

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

Product identifier: Aervoe Survey Marking Paint - Aerosol

Product name: Survey Marking Paint

Non-Fluorescent	Fluorescent	High Delivery	Metallic
Colors	Colors		
201 Red	220 Red	281 Red	210 Silver
202 Yellow	222 Orange	288 Fluorescent	
203 Blue	224 Green	Orange	
204 Green	226 Yellow		
205 Orange	227 Blue		
206 Black	229 Pink		
207 White	230 Red/Orange		
208 Hi Visibility			
Yellow			
209 Light Blue			
212 Purple			
280 Concrete Gray			

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

Uses advised against: This aerosol product is designed to spray at an angle not greater than  $30^{\circ}$  from vertical. Do not use on turf surfaces.

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: 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

#### Classifications

Physical Hazards: Aerosol - Category 1

Flam. Gas. 1 Press. Gas Flam. Liq. 2

Flam. Liq. 3 \* 210 Silver

Health Hazards: Car 1B

Muta 1B Asp Tox. 1 Eye Irrit. - 2 Rep. 2 Skin Irr. 2 STOT SE3 STOT RE 2

Acute Tox. 4 \* 280 Concrete Gray

Environmental Hazards: Aquatic Chronic 2

Labeling

Signal Word: Danger

Hazard Statements: H220 – Extremely flammable gas

H222 – Extremely flammable aerosol

H225 – Highly flammable liquid and vapour.

H226 – Flammable liquid and vapour.

H229 - Pressurized container: may burst if heated H304 – May be fatal if swallowed and enters airways.

H312 – Harmful in contact with skin. \*280 Concrete Gray

H315 – Causes skin irritation.

H319 – Causes serious eye irritation.

H332 - Harmful if inhaled. \* 280 Concrete Gray

H336 – May cause drowsiness or dizziness.

H340 – May cause genetic defects

H350 – May cause cancer

H361 – Suspected of damaging fertility or the unborn child.

H373 – May cause damage to nervous system through prolonged or

repeated exposure(Inhalation)

H411 – Toxic to aquatic life with long lasting effects.

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

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



Symbols/Pictograms:

# 3. Composition / Information on Ingredients

# Composition

Chemical	Synonyms	CAS Number	EINECS Number	Weight Percent	Hazard Category	H-Code
Hydrocarbon Propellant	LPG	68476-86-8	270-705-8	10-30%	Press. Gas Flam. Gas 1 Carc. 1B Muta. 1B	H220 H350 H340
Hexane	n-Hexane	110-54-3	203-777-6	5-10%	Flam. Liq. 2 Repr. 2 Asp. Tox. 1 STOT RE 2 * Skin Irrit. 2 STOT SE 3 Aquatic Chronic 2	H225 H361f *** H304 H373 ** H315 H336 H411
Aliphatic Petroleum Distillates	Solvent Naphtha	64742-89-8	265-192-2	5-10%	Carc. 1B Muta. 1B Asp. Tox. 1	H350 H340 H304
Aliphatic Petroleum Distillates	Solvent Naphtha	64742-88-7	265-191-7	1-5%	Asp. Tox. 1	H304
Aliphatic Petroleum Distillates	Solvent Naphtha	8032-32-4	232-453-7	1-5%	Carc. 1B Muta. 1B Asp. Tox. 1	H350 H340 H304
Non- fluorescent colors also contain:						
Acetone	Propanone	67-64-1	200-662-2	1-5%	Flam. Liq. 2 Eye Irrit. 2	H225, H319,



# Safety Data Sheet (SDS)

Date Prepared/Revised: 5/2/2016 Version no.: 04 Supersedes: (7/27/2015)

