Date Prepared/Revised: 12/2/2014 Version no.: 01 Supersedes: (-)

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

Product identifier: Crown Fault-Finder Cleaner Group 1 - Aerosol Product name: 1071 Fault-Finder Cleaner Group 1

Relevant identified uses of the substance: Use to clean metals, glass and plastic before applying penetrant.

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:	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: Health Hazards:	Aerosol - Category 1 Press. Gas Flam. Gas. 1 Flam. Liquid 2 Carc. 1B Muta. 1B Eye Irrit. 2 STOT SE 3
Environmental Hazards:	N/AV
Labeling	
Signal Word:	Danger
Hazard Statements:	H220 – Extremely flammable gas. H222 – Extremely Flammable Aerosol

AERVOE

Safety Data Sheet (SDS)

Date Prepared/Revised: 12/2/2014 Version no.: 01 Supersedes: (-)

- H225 Highly flammable liquid and vapour.
- H229 Pressurized container: may burst if heated
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H340 May cause genetic defects
- H350 May cause cancer

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
- P251 Pressurized container: Do not pierce or burn, even after use



Symbols/Pictograms:

# 3. Composition / Information on Ingredients

#### Composition

Chemical	Synonyms	CAS Number	EINECS Number	Weight Percent	Hazard Category	H-Code
Isopropanol	Isopropyl Alcohol	67-63-0	200-661-7	60-100%	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336
Hydrocarbo	LPG	68476-86-8	270-705-8	10-30%	Press. Gas	H220



Date Prepared/Revised: 12/2/2014 Version no.: 01 Supersedes: (-)

n Propellant			Flam. Gas 1	H350
_			Carc. 1B	H340
			Muta. 1B	

# **Other Product Information**

Chemical Identity: Mixture

# 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:	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	are build up. In the event of a fire, wear full protective clothing and
NIOS	H- approved self-contained breathing apparatus with full face piece
opera	ted in the pressure demand or other positive pressure mode.

Date Prepared/Revised: 12/2/2014 Version no.: 01 Supersedes: (-)

#### 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).



Date Prepared/Revised: 12/2/2014 Version no.: 01 Supersedes: (-)

Hazardous Ingredient	CAS Number	ACGIH TLV (TWA)	ACGIH TLV (STEL)	OSHA PEL (TWA)	OSHA PEL (STEL)
Isopropanol	67-63-0	200ppm	400ppm	400ppm	N/AV
Hydrocarbon Propellant	68476-86- 8	N/AV	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: Clear, transparent liquidClear	Odor: Alcohol 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: 1.4% UEL: 11%
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:

Date Prepared/Revised: 12/2/2014 Version no.: 01 Supersedes: (-)

Skin irritation/sensitization/absorption data: Reproductive toxicity data:	N/AV 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:	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.

Date Prepared/Revised: 12/2/2014 Version no.: 01 Supersedes: (-)

#### **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

#### 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: 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 Prepared/Revised: 12/2/2014 Version no.: 01 Supersedes: (-)

Date of Preparation/Revision: 12/2/2014 Supersedes: (-)

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.

Date Prepared/Revised: 7/28/2015 Version no.: 01 Supersedes: 12/5/2014

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

Product identifier: Crown Fault-Finder Penetrant Group 1 - Aerosol

Product name: 1072 Fault-Finder Penetrant Group 1

Relevant identified uses of the substance: Use on metals, glass and plastic 20 minutes before applying developer.

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:	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 Press. Gas Flam. Gas 1
Health Hazards:	Asp. Tox. 1 Carc. 1B Muta. 1B Eye Irrit. 2 Skin. Irrit. 2 STOT SE 3
Environmental Hazards:	N/AV
Labeling	
Signal Word:	Danger
Hazard Statements:	H220 – Extremely flammable gas.

AERVOE

Safety Data Sheet (SDS)

#### Date Prepared/Revised: 7/28/2015 Version no.: 01 Supersedes: 12/5/2014

- H222 Extremely flammable aerosol.
- H229 Pressurized container: may burst if heated
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H340 May cause genetic defects
- H350 May cause cancer

#### 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
- P251 Pressurized container: Do not pierce or burn, even after use



Symbols/Pictograms:

# 3. Composition / Information on Ingredients

# Composition

Chemical	Synonyms	CAS Number	EINECS	Weight	Hazard	H-Code
			Number	Percent	Category	
Aliphatic	Solvent	64742-94-5	265-	40-70%	Asp. Tox. 1	H304
Petroleum	Naphtha		198-5			
	-					



Date Prepared/Revised: 7/28/2015 Version no.: 01 Supersedes: 12/5/2014

Distillates						
Hydrocarbo n Propellant	LPG	68476-86-8	270- 705-8	15-40%	Press. Gas Flam. Gas 1 Carc. 1B Muta. 1B	H220 H350 H340
Aliphatic Petroleum Distillates	Solvent Naptha	64741-44-2	265- 044-7	10-30%	N/AV	N/AV
Propylene Glycol Monobutyl Ether	Poly(prop ylene glycol) Monobuty l Ether	9003-13-8	500-003	10-30%	N/AV	N/AV
N-methyl-2- pyrrolidone;	1-methyl- 2- pyrrolidon e	872-50-4	212- 828-1	1-5%	Repr. 1B Eye Irrit. 2 STOT SE 3 Skin Irrit. 2	H360D*** H319 H335 H315

# **Other Product Information**

Chemical Identity: Mixture

# 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
Eye Contact First Aid:	reuse. 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.

