SAFETY DATA SHEET

Date Prepared: October 26, 2015 Version 2

SECTION 1 – IDENTIFICATION	
Product Name:	BIC Magic Markers Dry Erase
Synonyms:	WPS-BIC-012
Product Use:	Marking instrument
Manufacturer/ Vendor Information:	Manufactured for/Distributed by: BIC Corporation One BIC Way, Suite 1 Shelton, CT 06484 USA (203) 783-2000 Emergency Telephone Number: (203) 783-2412 Supplier Information: BIC Inc. 155 Oakdale Road Downsview, Ontario M3N 1W2 CANADA (416) 742-9173 x288 (Business hours)
SDS Contact:	Product Safety
Telephone number:	(203) 783-2412

SECTION 2 – HAZARD(S) IDENTIFICATION	
This product is a consumer product and is not subject to the requirements of OSHA HCS/HazCom 2012 nor Health Canada Hazardous Products Regulations (WHMIS 2015). Warnings in this Section are for the bulk inks and applicable only in workplace environments and not for the product itself under normal use and conditions. Nonetheless, this SDS is provided for the information of product users.	
Classification in accordance with 29 CFR § 1910.1200 and WHMIS, 2015:	Flammable Liquid – Category 2 Serious Eye Damage / Eye Irritation – Category 2A Specific Target Organ Toxicity – Single Exposure (STOT-SE) – Category 3 (narcotic effects) Aspiration Hazard – Category 1
Signal Word:	Danger
Hazard Statements:	Highly flammable liquid and vapor. Causes serious eye irritation. May be fatal if swallowed and enters airways. May cause drowsiness of dizziness.
Symbols:	

Precautionary Statements:	Prevention: Avoid breathing vapors. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Wash skin thoroughly after handling. Wear protective gloves/eye protection/face protection. Response: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Storage: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Disposal: Dispose of contents/container in accordance with local / regional / national / international regulations. 17% of the mixture consists of ingredients of unknown acute oral, dermal, and inhalation toxicity.
Any Hazards Not Otherwise Classified – Physical Hazards:	None
Any Hazards Not Otherwise Classified – Health Hazards:	None
For more information refer to Section 11 of this SDS	

SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS

Preparation:

CAS No.	Chemical Name	% by Weight
64-17-5	Ethanol	60-100
67-63-0	Isopropyl alcohol	15-40
63148-65-2	Polyvinyl butyral	1-5

SECTION 4 – FIRST-AID MEASURES	
Eyes:	Flush contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until chemical is removed, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, obtain medical advice.
Skin:	If irritation does occur, flush with lukewarm gently flowing water until chemical is removed. Remove contaminated clothing, shoes, and leather goods (*e.g*., watchbands) as the product is highly flammable. If irritation occurs, obtain medical advice.
Inhalation:	If inhaled, remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell. If breathing has stopped, trained personnel should begin artificial respiration (AR) or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Immediately transport victim to an emergency care facility.
Ingestion:	If swallowed, immediately call a doctor. DO NOT INDUCE VOMITING. Aspiration hazard if swallowed. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Transport victim to an emergency care facility if necessary.
Most Important Symptoms and Effects, Both Acute and Delayed	
Symptoms/Injuries after Inhalation:	Deliberately concentrating and inhaling this product can lead to Central Nervous System (CNS) effects, unconsciousness and/or death. Product may be irritating if inhaled accidentally.
Symptoms/Injuries after Skin Contact:	Short-term exposure is expected to cause only slight irritation, if any.
Symptoms/Injuries after Eye Contact:	Serious eye irritation may occur if product comes in contact with eyes.
Symptoms/Injuries after Ingestion:	Ingestion of this product may cause CNS depression, symptoms of which may include; weakness, dizziness, slurred speech, drowsiness, unconsciousness and in cases of severe overexposure; coma and death. Ingestion of this product may lead to aspiration of the liquid, especially if vomiting occurs. This may result in chemical pneumonitis (inflammation of the lungs) and/or pulmonary edema (an accumulation of fluid in the lungs).
Indication of Any Immediate Medical Attention and Special Treatment Needed	
Treat symptomatically.	

