eye irritation data: | N/AV |
| Skin irritation/sensitization/absorption data: | N/AV |
| Reproductive toxicity data: | N/AV |
| Mutagenicity data: | N/AV |
| Symptoms associated with physical contact: | N/AV |
| Acute/chronic effects from short/long term exposure: | Irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis. Not expected to be a skin sensitizer. |
| Known reportable carcinogens via the following agencies: | |
| NTP: IARC: OSHA: | N/AV N/AV N/AV |

* Petroleum distillates may contain chemical carcinogens in limited quantities (< 0.01%). These quantities are determined by the supplier/fraction/purity of the distillate during the manufacturing process. Chemicals that may be present within distillates are listed on California's prop 65 list such as ETHYLBENZENE, BENZENE, and TOLUENE.

12. Ecological Information

Ecotoxicity: **No Data Available** Persistence and degradability: **No Data Available** Bioaccumulative potential: **No Data Available**



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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 | Proper Shipping Name | Hazard | Packing | Marine | Special |
|--------|----------------------|--------|------------|------------|--------------|
| Number | | Class | Group | Pollutant | Provisions |
| UN1950 | Aerosols | 2.1 | Not | Not | Reference 49 |
| | | | Applicable | Applicable | CFR 172.101 |

IMDG

| UN | Proper Shipping Name | Hazard | Packing | Marine | Special |
|--------|----------------------|--------|-------------------|-------------------|----------------------------------|
| Number | | Class | Group | Pollutant | Provisions |
| UN1950 | Aerosols | 2.1 | Not Applicable | Not Applicable | Reference IMDG code part 3 |

IATA:

| UN | Proper Shipping Name | Hazard | Packing | Marine | Special |
|--------|----------------------|--------|-------------------|-------------------|---|
| Number | | Class | Group | Pollutant | Provisions |
| UN1950 | Aerosols, Flammable | 2.1 | Not Applicable | Not Applicable | Reference IATA Dangerous Goods Regulation |

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.



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

WHMIS: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the (M)SDS contains all of the information required by the CPR.

16. Other Information

This SDS has been completed in accordance with GHS Rev04 (2011): U.S OSHA, CMA, ANSI, Canadian WHMIS standards, and European Directives.

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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.