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DATE OF LAST CHANGE: 08/19/02

DATE PRINTED..... 08/21/02

MANUFACTURER'S NAME:

NAZDAR CHICAGO 1087 N. NORTH BRANCH ST.

CHICAGO

IL 60622 4292 USA

EMERGENCY TELEPHONE #: (800)424-9300

(U.S. and Canada)

EMERGENCY TELEPHONE #: (703)527-3887

(Outside U.S. and Canada, collect calls are accepted) INFORMATION TELEPHONE #: (800)736-7636

SECTION 1 -- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE.: 2000

TRADE NAME...: WATERMASK

PRODUCT CLASS: ADDITIVE

INK SERIES...:

- HMIS CODES -

HEALTH FLAMMABILITY - 1

REACTIVITY - 0 PPE - X

TON ON	INGREDIENTS
J	LON ON

CHEMICAL NAME; COMMON NAME; CAS NUMBER	PERCENT BY WEIGHT	OCCUPATIONAL EACGIH TLV	XPOSURE LIMITSOSHA PEL	VAPOR PRESSURE IN mmHg	NOTES
WATER: CAS #: 7732-18-5	30-35	NOT ESTABLISHED	NOT ESTABLISHED	24 @ 25C	
RESIN MIXTURES; CAS #: NOT AVAILABLE	30-35	NOT ESTABLISHED	NOT ESTABLISHED	<1 @ 20C	
PIGMENTS; MIXTURE; CAS #: NOT AVAILABLE	25-30	10 mg/m3 Total dust	15 mg/m3 Total dust	 N/A 	(1)
TITANIUM DIOXIDE; CAS #: 13463-67-7	5-10	10 mg/m3	10 mg/m3	N/A	
CRYSTALLINE SILICA; CRISTOBALITE; CAS #: 14464-46-1	< .50	.050 mg/m3 Respirable dust	.050 mg/m3 Respirable dust	N/A	

1) See Section 8 Exposure Controls, Personal Protection - Exposure Guidelines for more information on exposure limits.

The recommended permissible exposure limits (PEL) indicated above reflect the levels adopted by OSHA in 1989. Although, some of the 1989 levels have since been vacated the Nazdar Company recommends that the lower exposure levels be observed as reasonable worker protection.

SECTION 3 -- HAZARDS IDENTIFICATION

GENERAL HEALTH EFFECTS
THE FOLLOWING INFORMATION HAS BEEN DEVELOPED BASED UPON USING THE PRODUCT AS INTENDED BY THE MANUFACTURER. The potential
The product in combination with of health effects of this product are based on the hazards of its components. The use of this product in combination with other products may produce synergistic (additive) health effects. Cautionary labeling and material safety data sheets of all materials used with this product should be reviewed before use.

EYES

Eye contact with liquid, vapors or mists may cause irritation, including burning, tearing, redness or swelling.

SKIN

Skin contact may cause irritation. Symptoms may include dryness, chapping and redness.

INHALATION

Inhalation may cause respiratory tract irritation.

Ingestion may cause gastrointestinal tract irritation.

CHRONIC EFFECTS/TARGET ORGANS

Crystalline silica is classified as carcinogenic to humans by IARC (Group 1). Excessive exposure to crystalline silica is also a known cause of silicosis, a noncancerous lung disease. Overexposure should not occur during normal use. Risk of cancer depends on duration and level of exposure to dust generated from sanding surfaces or spray mists.

ANIMAL STUDIES

PRODUCT CODE: 2000	NAZDAR CHICAGO	PAGE: 2 OF 5
No Data Available		
Repeated and projonded overexposure and	sting health disorders should consult their physician before using /or individual sensitivity may increase the potential for and degre fication" for effects of certain hazardous ingredients.	this product. ee of adverse health
ROUTES OF EXPOSURE Primary exposure routes: Inhalation-Derm	mal (Contact/Absorption)-Ingestion	
SECTION 4 F	FIRST AID MEASURES	•

