Date Prepared/Revised: 9/10/19 Version no.: 04 Supersedes: (9/7/18)

1.) Identification of the Mixture and of the Company

Product identifier: Crown Blue Toolmaker's Ink - Aerosol

Product name: Crown 6001 Blue Toolmaker's Ink

Relevant identified uses of the substance: Use for production layouts, pattern making, tool, die, and model making. May be used for templates and machined parts. Uses advised against: Poorly ventilated areas

vapour.

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

AERVOE

Physical Hazards:	Aerosol - Category 1 Flam. Gas. 1 Liquefied Gas Flam. Liq. 2 Flam. Liq. 3
Health Hazards:	Asp Tox. 1 Eye Irrit 2 STOT SE3
Environmental Hazards:	N/AV
Labeling	
Signal Word:	Danger
Hazard Statements:	H220 – Extremely flammable gas H222 – Extremely flammable aerosol H225 – Highly flammable liquid and va H226 – Flammable liquid and vapour.

AERVOE

Safety Data Sheet (SDS)

Date Prepared/Revised: 9/10/19

Version no.: 04 Supersedes: (9/7/18)

- H229 Pressurized container: may burst if heated
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.

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	Weight	Hazard Category	H-Code
			Number	Percent		
Methyl Ethyl	M.E.K.	78-93-3	201-159-0	30-60%	Flam. Liq. 2	H225
Ketone					Eye Irrit. 2	H319
					STOT SE 3	H336
Hydrocarbon	LPG	68476-86-8	270-705-8	15-40%	Press. Gas	H220
Propellant					Flam. Gas 1	H229
n-Butyl	n-Butyl	123-86-4	204-658-1	7-13%	Flam. Liq. 3	H226
Acetate	Ester				STOT SE 3	H336
n-Methyl-2-	2-Methoxy-	108-65-6	203-603-9	1-5%	Flam. Liq. 3	H226
Propanol	1-					
Acetate	Methylethyl					
	Acetate					

# **Other Product Information**

Chemical Identity: Mixture

AERVOE

Safety Data Sheet (SDS)

Date Prepared/Revised: 9/10/19

Version no.: 04 Supersedes: (9/7/18)

#### 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
C	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.
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.
Precautions for fire-fighters: Use w	ater spray to cool containers exposed to heat or fire to prevent
pressu	re build up. In the event of a fire, wear full protective clothing and
NIOS	H- approved self-contained breathing apparatus with full face piece
	ed 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.

Date Prepared/Revised: 9/10/19 Version no.: 04 Supersedes: (9/7/18)

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:  $32^{\circ}$  to  $120^{\circ}$ F ( $0^{\circ}$  to  $49^{\circ}$ 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)
Methyl Ethyl Ketone	78-93-3	200ppm	300ppm	200ppm	N/AV
Hydrocarbon Propellant	68476-86-8	N/AV	N/AV	N/AV	N/AV
n-Butyl Acetate	123-86-4	150ppm	200ppm	150ppm	N/AV
n-Methyl-2-Propanol Acetate	108-65-6	N/AV	N/AV	N/AV	N/AV

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

Date Prepared/Revised: 9/10/19

Version no.: 04 Supersedes: (9/7/18)

## 9. Information on Basic Physical and Chemical Properties

Appearance: Blue	Odor: Ketone 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	LEL: 0.7% UEL: 14%
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:	N/AV
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

Irritating to skin. Prolonged/repeated contact may

Date Prepared/Revised: 9/10/19

Version no.: 04 Supersedes: (9/7/18)

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:	N/AV
OSHA:	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** 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	Not	Reference
			Applicable	Applicable	IMDG code
					part 3



Date Prepared/Revised: 9/10/19

Version no.: 04 Supersedes: (9/7/18)

## 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.

**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: Cancer – www.P65Warnings.ca.gov.

## **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: 9/10/19 Supersedes: (9/7/18)

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.