Date Prepared/Revised: 7/28/2015 Version no.: 01 Supersedes: 12/5/2014

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	vater 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 ted 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:  $32^{\circ}$  to  $120^{\circ}$ F ( $0^{\circ}$  to  $49^{\circ}$ C). No known incompatibilities.

Date Prepared/Revised: 7/28/2015 Version no.: 01 Supersedes: 12/5/2014

#### 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	64742-94-5	N/AV	N/AV	N/AV	N/AV
Hydrocarbon Propellant	68476-86-8	N/AV	N/AV	N/AV	N/AV
Aliphatic Petroleum Distillates	64741-44-2	N/AV	N/AV	N/AV	N/AV
Propylene Glycol Monobutyl Ether	9003-13-8	N/AV	N/AV	N/AV	N/AV
N-methyl-2-pyrrolidone	872-50-4	N/AV	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: Red	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	LEL: 1.4% UEL: 11%



Date Prepared/Revised: 7/28/2015 Version no.: 01 Supersedes: 12/5/2014

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: Reproductive toxicity data:	N/AV 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: IARC:	N/AV N/AV

AERVOE Safe

Safety Data Sheet (SDS)

Date Prepared/Revised: 7/28/2015 Version no.: 01 Supersedes: 12/5/2014

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 Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special 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 Applicable	Not Applicable	Reference IATA Dangerous

Date Prepared/Revised: 7/28/2015 Version no.: 01 Supersedes: 12/5/2014

		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: 7/28/2015 Supersedes: 12/5/2014

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.

Date Prepared/Revised: 11/20/2014 Version no.: 01 Supersedes: (-)

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

Product identifier: Crown Fault-Finder Developer Group 1 - Aerosol

Product name: 1073 Fault-Finder Developer Group 1

Relevant identified uses of the substance: Use on metals, glass and plastic to reveal material faults. 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:	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: Health Hazards:	Aerosol - Category 1 Press. Gas Flam. Liq. 2 Asp. Tox. 1 Carc. 1B Muta. 1B STOT SE 3 Eye Irrit. 2
Environmental Hazards:	N/AV
Labeling	
Signal Word:	Danger
Hazard Statements:	H220 – Extremely flammable gas. H222 – Extremely flammable aerosol.



#### Date Prepared/Revised: 11/20/2014 Version no.: 01 Supersedes: (-)

- H225 Highly flammable liquid and vapour.
- H229 Pressurized container: may burst if heated
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H340 May cause genetic defects
- H350 May cause cancer

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
- P251 Pressurized container: Do not pierce or burn, even after use



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	40-70%	Flam. Liq. 2	H225
Ketone					Eye Irrit. 2	H319
					STOT SE 3	H336



Date Prepared/Revised: 11/20/2014 Version no.: 01 Supersedes: (-)

Hydrocarbon	LPG	68476-86-8	270-705-8	15-40%	Press. Gas	H220
Propellant					Flam. Gas 1	H350
					Carc. 1B	H340
					Muta. 1B	
Isobutyl	2-	110-19-0	203-745-1	1-5%	Flam. Liq. 2	H225
Acetate	Methylpropyl					
	Ethanoate					

# **Other Product Information**

Chemical Identity: Mixture

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 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.
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.



Date Prepared/Revised: 11/20/2014 Version no.: 01 Supersedes: (-)

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.



Date Prepared/Revised: 11/20/2014 Version no.: 01 Supersedes: (-)

#### **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
Isobutyl Acetate	110-19-0	N/AV	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	
<b>7.</b> Information on Dasic r hysical and Chemical r toperties	

Appearance: Off-white liquid	Odor: Ketone
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: 1.4% 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

Date Prepared/Revised: 11/20/2014 Version no.: 01 Supersedes: (-)

Acute toxicological data:	N/AV
Eye irritation data:	N/AV
Skin irritation/sensitization/absorption data: Reproductive toxicity data:	N/AV 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: IARC: OSHA:	N/AV N/AV 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**

LERVOE

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



Date Prepared/Revised: 11/20/2014 Version no.: 01 Supersedes: (-)

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 Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special 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 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: This product may contain chemicals know to the state of California to cause cancer, birth defects or other reproductive harm.



Date Prepared/Revised: 11/20/2014 Version no.: 01 Supersedes: (-)

# **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: 11/20/2014 Supersedes: (-)

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.