YES After initial flushing, remove any conta eyes examined and tested by medical pers	act lenses and continue flushing for at least 15 minutes. If irrit	tation persists have
SKIN		
minimize both the area and time of skin Skin should be monitored for reddening of	in with a mild soap and plenty of water for at least 15 minutes, wh water is initially suggested to prevent the pores of the skin from contact. Lukewarm water may then be used to ensure all contaminar or chemical burns. Mild soap is suggested to help prevent abrading ng. Get medical attention if irritation persists or significant co nd shoes before reuse.	opening. This will nts are removed.
NHALATION Remove to fresh air. If not breathing, medical attention if breathing difficult	give artificial respiration or give oxygen by trained personnel. ty is experienced.	Seek immediate
NGESTION If swallowed, do NOT induce vomiting. (an unconscious person.	Call a physician or poison control center immediately. Never give	anything by mouth to
OTHER COMMENTS No Data Available		
SECTION 5 F	FIRE FIGHTING MEASURES	
LASH POINT Greater than 200 Degrees Fahrenheit		
SHA FLAMMABILITY CLASSIFICATION (NFPA) Class IIIB Combustible Liquid		
EL - LOWER EXPLOSIVE LIMIT / UEL - UPPER EX No Data Available	XPLOSIVE LIMIT	
XTINGUISHING MEDIA Foam-CO2-Dry Chemical-Water Spray		
	, sparks, and open flame. Keep containers tightly closed. Vapors	may be heavier than
Isolate from heat, electrical equipment,	ion then flash back. Closed containers may explode when exposed to	extreme heat.
Isolate from heat, electrical equipment, air and can travel to a source of ignition IRE FIGHTING EQUIPMENT	ion then flash back. Closed containers may explode when exposed to f-contained breathing apparatus (SCBA) is recommended to protect fi	
air and can travel to a source of igniti TRE FIGHTING EQUIPMENT Full protective equipment including self PECIAL FIRE FIGHTING PROCEDURES	ion then flash back. Closed containers may explode when exposed to	irefighters. dangerous.

Remove all sources of ignition (flames, hot surfaces and electrical, static or frictional sparks). Avoid contact or breathing vapors. Ventilate area. Contain release and remove with inert absorbent. Use non-sparking tools to place material in appropriate container for disposal. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. The National Response Center (800-424-8802) and local authorities should be contacted for any reportable spill/release.

SECTION 7 -- HANDLING AND STORAGE

HANDLING AND STORAGE METHODS

Use in a well ventilated area. Follow all MSDS/label precautions even after container is emptied; container may retain

product residues. Store in closed containers in cool, dry, well ventilated area away from sources of ignition. Keep containers closed when not in use. Smoke in designated areas only. Avoid prolonged or repeated overexposure to this product. Keep out of reach of children. Follow label directions carefully. Do not take internally. Harmful or fatal if swallowed. Avoid prolonged exposure to excessive cold. Protect from freezing.

SECTION 8 -- EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION

If concentrations of hazardous ingredients exceed exposure limits listed in Section 2 an appropriate NIOSH (National Institute for Occupational Safety and Health) approved respirator with an organic vapor cartridge should be used. If material is handled under mist, spray or dust forming conditions, a P100 (99.97% efficiency) filter should be used in addition to the organic vapor cartridge. Protection provided by air-purifying respirators is limited. If no exposure limits are listed in Section 2, follow general safety guidelines in 29 CFR 1910.134 Respiratory Protection or other applicable respiratory standard.

SKIN PROTECTION

Use neoprene, nitrile or other gloves resistant to chemicals listed in Section 2. Contact a reputable safety supply company for appropriate gloves. Solvent resistant aprons are recommended. Prevent prolonged skin contact with contaminated clothing.

EYE PROTECTION

Use ANSI (American National Standards Institute) approved safety glasses, faceshield or splash proof goggles to prevent eye contact. Contact a reputable safety supply company for appropriate eye protection. The availability of an eye wash is highly recommended.

EXPOSURE GUIDELINES

See Section 2 "Composition, Information on Ingredients" for occupational exposure limits. Excessive concentrations of nuisance dusts or particulates not otherwise classified (PNOC) or regulated (PNOR) may reduce visibility and cause unpleasant deposits in the eyes, ears, and nasal passages. The TLV and PEL has been established for all non-toxic "nuisance dusts" that are not otherwise classified and refers to both organic and inorganic dusts. Exposure or generation of these dusts is not anticipated during normal printing operations. The use of dry pigments and powders, grinding or sanding of printed products may generate quantities of these particulates. Refer to Section 2 Composition, Information on Ingredients for exposure limits.

HYGIENIC PRACTICES

Wash with soap and water before eating, smoking or using toilet facilities. Separately wash or discard clothing and footwear before reuse. NEVER try to remove product from the skin by using solvent or thinner. Such action is likely to increase the possibility of undesirable effects. Remove contaminated clothing to prevent prolonged skin contact.

ENGINEERING CONTROLS

Use applicable engineering controls, work practices and personal protective equipment to ensure all concentrations are kept below the exposure limits listed in Section 2. Adequate controls should be implemented to ensure employee safety from fine mists which may be produced under some printing conditions.

OTHER PROTECTION

No Data Available

SECTION 9 -- PHYSICAL AND CHEMICAL PROPERTIES

**

APPEARANCE:

Viscous liquid

ODOR:

Characteristic

PHYSICAL STATE: Liquid

nН

7-9

VAPOR PRESSURE

See Section 2 for individual ingredients.

