



Security Devices International Inc.

DNA Forensic Marking (S-1070 DNA)

Safety Data Sheet Version C-1

Last Updated: August 31, 2017



WARNING

All explosives are dangerous and must be carefully handled and used following approved safety procedures either by or under the direction of competent, experienced persons in accordance with all applicable federal, state, and local laws, regulations, and ordinances. If, after carefully reading the information included in this Safety Data Sheet, you have questions or doubts as to how to use the device, do not use it before consulting your supervisor, or the manufacturer. If your supervisor has any questions or doubts, they should consult the manufacturer before use. See "SECTION XVI – Other Information" for further information below.

SECTION I – Identification

Product Name: Acrylate Based Polymer Mixture

Product Use: Botanical encrypted taggant in water, acrylate based polymer, isopropanol, ethyl alcohol (denatured) and fluorophore.

Manufacturer: Security Devices International Inc.

Address: 9325 Puckett Road, Perry, Florida 32348 USA

Emergency Telephone Number: (978) 868-5011

SECTION II – Hazard Identification

Routes of Exposure:

Eye Contact: Contact with the product, vapor or mist may cause irritation and redness.

Inhalation: Prolonged or repeated contact with the product, vapor or spray mist may cause irritation to the upper respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

Skin Contact: Prolonged or repeated contact with the product, vapor or mist may cause irritation.

Signs and Symptoms of Overexposure: Headache, dizziness, nausea, and loss of coordination are indication of excessive exposure to vapors or spray mists. Redness and itching or burning sensation may indicate eye or excessive skin exposure.

SECTION III – Composition/Information on Ingredients

	CAS#	Ingredient	% By Wt.
	64-17-5	Ethanol	30
	Proprietary	Acrylate Based Polymer	12
	67-63-0	2-Propanol	12
Payload:	111-77-3	Methyl CARBITOLTM	1.6
	Proprietary	Flourophore	1
	N/A	Botanical Taggant	1 µg/kg

Logo or Trademarks associated with this Product or Product Family:



Total Payload Amount:

7 ml, Liquid



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	CAS Number	Components	% By Weight	INECS/ ELINCS #	EU Classification	
					Symbol	R-Phrase
Powder Charge:	7440-50-8	Copper	40-75	231-159-6	None	None
	7440-66-6	Zinc	20-35	231-175-3	F (as dust of powder)	R15-17
	9004-70-0	Nitrocellulose	2-17	Not listed	E*	R 2
	55-63-0	Nitroglycerin	1-3	200-240-8	E, T+, N	R 3-26/27/28-33-51-53
	84-74-2	Dibutyl phthalate	0.2-3	201-55-74	None	None
	15245-44-0	Normal Lead styphnate	0.1-1	239-290-0	E, T, N	R61-3-20/22-33-50/53-62

*This material is not listed in Annex 1 of Directive 88/379/EEC. SDI has classified the material according to the conventional method based upon information from similar materials.

OSHA REGULATORY STATUS: Explosive

SECTION IV – First Aid Measures

Eye Contact:	Flush eyes with large amounts of water for 15 minutes. Get medical attention.
Ingestion:	Do not induce vomiting. Get medical attention immediately.
Inhalation:	If affected, remove from exposure. Restore breathing. Keep warm and quiet.
Skin Contact:	Wash affected area thoroughly with soap and water.

SECTION V – Fire-fighting Measures

Fire:	Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
Explosion:	Information not available.
Fire Extinguishing Media:	Carbon dioxide, Dry Chemical, Foam.
Special Fire Fighting Measures:	Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible auto- ignition or explosion when exposed to extreme heat.
Primer Smokeless Powder Charge:	4.9 grains / 317.5147 mg

SECTION VI – Accidental Release Measures

- Remove all sources of ignition.
- Ventilate the area.
- Remove with inert absorbent.

SECTION VII – Handling and Storage

DOT Storage Class II



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Precautions to be Taken in Handling and Storage:

Contents are FLAMMABLE. Keep away from heat and open flame. Consult NFPA Code. Use approved Bonding and Grounding procedures. Keep container closed when not in use. Transfer only to "approved" containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

To minimize the possibility of spontaneous combustion: control the accumulation of over-spray; soak wiping rags and waste immediately after use in a water-filled, closed metal container; air dry filters outside, far from any combustible material and separated by bricks or other non-combustible spacers; dispose of all contaminated materials and waste properly. Consult OSHA 29 CFR 1910.107 (b) (5) and NFPA 33, Chapter 8 (8-9) for the proper procedure.

Label Precautions:

Keep in tightly closed container.

SECTION VIII – Exposure Controls and Personal Protection

Airborne Exposure Limits:

Use only with adequate ventilation system. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

Ventilation System:

Local exhaust is preferable. General exhaust acceptable if the exposure to materials in Section II is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

Personal Respirators (NIOSH) Approved:

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator by NIOSH/MSHA for dust which may be generated from this product, underlying pain, or the abrasive.

Skin Protection:

Wear protective gloves which are recommended by glove supplier for protection against materials in Section II.

Eye Protection:

Wear safety goggles with un-perforated side shields.

Other Precautions:

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION IX – Physical and Chemical Properties

Appearance:

Off-white free flowing liquid

Odor:

Alcohol or ether

Product Weight:

7.55 lb/gal 904 g/L

Specific Gravity:

0.98

Evaporation Rate:

Slower than Ether

Solubility in Water:

N/A

Boiling Point:

N/A

Melting Point:

N/A

Flash Point:

N/A

Vapor Density (Air=1):

Heavier than air

Physical Form:

Liquid

Vapor Pressure (mm in Hg):

N/A

Volatile Organic Compounds (VOC Theoretical – As Packaged)

Percent Volatiles by Volume @

42%

21°C (70°F):



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Less water and Federally Exempt Solvents: N/A

Emitted VOC: N/A

SECTION X – Stability and Reactivity

Stability: No information available

Hazardous Decomposition Products: By Fire: Carbon Dioxide, Carbon Monoxide available

Hazardous Polymerization: No information available

Conditions to Avoid: No information available

Incompatibilities: No information available

SECTION XI – Toxicology Information

Chronic Health Hazards: No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

SECTION XII – Ecological Information

Waste from this product may be hazardous as defined under the Resource, Conservation and Recovery Act (RCRA) 40 CFR 261.

SECTION XIII – Disposal Considerations

Waste Disposal Method: Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulation regarding pollution.

SECTION XIV – Transport Information

U.N. Proper Shipping Name: Cartridges for weapons, inert projectile or Cartridges, small arms

U.N. Classification Number: UN0012

U.N. Classification Code: 1.4S

Reference Number: EX2012091360

Product Designation/Part Number: Blunt Impact Projectile (BIP) 40mm (D/N: DWG-1652, Rev. D)

Hazard Class: Not a hazardous material

SECTION XV – Regulatory Information

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

SECTION XVI – Other Information

Last Revision: August 31, 2017

Shelf Life: Five (5) Years

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