

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: October 12, 2016

Revision: October 12, 2016

1 Identification

· Product identifier

- **Trade name:** Photographic Fog
- **Product code:** A-PF-1

· Recommended use and restriction on use

- **Recommended use:** Forensics.
- **Restrictions on use:** Contact manufacturer/supplier

· Details of the supplier of the Safety Data Sheet

· **Manufacturer/Supplier:**

CITC
1420 80th St. #D
Everett, WA 98203

· **Manufactured for/Distributor:**

Arrowhead Forensics
11030 Strang Line Road
Lenexa, KS 66215
Customer Care (800) 953-3274

· Emergency telephone number:

ChemTel Inc.
(800)255-3924, +1 (813)248-0585



2 Hazard(s) identification

· Classification of the substance or mixture

Flam. Aerosol 1 H222 Extremely flammable aerosol.
Press. Gas H280 Contains gas under pressure; may explode if heated.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

· Label elements

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms:**



GHS02 GHS04 GHS08

· Signal word: Danger

· **Hazard statements:**

H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.

· **Precautionary statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P251 Pressurized container: Do not pierce or burn, even after use.
P211 Do not spray on an open flame or other ignition source.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
P405 Store locked up.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

(Cont'd. on page 2)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: October 12, 2016

Revision: October 12, 2016

Trade name: Photographic Fog

(Cont'd. of page 1)

P403 Store in a well-ventilated place.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

8042-47-5	White Mineral Oil	Asp. Tox. 1, H304	60-80%
75-28-5	isobutane	Flam. Gas 1, H220 Press. Gas, H280	☒10%
74-98-6	propane	Flam. Gas 1, H220 Press. Gas, H280	☒10%

· **Additional information:**

For the wording of the listed Hazard Statements refer to section 16.

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

4 First-aid measures

· **Description of first aid measures**

· **General information:** Take affected persons out into the fresh air.

· **After inhalation:**

Supply fresh air; consult doctor in case of complaints.

Provide oxygen treatment if affected person has difficulty breathing.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately remove any clothing soiled by the product.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

In cases of frostbite, rinse with plenty of water. Do not remove clothing.

· **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Unlikely route of exposure.

A person vomiting while lying on their back should be turned onto their side.

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· **Most important symptoms and effects, both acute and delayed:**

Breathing difficulty

Coughing

Gastric or intestinal disorders when ingested.

· **Danger:**

Danger of impaired breathing.

(Cont'd. on page 3)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: October 12, 2016

Revision: October 12, 2016

Trade name: Photographic Fog

(Cont'd. of page 2)

May be fatal if swallowed and enters airways.

· **Indication of any immediate medical attention and special treatment needed:**

If swallowed, gastric irrigation with added, activated carbon.

If swallowed or in case of vomiting, danger of entering the lungs.

If necessary oxygen respiration treatment.

Later observation for pneumonia and pulmonary edema.

If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

Foam

Gaseous extinguishing agents

Carbon dioxide

Fire-extinguishing powder

Water fog / haze

· **For safety reasons unsuitable extinguishing agents:**

Water stream.

Water spray

· **Special hazards arising from the substance or mixture**

Extremely flammable aerosol.

Danger of receptacles bursting because of high vapor pressure if heated.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

· **Additional information:**

Eliminate all ignition sources if safe to do so.

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Cool endangered containers with water fog.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures:**

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Protect from heat.

· **Environmental precautions:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Methods and material for containment and cleaning up:**

Allow to evaporate.

Ensure adequate ventilation.

Absorb liquid components with non-combustible liquid-binding material.

(Cont'd. on page 4)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: October 12, 2016

Revision: October 12, 2016

Trade name: Photographic Fog

(Cont'd. of page 3)

Send for recovery or disposal in suitable receptacles.

· **Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Handling**

· **Precautions for safe handling:**

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

Do not spray on flame or other ignition sources. No smoking.

· **Information about protection against explosions and fires:**

Emergency cooling must be available in case of nearby fire.

Flammable gas-air mixtures may be formed in empty containers/receptacles.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 120 °F / 49 °C, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

· **Conditions for safe storage, including any incompatibilities**

· **Storage**

· **Requirements to be met by storerooms and receptacles:**

Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

Provide ventilation for receptacles.

· **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from oxidizing agents.

· **Further information about storage conditions:**

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

· **Specific end use(s):** No relevant information available.

8 Exposure controls/personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-28-5 isobutane

TLV (USA)	Short-term value: (2370) mg/m ³ , (1000) ppm NIC-EX
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EV (Canada)	Long-term value: 800 ppm
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LMPE (Mexico)	Long-term value: 1000 ppm
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74-98-6 propane

PEL (USA)	Long-term value: 1800 mg/m ³ , 1000 ppm
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REL (USA)	Long-term value: 1800 mg/m ³ , 1000 ppm
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(Cont'd. on page 5)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: October 12, 2016

Revision: October 12, 2016

Trade name: Photographic Fog

(Cont'd. of page 4)

TLV (USA)	refer to Appendix F in TLVs & BEIs book; NIC-EX
EL (Canada)	Long-term value: 1000 ppm
EV (Canada)	Long-term value: 1000 ppm
LMPE (Mexico)	Long-term value: 1000 ppm

8042-47-5 White Mineral Oil

PEL (USA)	Long-term value: 5 mg/m ³
REL (USA)	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ oil mist
TLV (USA)	L
EV (Canada)	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ Mist
LMPE (Mexico)	Long-term value: 5 mg/m ³ A4

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

- **Engineering controls:** No relevant information available.