SECTION 5 – FIRE-FIGHTING MEASURES	
Extinguishing Media:	Suitable: CO_2, Foam, Dry Chemical Unsuitable: Water stream or jet
Conditions of Flammability:	HIGHLY FLAMMABLE (Liquid ink only). Can release vapors that form flammable mixtures at or above the flash point.
Hazardous Combustion Products:	Carbon oxides, irritating gases and vapors may be formed on combustion.
Special Protective Equipment and Procedures for Fire-fighters:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6 – ACCIDENTAL RELEASE MEASURES	
Personal Precautions, Protective Equipment and Emergency Procedures:	Highly flammable (Liquid ink only). Ventilate area.
Methods and Materials for Containment and Cleaning Up:	Avoid contaminating sewers, streams, rivers and other watercourses with spilled material. Absorb with inert absorbent material (do not use combustible materials like cloth or paper) and dispose of properly.

SECTION 7 – HANDLING AND STORAGE	
Handling	
Precautions for Safe Handling:	Highly flammable (Liquid ink only). Avoid contact with eyes and skin. Avoid breathing vapors. Wash thoroughly after handling this product if in contact with skin. Avoid contact with heat, and sources of ignition. Keep container tightly closed. Wash skin thoroughly after handling.
Storage	
Conditions for Safe Storage, including any incompatibilities:	Store in cool, dry, well-ventilated area. Store away from incompatible and reactive materials (See Section 10). Keep container tightly closed. Store away from heat and sources of ignition.

SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION		
Control parameters		
Chemical Name	**CAS Number**	**Exposure Limits**
Ethanol	64-17-5	ACGIH: (STEL) 1000 ppm OSHA: (PEL-TWA) 1000 ppm; 1900 mg/m^3 NIOSH: (IDLH) 3300 ppm 10% LEL NIOSH: (REL-TWA) 1000 ppm; 1900 mg/m^3
Isopropyl alcohol	67-63-0	ACGIH: (STEL) 400 ppm ACGIH: (TWA) 200 ppm OSHA: (PEL-TWA) 400 ppm; 980 mg/m^3 NIOSH: (IDLH) 2000 ppm 10% LEL NIOISH: (REL-TWA) 400 ppm; 980 mg/m^3 NIOSH: (REL-STEL) 500 ppm; 1225 mg/m^3
Polyvinyl butyral	63148-65-2	ACGIH: Not available OSHA: Not available NIOSH: Not available
The selection of personal protective equipment varies, depending upon the conditions of use. Use equipment appropriate to your particular use pattern.		
Engineering Controls:	For normal application, special ventilation is not necessary.	
Eye Protection:	Not required under normal use conditions.	
Hand Protection:	None necessary under normal use conditions.	
Skin and Body Protection:	None necessary under normal use conditions.	
Respiratory Protection:	None necessary under normal use conditions.	

ACGIH = American Conference of Governmental Industrial Hygienists
IDLH = Immediately Dangerous to Life or Health concentrations
LEL = Lower Explosive Limit
NIOSH = National Institute for Occupational Safety and Health
OSHA = Occupational Safety & Health Administration
PEL = Permissible Exposure Limit
REL = Recommended Exposure Limit
TWA = Time-Weighted Average
STEL = Short-Term Exposure Limit

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES	
Appearance & Physical State:	Liquid Ink reservoir contained in a solid container
Odor:	Alcohol
Odor Threshold:	Not Available
pH:	Not Available
Melting Point/Freezing Point:	Not Available

Initial Boiling Point and Boiling Range:	78°C (172.4°F) (Liquid ink only)
Flash point:	13°C (55.4°F) [Closed cup] (Liquid ink only)
Evaporation Rate:	Not Available
Flammability:	Not Available
Flammability Limits in Air Lower (LFL): Upper (UFL):	 Not Available Not Available
Vapor Pressure:	Not Available
Vapor Density:	Not Available
Density/Specific Gravity:	0.82-0.88 @ 20°C (68°F) (Liquid ink only)
Solubility in Water:	Miscible with water (Liquid ink only)
n-Octanol/ Water Partition Coefficient:	Not Available
Auto-ignition Temperature:	Not Available
Decomposition Temperature:	Not Available
Viscosity:	6.0-9.0 mPa*s/25°C (77°F) (Liquid ink only)

SECTION 10 – STABILITY AND REACTIVITY

Reactivity:	This product is stable under the normal conditions of use.
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	Not expected to undergo hazardous polymerization.
Conditions to Avoid:	Avoid heat sources, sparks or flames and static discharge.
Incompatible Materials:	Avoid strong oxidizing or reducing agents, strong acids and strong bases.
Hazardous Decomposition Products:	Not expected to undergo decomposition.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Entry: Skin contact, Inhalation, Eye contact, Skin Absorption, Ingestion

