



Material Safety Data Sheet

Date Prepared/Revised: 4/4/2014 Version no.: 02 Supersedes: (11/30/2010)

1.) Identification of the Mixture and of the Company

Product identifier: **Aervoe Survey Marking Paint - Aerosol**

Product name:
Survey Marking Paint

| Non-Fluorescent Colors | Fluorescent Colors | 16 oz. I.A.C. | High Delivery | Metallic |
|--------------------------|--------------------|----------------------------|------------------------|------------|
| 201 Red | 220 Red | 261 Red | 281 Red | 210 Silver |
| 202 Yellow | 222 Orange | 262 Yellow | 282 Yellow | |
| 203 Blue | 224 Green | 263 Blue | 288 Fluorescent Orange | |
| 204 Green | 226 Yellow | 265 Orange | | |
| 205 Orange | 227 Blue | 267 White | | |
| 206 Black | 229 Pink | 270 Fluorescent Red | | |
| 207 White | 230 Red/Orange | 272 Fluorescent Orange | | |
| 208 Hi Visibility Yellow | | 274 Fluorescent Green | | |
| 209 Light Blue | | 275 Fluorescent Red/Orange | | |
| 212 Purple | | 279 Fluorescent Pink | | |

Relevant identified uses of the substance: Designed to adhere to most surfaces, including pavement, gravel, and soil.

Uses advised against: This aerosol product is designed to spray at an angle not greater than 30° from vertical. Do not use on turf surfaces.

| | |
|-----------------------------|---|
| CAS 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: | 001 (0) 1-775-782-0100 |
| e-mail: | mailbox@aervoe.com |
| National contact: | Aervoe industries Incorporated |
| For Product Information: | 001 (0) 1-800-227-0196 |
| Emergency telephone number: | 001 (0) 1-800-424-9300 (CHEMTREC – 24 hrs) |
| | English Language Service |

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 |
|------------------------|------------|---------------|----------------|-------------------------|-------|
| Hydrocarbon Propellant | 68476-86-8 | 270-705-8 | 10-30% | R12, R45, R46, S45, S53 | |



Material Safety Data Sheet

Date Prepared/Revised: 4/4/2014 Version no.: 02 Supersedes: (11/30/2010)

| | | | | | |
|--------------------------------------|------------|-----------|--------|--|--|
| Aliphatic Petroleum Distillates | 64742-89-8 | 265-192-2 | 10-30% | R45, R46, R65, S45, S53 | |
| Hexane | 110-54-3 | 203-777-6 | 7-13% | R11, R20, R38, R48, R51, R53, R62, R65, R67, S2, S9, S16, S29, S33, S37, S61 | |
| Aliphatic Petroleum Distillates | 64742-88-7 | 265-191-7 | 1-5% | R65, S2, S23, S24, S62 | |
| Non-Flourescent Colors Also Contain: | | | | | |
| Acetone | 67-64-1 | 200-662-2 | 7-13% | R11, R36, R66, R67, S2, S9, S16, S26 | |
| Metallic Colors Also Contain: | | | | | |
| Acetone | 67-64-1 | 200-662-2 | 30-60% | R11, R36, R66, R67, S2, S9, S16, S26 | |
| n-Butyl Acetate | 123-86-4 | 204-658-1 | 1-5% | R10, R66, R67, S2, S25 | |
| Aliphatic Hydrocarbon | 64742-47-8 | 265-149-8 | 1-5% | R65, S2, S23, S24, S62 | |

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

R Code Summation: R11, R12, R20, R36, R38, R45, R46, R48, R51, R53, R62, R65, R66, R67

S Code Summation: S2, S9, S16, S23, S24, S25, S26, S29, S33, S45, S53, S62

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. |
| 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. |

5. Fire Fighting Measures

| | |
|---------------------------------|--|
| Flammable Properties: | Aerosol |
| Flash Point: | <0° F (-18° C) |
| Auto Ignition Temperature: | Not Available |
| Flammable Limits in Air: | |
| % by Volume: | LEL: 1% UEL: 13% |
| Suitable extinguishing media: | Carbon dioxide, dry chemical, water spray. |
| Unsuitable extinguishing media: | None known |



Material Safety Data Sheet

Date Prepared/Revised: 4/4/2014 Version no.: 02 Supersedes: (11/30/2010)

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.
- 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



Material Safety Data Sheet

Date Prepared/Revised: 4/4/2014 Version no.: 02 Supersedes: (11/30/2010)

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 |
|---------------------------------|------------|------|------|
| Hydrocarbon Propellant | 68476-86-8 | N/AV | N/AV |
| Aliphatic Petroleum Distillates | 64742-89-8 | 300 | N/AV |
| Hexane | 110-54-3 | 50 | N/AV |
| Acetone | 67-64-1 | 500 | 750 |
| n-Butyl Acetate | 123-86-4 | 150 | 200 |
| Aliphatic Hydrocarbon | 64742-47-8 | 100 | N/AV |

9. Information on Basic Physical and Chemical Properties

| | |
|--|---|
| Appearance: Opaque Liquid | 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 |
| Flammability Solid/Gas: Flammable gas | Upper LEL: 1% Lower LEL: 13% |
| 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



Material Safety Data Sheet

Date Prepared/Revised: 4/4/2014 Version no.: 02 Supersedes: (11/30/2010)

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 |

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.



Material Safety Data Sheet

Date Prepared/Revised: 4/4/2014 Version no.: 02 Supersedes: (11/30/2010)

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.

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
- R12: Extremely flammable
- R20: Harmful by inhalation
- R36: Irritating to eyes
- R38: Irritating to skin
- R45: May cause cancer
- R46: May cause heritable genetic damage
- R48: Danger of serious damage to health by prolonged exposure
- R51: Toxic to aquatic organisms
- R53: May cause long-term adverse effects in the aquatic environment
- R62: Possible risk of impaired fertility
- R65: Harmful: may cause lung damage if swallowed
- R66: Repeated exposure may cause skin dryness or cracking
- R67: Vapours may cause drowsiness and dizziness

S Phrases:

- S2: Keep out of the reach of children
- S9: Keep container in a well-ventilated place
- S16: Keep away from sources of ignition - No smoking
- S24: Avoid contact with skin
- S23: Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer)
- S25: Avoid contact with eyes
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S33: Take precautionary measures against static discharges
- SS45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)
- S53: Avoid exposure - obtain special instructions before use
- 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



Material Safety Data Sheet

Date Prepared/Revised: 4/4/2014 Version no.: 02 Supersedes: (11/30/2010)

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

Date of Preparation/Revision: 4/4/2014
Supersedes: (11/30/2010)

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.