



Security Devices International Inc.

Marking Liquid (S-1020 ML)

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: Inert Marking Liquid (S-1020 ML)
 Product Use: Projectile Fill
 Manufacturer: Security Devices International Inc.
 Address: 9325 Puckett Road, Perry, Florida 32348 USA
 Emergency Telephone Number: (978) 868-5011

SECTION II – Hazard Identification

Payload:	Unusual Fire and Explosion Hazards:	None		
	HMIS Rating:	Health: 1	Flammability: 0	Reactivity: 0

Caution! Explosive. Keep away from heat. Do not subject to mechanical shock. Particles from firing may be harmful if inhaled. Do not take internally.

Primer:	HMIS Rating:	Health: 0	Flammability: 0	Explosive: 2
	National Fire Protection Association (NFPA):	Mixture. Not rated.		
	Human Threshold Response Data			
	Odor Threshold:	Unknown		
	Irritation Threshold:	Unknown		
	Immediately Dangerous to Life or Health (IDLH) Value(s):	The IDLH for this product is not known. The IDLH for copper and lead is 100 mg/m3. The IDLH for nitroglycerin is 75 mg/m3. The IDLH for dibutyl phthalate is 4000 mg/m3.		

SECTION III – Composition/Information on Ingredients

	Active Components:	None		
	Inert Ingredients:	A proprietary combination of inert carriers colorant and dispersion agents.		
Payload:	Composition:	TLV	TLV	VAP/PRES
		PPM	mg/M3 LEL	MM HG @20°C
	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

Skin Contact:	Wash with soap and water. Use emollient cream or lotion.
Eye Contact:	Flush eye with plenty of water. See physician.
Inhalation:	Provide fresh air and rest.
Ingestion:	Do not induce vomiting. Call physician.

SECTION V – Fire-fighting Measures

Payload:	Explosion Data:	Non explosive. No upper or lower explosive limits.
	Flash Point:	>400°F
	Extinguishing Media:	N/A
	Unusual Fire and Explosion Hazards:	None
Primer:	Smokeless Powder Charge:	4.9 grains / 317.5147 mg
	OSHA Regulatory Status:	Explosive

SECTION VI – Accidental Release Measures

Respiratory Protection:	Not required if ventilation is maintained.
Ventilation:	Use only with adequate ventilation.
Protective Gloves:	Rubber gloves
Eye Protection:	Safety goggles or face shield.
Skin Protection:	Use rubber apron if convenient for operation.

SECTION VII – Handling and Storage

Precautions To Be Taken in Storage and Handling:	Keep tightly closed. Store in a cool dry place.
Proper Disposal of Containers:	Dispose of in municipal waste in accordance with Federal, State, or Local regulations or offer for recycling if appropriate for area.
Precautions Handling:	See below.
DOT Storage Category:	3 B
Other Precautions:	Do not transfer material to other containers for storage. Keep out of the reach of children.



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SECTION VIII – Exposure Controls and Personal Protection

Overexposure Acute:	Can cause irritation of eyes and skin. Swallowing can cause gastronomic irritation.
Overexposure Chronic:	Breathing concentrated vapors can cause headache or nausea. The toxicological properties of this product have not been fully investigated. Repeated exposure may present additional hazards.

SECTION IX – Physical and Chemical Properties

Boiling Point:	212–400°F
Vapor Pressure (mmHg):	Heavier than air
Color:	Green
% Volatile by Volume:	85.63
Weight:	9.14 lbs./Gallon
Anti-freeze Additive:	
Product name:	MP Biomedicals Propylene Glycol
Chemical Name:	Propylene Glycol
Water Solubility:	Complete
Appearance:	Clear
Boiling Point:	187°C (369°F)
Freezing Point:	-68°C (-90°F)

SECTION X – Stability and Reactivity

Stability:	Stable
Conditions to Avoid:	None
Incompatibility:	None
Hazardous Decomp. Prod.:	Thermal decomposition may yield oxides of carbon.
Polymerization:	Will not occur.
Conditions to Avoid:	None

SECTION XI – Toxicology Information

SECTION XII – Ecological Information

SECTION XIII – Disposal Considerations

Absorb on inert materials or flush with water.



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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

SECTION XVI – Other Information

Last Revision: August 31, 2017
Shelf Life: Five (5) Years

The information contained herein this Safety Data Sheet (SDS) is believed to be accurate and reliable: however, no warranty either expressed or implied is made. Conditions under which this information may be applied are beyond Security Devices International's (SDI) control and therefore SDI can assume no liability for results of its application. This product is designed to be used by persons having sufficient skill to make informed judgments regarding its application. Additionally, if this SDS is more than three years old, you should contact SDI at the phone number listed below to make certain that this sheet is current