Acute Toxicity

Product data:

Route & Species	Value
Oral, ATE	>5 g/kg
Inhalation, ATE	>45 mg/L
Dermal, ATE	>5 g/kg

ATE = acute toxicity estimate

Ingredient data:

Chemical	CAS#	Route & Species	Value
Ethanol	64-17-5	Oral, rat, LD_{50}	7,060 mg/kg
		Inhalation, rat, LC_{50}	60.9 mg/L (4 hr)
		Dermal, rabbit, LD_{50}	15,800 mg/kg
Isopropyl alcohol	67-63-0	Oral, rat, LD_{50}	4,396 mg/mg
		Inhalation, rat, LC_{50}	41.7 mg/L (4 hr)
		Dermal, rabbit, LD_{50}	12,800 mg/kg
Polyvinyl butyral	63148-65-2	Not available	Not available

Eye Irritation:	The liquid ink causes serious eye irritation.
Skin Irritation:	The liquid ink may cause skin irritation.
Ingestion Effects:	Ingestion of this product may cause CNS depression, symptoms of which may include; weakness, dizziness, slurred speech, drowsiness, unconsciousness and in cases of severe overexposure; coma and death. Ingestion of this product may lead to aspiration of the liquid, especially if vomiting occurs. This may result in chemical pneumonitis (inflammation of the lungs) and/or pulmonary edema (an accumulation of fluid in the lungs).
Inhalation Effects:	Deliberately concentrating and inhaling this product can lead to CNS effects, unconsciousness and/or death.
Skin Sensitization:	Contact with this product is not expected to cause skin sensitization, based upon the available data and the known hazards of the components.
Respiratory Tract Sensitization:	Contact with this product is not expected to cause respiratory tract sensitization, based upon the available data and the known hazards of the components.
Chronic Toxicity	
Carcinogenicity:	Not classified. Ethanol (64-17-5) ACGIH: A3 IARC: Group 1 (Ethanol in alcoholic beverages only) NTP: Known (Alcoholic beverage consumption only) OSHA: Not listed Isopropyl alcohol (67-63-0) ACGIH: A4 IARC: Group 3 NTP: Not listed OSHA: Not listed Polyvinyl butyral (63148-65-2) ACGIH: Not listed IARC: Not listed NTP: Not listed OSHA: Not listed ACGIH (American Conference of Governmental Industrial Hygienists) A3: Confirmed animal carcinogen with unknown relevance to humans IARC (International Agency for Research on Cancer) Group 1: Carcinogenic to humans Group 3: Not classifiable as to its carcinogenicity to humans NTP (National Toxicology Program) Known: Known carcinogen
Mutagenicity:	This product is not known to contain any components at >= 0.1% that have been shown to cause mutagenicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a mutagen.
Reproductive Toxicity:	This product is not known to contain any components at >= 0.1% that have been shown to cause reproductive toxicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a reproductive toxin.
Teratogenicity/Embryotoxicity:	This product is not known to contain any components at >= 0.1% that have been shown to cause teratogenicity and/or embryotoxicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a teratogen/embryotoxin.
Other Chronic Effects:	Repeated and chronic product abuse such as deliberately concentrating and inhaling this product can result in adverse effects to the CNS such as drowsiness, dizziness and potentially serious long-term health effects.

SECTION 12 – ECOLOGICAL INFORMATION	
Ecotoxicity:	<u>Ethanol (64-17-5)</u> Algae: Not Available Daphnia: LC_{50} 48 hr = 9,268-14,221 mg/L (*Daphnia magna*) EC_{50} 24 hr = 10,800 mg/L (*Daphnia magna*) EC_{50} 48 hr = 2 mg/L Static (*Daphnia magna*) Fish: LC_{50} 96 hr = 12.0-16.0 mg/L static (*Oncorhynchus mykiss*) LC_{50} 96 hr >100 mg/L static (*Pimephales promelas*) LC_{50} 96 hr = 13,400 – 15,100 mg/L flow-through (*Pimephales promelas*) Microorganism: EC_{50} = 34,634 mg/L 30 min EC_{50} = 35,470 mg/L 5 min <u>Isopropyl alcohol (67-63-0)</u> Algae: EC_{50} 96 hr > 1,000 mg/L (*Desmodesmus subspicatus*) EC_{50} 72 hr > 1,000 mg/L (*Desmodesmus subspicatus*) Daphnia: EC_{50} 48 hr = 13,299 mg/L (*Daphnia magna*) Fish: LD_{50} 96 hr = 11,130 mg/L static (*Pimephales promelas*) LC_{50} 96 hr = 9,640 mg/L flow-through (*Pimephales promelas*) LC_{50} 96 hr > 1,400 mg/L (*Lepomis macrochirus*) Microorganism: Not Available <u>Polyvinyl butyral (63148-65-2)</u> Algae: Not Available Daphnia: Not Available Fish: Not Available Microorganism: Not Available
Persistence/ Degradability:	Not Available
Bioaccumulation:	<u>Ethanol (64-17-5)</u> Log Pow = -0.32 <u>Isopropyl alcohol (67-63-0)</u> Log Pow = 0.05 <u>Polyvinyl butyral (63148-65-2)</u> Not Available
Mobility in Soil:	Not Available
Other Adverse Effects:	Not Available

