Safety Data Sheet (SDS)

Date Prepared/Revised: 3/30/18 Version no.: 03 Supersedes: (1/15/16)

1.) Identification of the Mixture and of the Company

Product identifier**: Aervoe Industrial Paint Pen**
Product name:
Industrial Paint Pen

1221 Red	1222 Yellow	1226 Black	1227 White

Relevant identified uses of the substance: Use on metal, plastic, glass, or wood. These surfaces may include conduit, ABS, PVC, motor parts, auto parts, machinery, cable, lumber, wire, or windows.
Uses advised against: Poorly ventilated areas

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)**
	English Language Service

2. Hazards identification

Classifications

This product is an article as defined by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200). No exposure to hazardous chemicals is expected to occur during intended product use. Misuse of the product may result in exposure to hazardous chemicals. The classification below applies to the liquid ink in this marker.

This product is not a toxic or hazardous substance as defined by 16 CRF 1500.3 of the Federal Hazardous Substances Act (FHSA) and as such does not require acute or chronic hazard labeling. Reviews were conducted using guidelines set forth by the CPSC (Consumer Product Safety Commission). Inks are certified as compliant under ASTM D-4236

Physical Hazards:	N/AV
Health Hazards:	N/AV
Environmental Hazards:	N/AV

Labeling

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Signal Word: N/AV

Hazard Statements: N/AV

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
P262 - Do not get in eyes, on skin, or on clothing
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50ºC/122ºF
P501 - Dispose of contents/container in accordance with local/regional/national/international regulation

Symbols/Pictograms: N/AV

3. Composition / Information on Ingredients

Composition

Chemical	CAS Number	Weight Percent	Trade secret
Propyl alcohol	71-23-8	30-70	*
Titanium dioxide	13463-67-7	10-20	*
Pigment Yellow 83	5567-15-7	0-10	*
C.I Pigment red 3	2425-85-6	0-7	*
Carbon black	1333-86-4	0-5	*
C.I Pigment Blue 15	147-14-8	0-5	*
Ci 51319	6358-30-1	0-3	*
Silicon dioxide	7631-86-9	1-3	*
Silica, amorphous, fumed, crystal-free	112945-52-5	0-2	*
Propylene glycol monomethyl ether acetate	108-65-6	.1-1	*
n-Butyl acetate	123-86-4	.1-1	*
Dipropylene glycol monomethyl ether	34590-94-8	.1-1	*
Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, chlorinated	68987-63-3	0.1-1.0	*
Copper	7440-50-8	0.1-1.0	*
n-Butyl alcohol	71-36-3	<0.1	*

Sodium bisulfite	7631-90-5	<0.1	*

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: If skin irritation occurs, rinse affected area with water.

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: Non-flammable

Auto Ignition Temperature: 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: Product will not burn.

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:

Use in a well ventilated area.
Do not use near sources of ignition, open flames, or hot surfaces.
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.
Take precautionary measures against static discharge.

Personal Protection:
Use person protective equipment as required.

Skin protection
No protective equipment is needed under normal use conditions.

Respiratory protection:
Use only in an adequately ventilated area.

Hazardous Ingredient	CAS Number	ACGIH TLV (TWA)	ACGIH TLV (STEL)	OSHA PEL (TWA)	OSHA PEL (STEL)
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.					

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

9. Information on Basic Physical and Chemical Properties

Appearance: Color varies	Odor: Alcohol
Odor Threshold: N/AV	pH: Not Applicable (solvent Base)
Melting Point: N/AV	Freezing Point: N/AV
Initial Boiling Point: 96 °C / 205 °F (Liquid ink only)	Boiling Point Range: N/AV
Flash Point: 23 °C / 73 °F (Liquid ink only)	Evaporation Rate: Slower than Ether
Flammability Solid/Gas: Non-flammable	Upper LEL: 13.5% Lower LEL: 2.1%
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
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:

Chemical Name	**LD50 Oral**	**LD50 Dermal**	LC50 Inhalation
Propyl Alcohol	1870mg/kg (Rat)	4049 mg/kg (Rabbit)	>13548ppm (Rat) 4 h
Titanium Dioxide	>10000 mg/kg (Rat)	-	>6820 mg/m^3
Carbon Black	-	>3g/kg	-

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:	N/AV
IARC:	Titanium Dioxide (2B), C.I. Pigment red 3 (3), Carbon Black (2B) Silicon Dioxide (3), Silica, amorphous, fumed, crystal free (3) Sodium bisulfite (3)
OSHA:	Titanium Dioxide, Carbon Black

* 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:

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Propyl alcohol 71-23-8		LC50 96 h: = 4480 mg/L flow-through (Pimephales promelas)	EC50 = 17700 mg/L 5 min EC50 = 45000 mg/L 5 h EC50 = 8686 mg/L 15 min EC50 = 980 mg/L 12 h	EC50 48 h: = 3642 mg/L (Daphnia magna) EC50 48 h: 3339-3977 mg/L Static (Daphnia magna)

Persistence and degradability: **No Data Available**

Bioaccumulative potential:

Chemical Name	Log Pow
Propyl alcohol	0.34
C.I. Pigment Blue 15	6.6
Propylene glycol monomethyl ether acetate	0.43
n-Butyl acetate	1.81
Dipropylene glycol monomethyl ether	-0.064
n-Butyl alcohol	0.785

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
UN1210	Printing ink	3	III	Not Applicable	Reference 49 CFR 172.101

IMDG

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1210	Printing ink	3	III	Not Applicable	Reference IMDG code part 3

IATA:

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1210	Printing ink	3	III	Non Regulated Material	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.
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): The classification listed below only applies to respirable Titanium dioxide and respirable carbon black. This product contains the following Proposition 65 chemicals:

Chemical Name	CAS Number	California Prop. 65
Titanium dioxide	13463-67-7	Carcinogen
Carbon black	1333-86-4	Carcinogen

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.