

Vertec BioSolvents, Inc. 1441 Branding Lane, Suite 100 Downers Grove, IL 60515 USA 630-960-0600 630-960-0660 fax vertecbio@aol.com

PRODUCT INFORMATION BULLETIN

VERTECBIO GOLD INK ZAPPER, IZ-66

Regulatory Agency Information OSHA-DOT

PREPARATION/REVISION DATE LMP 05/26/04

Product Information Bulletin

MATERIAL SAFETY DATA SHEET

TRADE NAME: VERTECBIO GOLD INK ZAPPER, IZ-66 (PRESS, BLANKET & ROLLER WASH)							
SECTION 1							
MANUFACTURER'S NAME		EMERGENCY TELEPHONE NO.					
VERTEC BIOSOLVENTS, INC.		800-424-9300 (CHEMTREC)					
ADDRESS							
1441 Branding Lane, Suite 100							
Downers Grove, Illinois 60515 USA							
CHEMICAL NAME			COMMON NAME				
Ethyl Hydroxy Propionate Solvent Blend			Ethyl Lactate Solvent Blend				
DOT CLASSIFICATION			FORMULA				
Combustible Liquid			Blend				
SECTION 2 HAZARDOUS INGREDIENTS							
CHEMICAL OR COMMON NAME	PERCE	NT	CAS NO.	PEL-OSHA		1	TLV-ACGIH
Ethyl Lactate	30-70		97-64-3	None Established	None Establi		ne Established
Fatty Acids C ₁₆ -C ₁₈ and C ₁₈ Unsaturated Methyl Esters	1-15		67762-38-3	None Established	t	None Established	
Proprietary Solvent "A"	10-40		_	None Established	t l	None Established	
Proprietary Surfact "A"	10-4	0	_	None Established	ablished None Established		ne Established
CARCINOGENIC INGREDIENTS							
CHEMICAL OR COMMON NAME	%		REFERENCE	SOURCE			
			IARC	NTP	OSHA	١	OTHER
None identified	-		-	-	-		-
SECTION 3 HEALTH HAZARD DATA							

ACUTE HEALTH EFFECTS

Eyes Irritant.
Skin Contact Not an irritant.

Ingestion May cause irritation of the digestive tract.

Inhalation Possible narcotic effects at excessive exposure.

CHRONIC HEALTH EFFECTS

Not listed as a carcinogen.

ROUTES OF ENTRY

Most common, skin and inhalation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Mist may cause eye/respiratory irritation with coughing.

Mist may cause eye/respiratory irritation with coughing.					
	SECTION 4 FIRST AID MEASURES				
EYES	Immediately flush with water for at least 15 minutes. See a medical doctor immediately.				
SKIN	Wash affected area with soap and water.				
INHALATION	Remove person to fresh air. If discomfort occurs and persists, obtain medical attention.				
INGESTION	Immediately give two glasses of water. Do not induce vomiting. See a medical doctor immediately.				
SECTION 5 FIRE FIGHTING MEASURES					
EXTINGUISHING MEDIA	Water, water fog, carbon dioxide (CO ₂), dry chemical.				
SPECIAL FIREFIGHTING	Wear a self-contained breathing apparatus.				
PROCEDURES					
DEGREE OF FIRE AND	Moderate. Rags soaked with any solvent can present a fire hazard and should be stored in UL listed				
EXPLOSION HAZARD	or Factory Mutual approved, covered containers. Improperly stored rags, under certain conditions				
	can lead to spontaneous combustion. Not an explosion hazard.				
HAZARDOUS	None required when completely combusted, decomposes to water and CO ₂ .				
DECOMPOSITION	Intermediate aldehydes and ketones may be formed on burning along with CO.				
PRODUCTS					

SECTION 6 ACCIDENTAL RELEASE / SPILL MEASURES

PROCEDURE FOR Cover with large quantity of absorbent material (e.g. kitty litter) and collect in drums for disposal. RELEASE OR SPILL Prevent entry into sewers and waterways.