SECTION 13 – DISPOSAL CONSIDERATIONS	
Waste Disposal Method:	In accordance with local, provincial/territorial or federal guidelines and regulations.

SECTION 14 – TRANSPORT INFORMATION

	Shipping name	UN Number	Hazard Class	Packing Group
DOT (US)	For domestic transport by road, rail and cargo: Proper Shipping Name: **Printing Ink** Product packaged in containers less than 5 liters can be shipped as **Limited quantity** or **Consumer Commodity**	UN1210	3	II
TDGR	For domestic transport by road, rail and cargo: Proper Shipping Name: **Printing Ink** Product packaged in containers less than 5 liters can be shipped as **Limited quantity** or **Consumer Commodity**	UN1210	3	II
IMDG/IMO	Proper shipping name: **Printing Ink** EmS No. F-E, S-D Note: Will ship as limited quantity	UN1210	3	II
IATA	Proper shipping name: **Consumer Commodity** Note: Will ship as limited quantity	ID8000	9	--

DOT = Department of Transport
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
IMO = International Maritime Organization
TDGR = Transport of Dangerous Goods Regulations (Canada)

SECTION 15 – REGULATORY INFORMATION

OSHA Classification: OSHA Hazard Communication Standard (29 CFR §1910.1200)
This product has been classified in accordance with the hazard criteria of the OSHA's HCS/HazCom 2012.

Health Canada Classification: Hazardous Products Regulations (WHMIS 2015)
This product has been classified in accordance with the hazard criteria of the Health Canada's Hazardous Products Regulations (WHMIS 2015).

Hazard Ratings

	NPCA/HMIS	NFPA 704
Health:	[-]2	1
Flammability:	3	3
Reactivity:	0	0

NPCA/HMIS – National Paint and Coatings Association/ Hazardous Materials Identification System
NFPA – National Fire Protection Association

US Federal Regulations
All the ingredients in the product are listed on the US Toxic Substances Control Act (TSCA) inventory. Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any 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 Hazard Categories

Acute Health Hazard: No
Chronic Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the SARA (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65
This product does not contain any Proposition 65 chemicals.

US State Right-to-know Regulations
Ethanol: New Jersey, Massachusetts, Pennsylvania
Isopropyl alcohol: New Jersey, Massachusetts, Pennsylvania, Rhode Island
Carbon black: New Jersey, Massachusetts, Pennsylvania, Illinois, Rhode Island

Canada - Inventory
All the ingredients in the product are listed on the Canadian Domestic Substances List (DSL) inventory.

Canadian National Pollutant Release Inventory (NPRI)
Isopropyl alcohol (67-63-0) – 15-40%

This product is not a toxic or hazardous substance as defined by 16 CFR 1500.3 of the Federal Hazardous Substances Act (FHSA) and as such does not require acute or chronic hazard labelling. The ink in this writing instrument has been approved by board certified toxicologists under the WIMA (Writing Instrument Manufacturer's Association) certification program and/or the ACMI (Art & Creative Materials Institute) certification programs. Reviews were conducted using guidelines set forth by the CPSC (Consumer Product Safety Commission). Inks are certified as compliant under ASTM D-4236.

SECTION 16 – OTHER INFORMATION

Latest Revision Date: October 26, 2015
Supersedes Date: October 23, 2013

Disclaimer: The information given is based on data currently available to us and is believed to be correct. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. No responsibility is assumed for injury or damage from the use of the products described herein.