- **Breathing equipment:**

Not required under normal conditions of use.

Use suitable respiratory protective device when high concentrations are present.

NIOSH or EN approved organic vapor respirator equipped with a dust/mist prefilter should be used.

- **Protection of hands:**

Gloves not required under normal conditions of use.

Protection may be required for spills.

- **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:**

Not required under normal conditions of use.

Protection may be required for spills.

- **Limitation and supervision of exposure into the environment**

No relevant information available.

(Cont'd. on page 6)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: October 12, 2016

Revision: October 12, 2016

Trade name: Photographic Fog

(Cont'd. of page 5)

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· Appearance:	
Form:	Aerosol
Color:	Transparent
· Odor:	Characteristic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Melting point/Melting range:	Not applicable, as aerosol.
· Boiling point/Boiling range:	Not applicable, as aerosol.
· Flash point:	Extremely flammable aerosol.
· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	>260 °C (>500 °F)
· Decomposition temperature:	Not determined.
· Danger of explosion:	Not determined.
· Explosion limits	
Lower:	1.6 Vol % (Estimate)
Upper:	11 Vol % (Estimate)
· Oxidizing properties:	Not determined.
· Vapor pressure:	Not determined.
· Density:	
Relative density:	Not determined.
Vapor density:	Not determined.
Evaporation rate:	Not applicable.
· Solubility in / Miscibility with Water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity	
Dynamic:	Not determined.
Kinematic at 40 °C (104 °F):	<20.5 mm ² /sec (Estimated)
· Other information	No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
Danger of receptacles bursting because of high vapor pressure if heated.
- **Possibility of hazardous reactions:**
Reacts with oxidizing agents.

(Cont'd. on page 7)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: October 12, 2016

Revision: October 12, 2016

Trade name: Photographic Fog

(Cont'd. of page 6)

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.

Extremely flammable aerosol.

Toxic fumes may be released if heated above the decomposition point.

- **Conditions to avoid:** Store away from oxidizing agents.
- **Incompatible materials:** No relevant information available.
- **Hazardous decomposition products:**

Under fire conditions only:

Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:** Based on available data, the classification criteria are not met.
- **On the eye:** Based on available data, the classification criteria are not met.
- **Sensitization:** Based on available data, the classification criteria are not met.

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

- **NTP (National Toxicology Program):**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

- **Probable route(s) of exposure:**

Inhalation.

Eye contact.

Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):** May be fatal if swallowed and enters airways.
- **Repeated dose toxicity:** From product as supplied: None.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** May be fatal if swallowed and enters airways.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.

(Cont'd. on page 8)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: October 12, 2016

Revision: October 12, 2016

Trade name: Photographic Fog

(Cont'd. of page 7)

- **Mobility in soil:** No relevant information available.
- **Additional ecological information**
- **General notes:**
Negative ecological effects are, according to the current state of knowledge, not expected.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · UN-Number · DOT, ADR, IMDG, IATA | <p style="text-align: center;">UN1950</p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · ADR, IMDG · IATA | <p style="text-align: center;">Aerosols, flammable
AEROSOLS
AEROSOLS, flammable</p> |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT | |
| <ul style="list-style-type: none"> · Class · Label | <p style="text-align: center;">2.1
2.1</p> |



(Cont'd. on page 9)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: October 12, 2016

Revision: October 12, 2016

Trade name: Photographic Fog

(Cont'd. of page 8)

· **ADR**



· **Class** 2.1 5F
 · **Label** 2.1

· **IMDG, IATA**



· **Class** 2.1
 · **Label** 2.1

· **Packing group** This UN-number is not assigned a packing group.
 Aerosols are not assigned a packing group.

· **Environmental hazards** Not applicable.

· **Special precautions for user** Not applicable.

· **Danger code (Kemler):** 21
 · **EMS Number:** F-D,S-U

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **ADR**
 · **Excepted quantities (EQ)** Code: E0
 Not permitted as Excepted Quantity

· **IMDG**
 · **Excepted quantities (EQ)** Code: E0
 Not permitted as Excepted Quantity

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
 · **United States (USA)**
 · **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

(Cont'd. on page 10)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

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Trade name: Photographic Fog

(Cont'd. of page 9)

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

· **Canadian Domestic Substances List (DSL):**

All ingredients are listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 10/12/2016 / -

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

LDLo: Lowest Lethal Dose Observed

Flam. Gas 1: Flammable gases – Category 1

(Cont'd. on page 11)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: October 12, 2016

Revision: October 12, 2016

Trade name: Photographic Fog

(Cont'd. of page 10)

Flam. Aerosol 1: Aerosols – Category 1
Press. Gas: Gases under pressure – Compressed gas
Asp. Tox. 1: Aspiration hazard – Category 1

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaassen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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