SECTION 7	CHE	MICAL AND PHYSICAL DATA				
MELTING POINT (°C) Not Applical		SPECIFIC GRAVITY (H ₂ O=1)	1.008			
BOILING POINT 289°F		PERCENT VOLATILE BY VOLUME (%) Not Determined				
VAPOR PRESSURE (mmHg) 1.0		EVAPORATION RATE (butyl acetate=	1) 0.08			
VAPOR DENSITY (AIR=1) 4.1		pH OF WATER DISPERSION	4			
SOLUBILITY 20%, in water		APPEARANCE AND ODOR Clear Colorless Liquid, mild				
FLASH POINT 152° F, AST	M D93	FLAMMABLE LIMITS Le				
EVENIOU IIOU IINIO MEDIA		@212 F No c				
EXTINGUISHING MEDIA Water, foam, CO ₂		ODOR THRESHOLD BULK DENSITY (G/ML)	No data			
SPECIAL FIRE FIGHTING PROCEDURES		BOLK DENSITT (G/ML)				
None required		PARTITION COEFFICIENT				
INCOMPATIBILITY (materials to avoid)		(n-octanol/water)	Not applicable			
Strong oxidizing agents and acids.		AUTOIGNITION TEMPERATURE No data				
HAZARDOUS DECOMPOSITION PRODUCTS	20	EXPLOSIVE PROPERTIES Not applicable				
Intermediate aldehydes and ketones along with C		OXIDIZING PROPERTIES	Not applicable			
SECTION 8	TABILITY	ILITY AND REACTIVITY DATA Stable				
S HAZARDOUS POLYMER		None known				
CONDITIONS T		None known				
MATERIALS T	-	Strong oxidizing agents and acids.				
MAJOR CONTAM. THAT CONTRIBUTE TO INS		None known				
INCOMPA		None known	1			
HAZARDOUS DECOMPOSITION PRO SENSITIVITY TO MECHANICAL		Intermediate aldehydes and ketones al None known	iong with CO.			
SENSITIVITY TO MECHANICAL SENSITIVITY TO STATIC DISC		None known				
	CTION 9	TOXICOLOGICAL INFORMA	ATION			
	ONTACT	Severe irritant	ATION			
	ONTACT	No data				
SKIN ABSO	ORPTION	No data				
	ALATION	No data				
	GESTION	No data				
ACUTE EFFECTS FROM OVEREX CHRONIC EFFECTS FROM OVEREX		May cause severe irritation of the eyes None identified	i.			
(effects considered include: sens		None identified				
carcinogenicity, teratogenicity, muta	genicity,					
synergistic products, and any medical co						
generally recognized as being aggravated by e		OLOGICAL INFORMATION				
SECTION 10 ENVIRONMENT		OLOGICAL INFORMATION Not determined.				
ENVIRONMENTAL E		No adverse effects known or suspected	d. Not listed toxic chemical			
		under SARA Title III 302, 304 or 313.				
SECTION '	11 H.	SECTION 11 HANDLING AND STORAGE				
⊔ <i>1</i>						
Π/	ANDLING	Keep container tightly closed. Store in liquid storage area.	a cool, dry, well-ventilated,			
	ANDLING	Keep container tightly closed. Store in				
VENT S	TILATION TORAGE	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxid	t ventilation to keep vapor and idizers and acids.			
VENT S' SECTION 12 EXPO	TILATION TORAGE OSURE C	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible.	t ventilation to keep vapor and idizers and acids.			
VENT S SECTION 12 EXPORTED TO THE SECTION SECTION 12 EXPORTED TO THE SECTION S	TORAGE DSURE C	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxic control / Personal Protections	t ventilation to keep vapor and idizers and acids.			
VENT SECTION 12 EXPORTED SECTION 12 EXPORTED SECTION 12 EXPORTED SECTIVE EQUIPMENT OF THE PROPERTY OF THE PROP	TORAGE DSURE CO JIPMENT RATORY	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxid	t ventilation to keep vapor and idizers and acids.			
VENT S' SECTION 12 EXPO RECOMMENDED PERSONAL PROTECTIVE EQU RESPI VENT	TORAGE OSURE O JIPMENT RATORY FILATION	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxic CONTROL / PERSONAL PROT	t ventilation to keep vapor and idizers and acids.			
VENT SECTION 12 EXPO RECOMMENDED PERSONAL PROTECTIVE EQU RESPI VENT Loca	TORAGE DSURE O JIPMENT RATORY FILATION II Exhaust	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxicontrol / PERSONAL PROT	t ventilation to keep vapor and idizers and acids. ECTION tion conditions exist.			
VENT S' SECTION 12 EXPO RECOMMENDED PERSONAL PROTECTIVE EQU RESPI VENT	TORAGE DSURE O JIPMENT RATORY FILATION II Exhaust	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxic CONTROL / PERSONAL PROT	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist.			
VENT SECTION 12 EXPORT RECOMMENDED PERSONAL PROTECTIVE EQUINERSPIT VENT Loca Mechanical	TORAGE DSURE O JIPMENT RATORY FILATION II Exhaust (general)	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxic control. / PERSONAL PROTE None required where adequate ventilate Recommended In most cases adequate ventilation car industrial floor or pedistal fan, combine openings to the workspace, such as do	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist. In be achieved by use of an ed with sizable inlet and outlet			
VENT SECTION 12 EXPORT RECOMMENDED PERSONAL PROTECTIVE EQUINE RESPIVENT VENT Loca Mechanical	TORAGE DSURE C JIPMENT RATORY FILATION II Exhaust (general)	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxicontrol / PERSONAL PROTING None required where adequate ventilated Recommended In most cases adequate ventilation car industrial floor or pedistal fan, combine openings to the workspace, such as do Use chemical goggles or face shield.	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist. In be achieved by use of an ed with sizable inlet and outlet pors and/or windows			
SECTION 12 EXPONENTIAL SECTION 12 EXPONENTIAL SECTION 12 EXPONENTIAL SECTION S	TORAGE DSURE C DIPMENT RATORY FILATION II Exhaust (general) TECTION GLOVES	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxicontrol / PERSONAL PROTE None required where adequate ventilated Recommended In most cases adequate ventilation car industrial floor or pedistal fan, combine openings to the workspace, such as do Use chemical goggles or face shield. Use impervious gloves to prevent skin	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist. In be achieved by use of an ed with sizable inlet and outlet bors and/or windows contact.			
VENT SECTION 12 EXPORT RECOMMENDED PERSONAL PROTECTIVE EQUINE RESPIVENT VENT Loca Mechanical	TORAGE DSURE C DIPMENT RATORY FILATION II Exhaust (general) TECTION GLOVES	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxicontrol / PERSONAL PROTING None required where adequate ventilated Recommended In most cases adequate ventilation car industrial floor or pedistal fan, combine openings to the workspace, such as do Use chemical goggles or face shield.	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist. In be achieved by use of an ed with sizable inlet and outlet bors and/or windows contact.			
