Security Devices International Inc.

Training Rounds (S-1060 TR, S-1090 RTR 50, S-1090 RTR 250)

Safety Data Sheet Version C-1
Last Updated: April 18, 2016

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:	40MM Training Round (S-1060 TR, S-1090 RTR 50, S-1090 RTR 250)
Product Use:	Training
Manufacturer:	Security Devices International Inc.
Address:	25 Sawyer Passway, Fitchburg MA 01420
Emergency Telephone Number:	(978) 868-5011

SECTION II – Hazard Identification

Health Hazards (Acute and Chronic):	This product contains no substances in their given form that are considered hazardous to health.
Appearance and Odor:	Pellets, Faint Odor
Potential Health Effects	
Principle Routes of Exposure:	None reasonably foreseeable.
Acute Effects	
Eyes:	May cause slight irritation
Skin:	Substance may cause slight skin irritation. Skin contact with the pellets as received does not present any known health hazard. Hot molten polymer will cause sever thermal burns.
Inhalation:	May cause irritation of respiratory tract. Pellets not respirable. Inhalation of fines from ground pellets can irritate the nose and throat.
Ingestion:	May be harmful if swallowed. Pellets are not a probable route of exposure.
Chronic Effects:	None reasonably foreseeable.

See Section XI for additional Toxicological information.

Signs and Symptoms of Exposure:	*Note*: The following information provided on the hazardous pigment(s) applies to the pigment(s) in the pure dry form. The form of the pigment provided to you is encapsulated in plastic and therefore, the likelihood of exposure is much less, even to the point of negligible. We therefore consider the level of hazard to be negligible.
Thermoplastic Resin:	Respiratory tract may be irritated by nuisance dust caused by handling and some operations and by fumes generated during processing. No other effects have been associated with the resin.
Titanium Dioxide:	Exposure to this product for a short duration is not likely to cause adverse effects directly after exposure. Chronic over exposure to titanium dioxide may cause slight lung fibrosis. When titanium dioxide was fed to rats and mice for their lifetimes in carcinogen bioassay, it was not carcinogenic. However inhalation of titanium dioxide dust at 50 times the nuisance dust level caused fibrosis and a slight increase in lung tumor incidence in laboratory rates.
Aggravated Medical Conditions:	None known for thermoplastic resin.

Potential Environmental Effects: See Section XII for additional Ecological information.

SECTION III – Composition/Information on Ingredients

All ingredients are encapsulated by the polymer which greatly reduces the potential for employee exposure to hazardous chemicals

Component	CAS #	Weight %
Nylon	25038-54-4	5-10

The following information provided on the below pelletized material applies to the pigments / resin in the pure dry form. The form of the material provided to you is encapsulated in plastic and therefore, the likelihood of exposure is much less, even to the point of negligible.

Component	CAS #	Weight %
Zinc Stearate	557-05-01	None
Titanium Dioxide	13463-67-7	8.81100

	CAS #	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

Eyes:	Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
Skin:	Wash off with warm water and soap. Wash skin with soap and water. Remove contaminated clothing and clean before reuse seek medical attention in the unlikely event that irritation occurs.
Inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Ventilation should be provided to control fumes and odors, and any dust conditions. If exposed to fumes and overheating or from combustion, move to fresh air. Consult a physician.
Ingestion:	Clean mouth with water and afterwards drink plenty of water. Do not give by mouth. Consult a physician.
Notes for the Doctor:	Treat symptomatically.
Protection of First-Aiders:	Use personal protective equipment.

SECTION V – Fire-fighting Measures

Suitable Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment, such as water, CO_2, foam or chemical dry powder.

Uniform Fire Code:	No information available.
Unsuitable Extinguishing Media:	No information available.
Hazardous Combustion Products:	CO, CO_2, Hydrogen Cyanide, Cyclopentanone, Aldehydes, Ammonia
Impact Sensitivity:	No information available.
Sensitivity to Static Discharge	No information available.
Hazards from the Substance or Mixture	Thermal decomposition can lead to release of irritating gases and vapors. Burning material may emit toxic fumes. Gases released include carbon monoxide and various hydrocarbons.
Advice for Firefighters	As in any fire, wear self-contained breathing apparatus pressure- demand, MSHA / NIOSH (approved or equivalent) and full protective / turnout gear to fight fires.

Primer:	Smokeless Powder Charge:	5.4 grains / 349.9141 mg
	OSHA Regulatory Status:	Explosive

SECTION VI – Accidental Release Measures

For Non-Emergency Personnel:	Use personal protective equipment.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so.

SECTION VII – Handling and Storage

Precautions for Safe Handling:	Store in a dry, well-ventilated area, using a tightly closed container to avoid contamination. Keep away form high heat.
Other Precautions:	Not to be taken internally. Handle in accordance with good industrial hygiene and safety practices.

