

22154-XXXX

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Material Safety Data Sheet		L&G Vertriebs GmbH Haeusserserpr 36, 69115 Heidelberg, Germany	
IDENTITY (As Used on Label and List) HARDCORE 15MM 45G, 15MM 25G, 30MM 45G, 50MM 45G (Solid Colors ink) PMA-120/HC, 120S/HC, 130/HC, 150/HC			
Section I			
Manufacturer's Name L&G Vertriebs GmbH		Emergency Telephone Number 6221-36333- 11	
Address Haeusserserpr 36, 69115 Heidelberg, Germany		Telephone Number for Information 6221-36333- 11	
		Date Prepared June 26, 2008	
Section II - Hazardous Ingredients/Identity Information			
Hazardous Components		Other Limits	
(Specific Chemical Identity: Common Name(s))		OSHA PEL	ACGIH TLV
Denatured ethyl alcohol (except metallic colors)		TWA	1000 ppm
Carbon black (Black)		TWA	3.5 mg/m3
Titanium dioxide (except black and metallic colors)		TWA	10 mg/m3
			% (optional)
			2 - 4
			8 - 12
			15 - 28
Section III - Physical/Chemical Characteristics			
Boiling Point	OVER 100°C	Specific Gravity (H2O = 1)	Solid Colors 1.06-1.08
Vapor Pressure (mm Hg.)	N.D.	Melting Point	N.D.
Vapor Density (AIR = 1)	N.D.	Evaporation Rate (Butyl Acetate = 1)	N.D.
Solubility in water: soluble completely			
Appearance and Odor: colored liquid with low viscosity, odorless			
Section IV - Fire and Explosion Hazard Data			
Flash Point (Method Used)	N.A.	Flammable Limits	LEL UEL
Extinguishing Media: N.A.			
Special Fire Fighting Procedures: None			
Unusual Fire and Explosion Hazards: None			
Section V - Reactivity Data			
Stability	Unstable		Conditions to avoid:
	Stable	X	
Incompatibility (materials to Avoid): None			
Hazardous Decomposition or Byproducts: None			
Hazardous Polymerization	May Occur		Conditions to avoid:
	Will not Occur	X	

N.A. - Not Applicable. N.D. - Not Determined.

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Material Safety Data Sheet		L&G Vertriebs GmbH Haeusserserpr 36, 69115 Heidelberg, Germany	
IDENTITY (As Used on Label and List) HARDCORE 15MM 45G, 15MM 25G, 30MM 45G, 50MM 45G (Solid Colors ink) PMA-120/HC, 120S/HC, 130/HC, 150/HC			
Section VI - Health Hazard Data			
Route(s) of Entry:	Inhalation ? No	Skin ? No	Ingestion ? Yes
Health Hazards (Acute and Chronic) None expected. Acute oral toxicity: LD-50 > 2,000 mg/kg (Black, Blue & Gold ink)			
Carcinogenicity:	NTP? None	IARC Monographs?	OSHA Regulated ?
Sign and Symptoms of Exposure: None expected.			
Medical Conditions Generally Aggravated Exposure: None			
Emergency and First Aid Procedures: Eyes: Immediately flush with water enough and see a physician. Skin: Wash with soap water. Ingestion: Do not induce vomiting. See a physician.			
Section VII - Precautions for safe Handling and Use			
Steps to Be Taken in Case Materials Is Released Spilled: Wash with water and remove with cloth.			
Waste Disposal Method: Waste disposal should be in accordance with the existing environmental regulation.			
Precautions to Be Taken in Handling and Storing: Do not store under direct sunlight.			
Other Precautions: Do not take internally.			
Section VIII - Control Measures			
Respiratory Protection (Specify Type): Not required.			
Ventilation	Local Exhaust	Special	
None required.	Mechanical (General)	Other	
Protective Gloves:	None required.	Eye Protection:	None required.
Other Protective Clothing or Equipment: None required.			
Work/Hygienic Practices: Standard procedure.			

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Material Safety Data Sheet		L&G Vertriebs GmbH Haeusserserpr 36, 69115 Heidelberg, Germany	
IDENTITY (As Used on Label and List) HARDCORE 15MM 45G,15MM 25G, 30MM 45G, 50MM 45G (Metallic Colors ink) PMA-120/HC,120S/HC,130/HC, 150/HC			
Section I			
Manufacturer's Name L&G Vertriebs GmbH		Emergency Telephone Number 6221-36333- 11	
Address Haeusserserpr 36, 69115 Heidelberg, Germany		Telephone Number for Information 6221-36333- 11	
		Date Prepared June 26, 2008	
Section II - Hazardous Ingredients/Identity Information			
Hazardous Components (Specific Chemical Identity: Common Name(s))		OSHA PEL	ACGIH TLV
		Other Limits Recommended	% (optional)
Ethyl alcohol		TWA	1000 ppm
Ethylene glycol		TWA	50 ppm (vapor)
			8.5-17.1
			6.5-8.5
Section III - Physical/Chemical Characteristics			
Boiling Point	N.D.	Specific Gravity (H2O = 1)	Metallic Colors 0.96-0.99
Vapor Pressure (mm Hg.)	N.D.	Melting Point	N.A.
Vapor Density (AIR = 1)	N.D.	Evaporation Rate (Butyl Acetate = 1)	N.D.
Solubility in water: soluble completely.			
Appearance and Odor: colored liquid with alcoholic odor.			
Section IV - Fire and Explosion Hazard Data			
Flash Point (Method Used) N.A.	Flammable Limits N.D.	LEL	UEL
Extinguishing Media: CO2, dry chemical and form			
Special Fire Fighting Procedures: None			
Unusual Fire and Explosion Hazards: None			
Section V - Reactivity Data			
Stability	Unstable		Conditions to avoid:
	Stable	X	
Incompatibility (materials to Avoid): Oxidizing materials			
Hazardous Decomposition or Byproducts: CO2, CO, Oxides of nitrogen and potentially toxic fumes.			
Hazardous Polymerization	May Occur		Conditions to avoid:
	Will not Occur	X	
N.A. = Not Applicable. N.D. = Not Determined.			

2

Material Safety Data Sheet		L&G Vertriebs GmbH Haeusserserpr 36, 69115 Heidelberg, Germany	
IDENTITY (As Used on Label and List) - HARDCORE 15MM 45G, 15MM 25G, 30MM 45G, 50MM 45G (Metallic Colors ink)			
Section VI - Health Hazard Data			
Route(s) of Entry:	Inhalation ?	Skin ?	Ingestion ?
	No	Yes	Yes
Health Hazards (Acute and Chronic)			
None expected.			
Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated ?
None			
Sign and Symptoms of Exposure: None expected.			
Medical Conditions Generally Aggravated Exposure: None			
Emergency and First Aid Procedures:			
Eyes: Immediately flush with water enough, see a physician.			
Skin: Wash with soap water. Ingestion: Do not induce vomiting. See a physician.			
Section VII - Precautions for safe Handling and Use			
Steps to Be Taken in Case Materials Is Released Spilled:			
Wash with water and remove with cloth.			
Waste Disposal Method:			
Waste disposal should be in accordance with the existing environmental regulation.			
Precautions to Be Taken in Handling and Storing:			
Keep away from heat, fire or other source of ignition.			
Other Precautions:			
None			
Section VIII - Control Measures			
Respiratory Protection (Specify Type): None required.			
Ventilation	Local Exhaust	Special	
None required.	Mechanical (General)	Other	
Protective Gloves:	None required.	Eye Protection:	None required.
Other Protective Clothing or Equipment: None required.			
Work/Hygienic Practices: Standard procedure.			