SECTION 12 EXPONENTIAL SECTION 12 EXPONENTIAL SECTION 12 EXPONENTIAL SECTION S	TORAGE DSURE O JIPMENT RATORY FILATION II Exhaust (general) TECTION GLOVES JIPMENT	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxicontrol / PERSONAL PROTE None required where adequate ventilated Recommended In most cases adequate ventilation car industrial floor or pedistal fan, combine openings to the workspace, such as do Use chemical goggles or face shield. Use impervious gloves to prevent skin Aprons recommended. If clothing become	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist. In be achieved by use of an ed with sizable inlet and outlet bors and/or windows contact.			
VENT SECTION 12 EXPO RECOMMENDED PERSONAL PROTECTIVE EQUAL RESPI VENT Loca Mechanical EYE PROT SPECIAL CLOTHING AND EQUAL FOOT PROTECTIVE EQUAL FOOT PROTECTIVE EQUAL SPECIAL SPECIAL SPECIAL SPECIAL FOOT PROTECTIVE EQUAL FOOT PROTECTIVE EQ	TILATION TORAGE DSURE O JIPMENT RATORY FILATION II Exhaust (general) TECTION GLOVES JIPMENT JIPMENT TECTION	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxicontrol / PERSONAL PROTE None required where adequate ventilated Recommended In most cases adequate ventilation car industrial floor or pedistal fan, combine openings to the workspace, such as do Use chemical goggles or face shield. Use impervious gloves to prevent skin Aprons recommended. If clothing becaused launder before reuse. None identified Industrial safety shoes are recommended.	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist. In be achieved by use of an ed with sizable inlet and outlet cors and/or windows contact. comes contaminated, remove			
VENT SECTION 12 EXPO RECOMMENDED PERSONAL PROTECTIVE EQUENCE RESPION VENT Loca Mechanical EYE PROTE SPECIAL CLOTHING AND EQUENCE FOOT PROTE OTHER PROTECTIVE EQUENCE FOOT PROTE OTHER ENGINEERING CO	TILATION TORAGE DSURE O JIPMENT RATORY FILATION II Exhaust (general) TECTION GLOVES JIPMENT TECTION DITTECTION DITTECTION DITTECLS	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxic control. / PERSONAL PROTE None required where adequate ventilated Recommended In most cases adequate ventilation carrindustrial floor or pedistal fan, combine openings to the workspace, such as do Use chemical goggles or face shield. Use impervious gloves to prevent skin Aprons recommended. If clothing become light and launder before reuse. None identified Industrial safety shoes are recommended None identified	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist. In be achieved by use of an ed with sizable inlet and outlet pors and/or windows contact. comes contaminated, remove ded in all industrial settings.			
VENT SECTION 12 EXPO RECOMMENDED PERSONAL PROTECTIVE EQUAL RESPI VENT Loca Mechanical EYE PROT SPECIAL CLOTHING AND EQUAL FOOT PROTECTIVE EQUAL FOOT PROTECTIVE EQUAL SPECIAL SECTION SECT	TILATION TORAGE DSURE O JIPMENT RATORY FILATION II Exhaust (general) TECTION GLOVES JIPMENT TECTION DITTECTION DITTECTION DITTECLS	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxic control. / PERSONAL PROTE None required where adequate ventilated Recommended In most cases adequate ventilation carrindustrial floor or pedistal fan, combine openings to the workspace, such as do Use chemical goggles or face shield. Use impervious gloves to prevent skin Aprons recommended. If clothing become identified Industrial safety shoes are recommended Industrial safety shoes are recommended None identified Do not smoke in areas of storage or use	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist. In be achieved by use of an ed with sizable inlet and outlet pors and/or windows contact. comes contaminated, remove ded in all industrial settings.			
VENT SECTION 12 EXPO RECOMMENDED PERSONAL PROTECTIVE EQUENCE RESPINATION VENT Loca Mechanical EYE PROTE SPECIAL CLOTHING AND EQUENCE FOOT PROTE OTHER PROTECTIVE EQUENCE FOOT PROTE OTHER ENGINEERING CO	TILATION TORAGE DSURE O DIPMENT RATORY FILATION II Exhaust (general) TECTION GLOVES JIPMENT TECTION ONTROLS ACTICES	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxicontrol / PERSONAL PROTE None required where adequate ventilated Recommended In most cases adequate ventilation carrindustrial floor or pedistal fan, combine openings to the workspace, such as do Use chemical goggles or face shield. Use impervious gloves to prevent skin Aprons recommended. If clothing become and launder before reuse. None identified Industrial safety shoes are recommended None identified Do not smoke in areas of storage or us and eyes. Minimize eye and skin contact by using	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist. In be achieved by use of an ed with sizable inlet and outlet pors and/or windows contact. comes contaminated, remove Ided in all industrial settings. Ided in all contact with skin gappropriate protective			
SECTION 12 EXPORTED SECTION 12 EXPORTED SECTION 12 EXPORTED SECTION 12 EXPORTED SPECIAL CLOTHING AND EQUIPMENT OF THE RESPIRATION OTHER PROTECTIVE EQUIPMENT OF THE RESPIRATION OF THE R	TILATION TORAGE DSURE O DIPMENT RATORY FILATION II Exhaust (general) TECTION GLOVES JIPMENT TECTION ONTROLS ACTICES	Keep container tightly closed. Store in liquid storage area. Use adequate general or local exhaust mist levels as low as possible. Store in a cool dry area, away from oxicontrol / PERSONAL PROTE None required where adequate ventilated Recommended In most cases adequate ventilation carrindustrial floor or pedistal fan, combine openings to the workspace, such as do Use chemical goggles or face shield. Use impervious gloves to prevent skin Aprons recommended. If clothing become and launder before reuse. None identified Industrial safety shoes are recommended. None identified Do not smoke in areas of storage or us and eyes.	t ventilation to keep vapor and idizers and acids. ECTION Ition conditions exist. In be achieved by use of an ed with sizable inlet and outlet pors and/or windows contact. comes contaminated, remove Ided in all industrial settings. Ided in all contact with skin and gappropriate protective exentilation to control vapors or			