SECTION VIII – Exposure Controls and Personal Protection

Exposure Guidelines:	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Engineering Measures:	Ensure adequate ventilation.
Respiratory Protection:	NIOSH approved dust respirator if dust levels exceed the OSHA exposure limits. Provide good ventilation to maintain dust concentrations below the exposure limits.
Protective Gloves:	Gloves of impervious materials are recommended.
Eye Protection:	Safety glasses or goggles with side-shields are recommended for dust protection. Wearing of contact lenses in areas where dust exists is not recommended.
Other Protective Clothing or Equipment:	Impervious clothing covering arms and legs should be worn.
Work / Hygiene Practices:	Do not eat, drink, or smoke in work area. Use normal soap and water cleansing procedures Handle in accordance with good industrial hygiene and safety practices.

SECTION IX – Physical and Chemical Properties

Appearance and Odor:	Colored pellets, Faint odor
Color and Physical State:	Yellow, Solid
Cooling Point:	Decomposes above 500
Vapor Pressure:	No information available
Vapor Density (Air=1):	No information available

Solubility in Water:	Insoluble
*Specific Gravity (H20 = 1):	Not examined
Melting point:	222°F
Evaporation Rate (Butyl Acetate = 1):	No information available
Flash Point:	No information available
pH value:	No information available
Autoignition Temperature:	No information available
Viscosity:	No information available
Molecular Weight:	No information available
Density:	No information available
VOC Content (%):	No information available

SECTION X – Stability and Reactivity

Chemical Stability:	Stable under normal conditions
Hazardous Polymerization:	May not occur
Conditions to Avoid:	To avoid thermal decomposition, do not overheat.
Incompatible Materials:	Strong acids and oxidizing agents
Hazardous Decomposition Products:	CO, CO2, Hydrogen Cyanide, Cyclopentanone, Aldehydes, Ammonia
Possibility of Hazardous Reactions:	None under normal processing

SECTION XI – Toxicology Information

Acute Toxicity

Product Information	No information available
Corrosivity*:*	No information available
Irritation:	No information available
Sensitisation:	No information available
Component Information:	No information available

Chronic Toxicity

Germ cell mutagenicity / Genotoxicity:	No information available
Developmental Effects:	No information available
Teratogenicity:	No information available
Reproductive toxicity:	No information available
Target Organ Effects:	No information available
Product Carcinogenicity:	No information available
Component Information:	No information available
Carcinogenicity:	No information available

SECTION XII – Ecological Information

Product Ecotoxicity:	No information available
Component Information:	No information available

SECTION XIII – Disposal Considerations

Methods and Materials for Containment and Cleaning Up:	Prevent spreading over a wide area (e.g. by containment or oil barriers). Clean up promptly by scoop or vacuum. Normal clean up of material to avoid slipping. Place spilled material into appropriate waste containers for disposal. Care should be taken to avoid causing dust to become airborne.
Waste Disposal Method:	If discarded in its original unused form, this product does not meet the definition of a RCRA hazardous waste under 40 CFR 261. However, it should be managed in compliance with all applicable federal, state and local requirements.
Contaminated Packaging:	Dispose of in accordance with local, state and federal regulations.
US EPA Waste Number:	No information available

SECTION XIV – Transport Information

DOT:	Transport in accordance with State, Federal, and International regulations.
DOT Classification:	1.4 S
TDG:	Not regulated by TDG
MEX:	Not regulated by MEX
Air transport (ICAO-TI):	Not regulated by ICAO
Sea transport (IMDG):	Not regulated by IMDG/IMO
Shipping Information	
Shipping Containers:	Bags, boxes, drums and gaylords.

SECTION XV – Regulatory Information

International Inventories:	All components in this product are on or are exempt from listing on the US TSCA Inventory and the Canadian DSL Inventory.
U.S. Federal Regulations	
SARA 313:	Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). Zinc stearate is listed as a "Toxic Chemical" (Section 313). Depending upon quantities used, annual reporting may be required. Also, zinc stearate may be subject to emergency release notification, CERCLA hazardous substance. This product does not contain any other chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
SARA 311/312 Hazardous Categorization	
Chronic Health Hazard:	No
Acute Health Hazard:	No
Fire Hazard:	No
Sudden Release of Pressure Hazard:	No
Reactive Hazard:	No

Clean Water Act:	There are no chemicals in this product that are subject to the Clean Water Act.
U.S. State Regulations	
MADEP:	SDS forms must be submitted in accordance with Massachusetts General Law (MGL) Chapter 111F.
California Proposition 65:	This product does not contain any Proposition 65 chemicals.
Other International Regulations	
RoHS:	This compound complies with the EU RoHS Directive (2011/65/EU) and does not contain any restricted materials above threshold levels. The RoHS directive restricts the use of Lead, Cadmium, Chrome VI, Mercury, PBBs and all PBDE materials (including Deca-BDE).
EU Regulation (EC) No. 1907/2006 (REACH):	As formulated, this product does not contain any SVHCs
Mexico - Grade:	No information available
Canada:	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.
WHMIS Hazard Class:	Not determined

SECTION XVI – Other Information

Last Revision:	April 18, 2016
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