					STOT SE 3	H336
Aliphatic	Solvent	8052-41-3	232-489-3	1-5%	Carc. 1B	H350
Petroleum	Naphtha				Muta. 1B	H340
Distillates					Asp. Tox. 1	H304
210 silver						
contains:	LPG	68476-86-8	270-705-8	10-30%	Press. Gas	H220
Hydrocarbon	LPG	084/0-80-8	270-705-8	10-30%		
Propellant					Flam. Gas 1	H350
					Carc. 1B Muta. 1B	H340
Acetone	Propanone	67-64-1	200-662-2	30-60%	Flam. Liq. 2	H225,
Accione	Fropanone	07-04-1	200-002-2	30-00%	Eye Irrit. 2	H319,
					STOT SE 3	H336
Aliphatic	Solvent	8052-41-3	232-489-3	1-5%	Carc. 1B	H350
Petroleum	Naphtha	0032-41-3	232-469-3	1-370	Muta. 1B	H340
Distillates	Napittila				Asp. Tox. 1	H304
n-Butyl	n-Butyl	123-86-4	204-658-1	1-5%	Flam. Liq. 3	H226
Acetate	Ester	120-00-4	204-030-1	1-570	STOT SE 3	H336
Aliphatic	Solvent	64742-89-8	265-192-2	10-30%	Carc. 1B	H350
Petroleum	Naphtha	0+1+2-07-0	203-192-2	10-3070	Muta. 1B	H340
Distillates	Napittia				Asp. Tox. 1	H304
Aliphatic	Solvent	64742-88-7	265-191-7	7-13%	Asp. Tox. 1	H304
Petroleum	Naphtha	04742-00-7	203-191-7	7-13/0	Asp. 10x. 1	11304
Distillates	Napittia					
280 Concrete						
Gray						
contains:						
Hydrocarbon	LPG	68476-86-8	270-705-8	10-30%	Press. Gas	H220
Propellant		00170 00 0	270 705 0	10 3070	Flam. Gas 1	H350
F					Carc. 1B	H340
					Muta. 1B	
Hexane	n-Hexane	110-54-3	203-777-6	5-10%	Flam. Liq. 2	H225
					Repr. 2	H361f ***
					Asp. Tox. 1	H304
					STOT RE 2 *	H373 **
					Skin Irrit. 2	H315
					STOT SE 3	H336
					Aquatic Chronic 2	H411
Aliphatic	Solvent	64742-89-8	265-192-2	5-10%	Carc. 1B	H350
Petroleum	Naphtha				Muta. 1B	H340
Distillates	_				Asp. Tox. 1	H304
n-Butyl	n-Butyl	123-86-4	204-658-1	1-5%	Flam. Liq. 3	H226
Acetate	Ester				STOT SE 3	H336
Acetone	Propanone	67-64-1	200-662-2	1-5%	Flam. Liq. 2	H225,
					Eye Irrit. 2	H319,
					STOT SE 3	H336
Ethyl Acetate	Ethanoate	141-78-6	205-500-4	1-5%	Flam. Liq. 2	H225
					Eye Irrit. 2	H319
					STOT SE 3	H336
2-Butoxyethyl	Butyl Glycol	112-07-2	203-933-3	1-5%	Acute Tox. 4 *	H332
Acetate	Acetate	1		1	Acute Tox. 4 *	H312

# **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.

Wash with soap and water. Remove contaminated clothing and **Skin Contact First Aid:** 

shoes. Get medical attention immediately. Wash clothing before

**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.

If swallowed, wash out mouth with water provided the person is **Ingestion First Aid:** 

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: Aerosol

Auto Ignition Temperature: Not Available

Suitable extinguishing media: Carbon dioxide, dry chemical, water spray.

None known

Unsuitable extinguishing media:

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.

Precautions 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

#### 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).

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	OSHA PEL (STEL)
				(TWA)	
Aliphatic Petroleum Distillates	64742-88-7	N/AV	N/AV	N/AV	N/AV
Aliphatic Petroleum Distillates	64742-89-8	N/AV	N/AV	N/AV	N/AV
Hydrocarbon Propellant	68476-86-8	N/AV	N/AV	N/AV	N/AV
Aliphatic Petroleum Distillates	8032-32-4	200ppm	300ppm	200ppm	N/AV
Hexane	110-54-3	50ppm	N/AV	500ppm	N/AV
Acetone	67-64-1	500ppm	750ppm	1000ppm	N/AV
Aliphatic Hydrocarbon	8052-41-3	100ppm	N/AV	500ppm	N/AV



n-Butyl Acetate	123-86-4	150ppm	200ppm	150ppm	N/AV
Aliphatic Petroleum Distillates	64742-47-8	N/AV	N/AV	N/AV	N/AV
Ethyl Acetate	141-78-6	400ppm	N/AV	400ppm	N/AV
2-Butoxyethyl Acetate	112-07-2	20ppm	N/AV	N/AV	N/AV

<sup>\*</sup>Values are based on the 2014 Guide to Occupational Exposure Values by ACGIH

# 9. Information on Basic Physical and Chemical Properties

Appearance: Color varies by product.	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:	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

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: (Acetone) Acute oral LD50: 5800mg/kg(rat)

(Acetone) LC50: 21000 ppm / 8 hr (rat) (Hexane) LD50: 2870 mg/kg (Rat-Oral)

Eye irritation data: N/AV

Skin irritation/sensitization/absorption data: N/AV



Reproductive toxicity data: N/AV

Mutagenicity data: Muta 1B

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: N/AV

IARC: IARC3:Classification not possible from current data

OSHA: TLV-A4

#### 12. Ecological Information

Ecotoxicity: 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	Proper Shipping Name	Hazard	Packing	Marine	Special
Number		Class	Group	Pollutant	Provisions

<sup>\*</sup> 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.



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	Not	Reference
			Applicable	Applicable	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.

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

#### 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.

Date of Preparation/Revision: 5/2/2016

Supersedes: (7/27/2015)

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.