VAPOR DENSITY

Heavier than air

BOILING POINT

Greater than 300 degrees Fahrenheit

FREEZING POINT

32 degrees Fahrenheit

PRODUCT CODE:		NAZDAR CHICAGO	PAGE:	4 OF	F 5
SOLUBILITY IN Complete -					• • • •
EVAPORATION RA Slower tha					
VISCOSITY Greater th	nan water				
PERCENT VOLATI	ILE BY VOLUME:	44.40 %			
WEIGHT PER GAL	LON: 11.68 1 b	os/gal			
PHOTOCHEMICALL No	Y REACTIVE				
Percent VC	OC = Negligibl	е			
		SECTION 10 STABILITY AND REACTIVITY			
CHEMICAL STABI Stable	ILITY				
CONDITIONS TO Avoid exce		gnition sources, sparks and open flame.			
INCOMPATIBILIT Strong aci		MATERIALS dizing/reducing agents and reactive chemicals.			
HAZARDOUS DECC May produc		DUCTS fumes when heated to decomposition e.g. carbon monoxide, carbon dioxide and other noxiou	ıs gases.		
HAZARDOUS POLY		normal printing and storage conditions.			
		SECTION 11 TOXICOLOGICAL INFORMATION			
EXPERIMENTAL 1					
Refer to S	Section 3 Haza	ards Identification for additional toxicological data.			
		SECTION 12 ECOLOGICAL INFORMATION			
ECOTOXICITY Because the not be dis	nis product ma sposed of into	ay be a mixture of chemicals, some of which may be ecologically toxic, it is strongly sug o the environment, i.e. soil, water courses, lakes, landfills, sewers, etc.	gested th	at it	t
ENVIRONMENTAL No Data Av					
		SECTION 13 DISPOSAL CONSIDERATIONS			
Resource (codes are	uct, as suppli Conservation a required. It	ied, is considered non-hazardous for disposal purposes by the U.S. Environmental Protect and Recovery Act (RCRA). If combined with other products, the user should determine if he is the responsibility of the user to determine if local, county, state, or provincial resal of this product and/or the container.	nazardous regulation	waste is may	У
		SECTION 14 TRANSPORT INFORMATION			
classified Internation of Dangero	ated. The pro d as a hazardo onal Civil Avi	oduct(s) described by this Material Safety Data Sheet do not meet the definition of nor a pus material/dangerous good as defined by the United States Department of Transportation lation Organization (ICAO), the International Maritime Organization (IMO) or the Canadian (TDG). Questions concerning transportation requirements should be directed to Nazdar's	are they (DOT), th Transpor Regulator	ne tatio	on
		SECTION 13 ** REGULATORY INFORMATION			

NAZDAR CHICAGO

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SARA TITLE III 313 INFORMATION

See Section 2 "Composition, Information on Ingredients" for applicable chemicals.

TOXIC SUBSTANCES CONTROL ACT STATUS

All ingredients in Section 2 are listed on the U.S. Environmental Protection Agency's Toxic Substances Control Act (TSCA) Inventory and the Canadian Domestic Substance List.

OTHER REGULATORY INFORMATION

OCCUPATIONAL SAFETY and HEALTH ADMINISTRATION (OSHA) - MSDS is compliant with Occupational Safety and Health Administration Hazard Communication Standard - 29 CFR 1910.1200. AMERICAN NATIONAL STANDARDS INSTITUTE - This MSDS follows the ANSI Z400.1-1998 format. WORKPLACE HAZARDOUS MATERIAL INFORMATION SYSTEM (WHMIS) - This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS CLASSIFICATION (CANADA):

No Data Available

SECTION 16 -- OTHER INFORMATION

DISCLOSURE

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind express or implied is made with respect to the information contained herein. The data in this MSDS relates only to the specific material designated herein and does not apply to use in combination with any other material or process.

DEFINITIONS

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CEILING: (TLV-Ceiling and PEL Ceiling Limit) The ceiling exposure limit or concentration not to be exceeded for even brief times

DOT: Department of Transportation

HMIS: The Hazardous Materials Identification System (HMIS) developed by the National Paint and Coatings Association (NPCA) to provide information on the acute health hazards, reactivity and flammability of products encountered in the workplace at room temperatures.

HMIS codes assigned for this product are only suggested ratings based on anticipated normal screen printing applications. The employer has the ultimate responsibility for assigning these ratings and should fully evaluate the MSDS, work practices and environmental conditions prior to assigning the appropriate ratings.

HMIS rating involves data interpretations that may vary from company to company.

HMIS Personal Protection Index of "X-Ask your supervisor" is given on this MSDS due to varying work conditions which may dictate different levels of protection. Please review this MSDS before determining appropriate protective equipment and beginning work.

IARC: International Agency for Research on Cancer

NFPA: National Fire Protection Association

NTP: National Toxicology Program

STEL: Short-Term Exposure Limit: ACGIH terminology for the short-term exposure limit or maximum concentration for a continuous exposure period of 15 minutes.

TLV: Threshold Limit Value. A term ACGIH uses to express the airborne concentration of a material to which most workers can be exposed during a normal daily and weekly work schedule without adverse effects.

TWA: Time-Weighted Average

VOC: Volatile Organic Compound