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

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° 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



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

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



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

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	H220 H350
Fiopenant					Carc. 1B	H340
					Muta. 1B	110 10
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
Aliphatic	Solvent	64742-88-7	265-191-7	1-5%	Asp. Tox. 1	H304
Petroleum	Naphtha					
Distillates						
Aliphatic	Solvent	8032-32-4	232-453-7	1-5%	Carc. 1B	H350
Petroleum	Naphtha				Muta. 1B	H340
Distillates	-				Asp. Tox. 1	H304
Non-						
fluorescent						
colors also						
contain:						
Acetone	Propanone	67-64-1	200-662-2	1-5%	Flam. Liq. 2	H225,
					Eye Irrit. 2	H319,



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	0002 11 0		10/0	Muta. 1B	H340
Distillates	rupinin				Asp. Tox. 1	H304
210 silver					715p. 10A. 1	11501
contains:						
Hydrocarbon	LPG	68476-86-8	270-705-8	10-30%	Press. Gas	H220
Propellant					Flam. Gas 1	H350
1					Carc. 1B	H340
					Muta. 1B	
Acetone	Propanone	67-64-1	200-662-2	30-60%	Flam. Liq. 2	H225,
	1				Eye Irrit. 2	H319,
					STOT SE 3	H336
Aliphatic	Solvent	8052-41-3	232-489-3	1-5%	Carc. 1B	H350
Petroleum	Naphtha				Muta. 1B	H340
Distillates	1				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
Aliphatic	Solvent	64742-89-8	265-192-2	10-30%	Carc. 1B	H350
Petroleum	Naphtha				Muta. 1B	H340
Distillates	1				Asp. Tox. 1	H304
Aliphatic	Solvent	64742-88-7	265-191-7	7-13%	Asp. Tox. 1	H304
Petroleum	Naphtha				1	
Distillates	1					
280 Concrete						
Gray						
contains:						
Hydrocarbon	LPG	68476-86-8	270-705-8	10-30%	Press. Gas	H220
Propellant					Flam. Gas 1	H350
					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				Acute Tox. 4 *	H312

Other Product Information

Chemical Identity: Mixture

AERVOE

Safety Data Sheet (SDS)

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

4.) First Aid Measures

General Advice: Inhalation First Aid:	If symptoms persist, always call a doctor. Remove victim to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial respiration, preferably
Skin Contact First Aid:	mouth to mouth. Get medical attention immediately. 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.
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	rater spray to cool containers exposed to heat or fire to prevent ire build up. In the event of a fire, wear full protective clothing and H- approved self-contained breathing apparatus with full face piece red 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.

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

- 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 (TWA)	OSHA PEL (STEL)
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



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

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

*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: $<0^{\circ}$ 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) N/AV

Eye irritation data:

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

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

* 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** 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



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

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	Not	Reference
			Applicable	Applicable	IMDG code
					part 3

IATA:

UN	Duonon Shinning Nome	Harand	Dealring	Marina	Cracial
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



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

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.