SPECIAL PRECAUTIONS DATA **SECTION 13**

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Avoid all contact with eyes or skin. Wear the appropriate protective equipment. Protect containers from physical damage.

MAINTENANCE PERSONNEL

Clean vessels. Check the oxygen and combustible vapor content of the vessel atmosphere. Use the appropriate protective equipment.

SECTION 14 DISPOSAL PROCEDURES

WASTE DISPOSAL METHOD

Take up with sand or other non-combustible absorbent material and place into container for later disposal. Dispose in accordance with all applicable Federal, State, and local environmental regulations.

TRANSPORT INFORMATION **SECTION 15**

DOT PROPER SHIPPING NAME VertecBio Gold Ink Zapper, IZ-66 (under 119 gallons) IATA Non-regulated

IMDG Non-regulated

DOT CLASSIFICATION Combustible liquid

DOT LABELS None required, under 119 gallons DOT MARKING Marine Pollutant (Ocean Shipment Only) DOT PLACARD Bulk: Combustible liquid, NA1993

IDENTIFICATION NUMBER NA 1993 HAZARDOUS SUBSTANCE/RQ None 49 STCC NUMBER Not applicable

PRECAUTIONS TO BE TAKEN IN TRANSPORTATION None needed OTHER SHIPPING INFORMATION None

SECTION 16 REGULATORY INFORMATION

OSHA EXPOSURE LIMITS SUBSTANCE(S) Ethyl Lactate, Fatty Acid Methyl Esters, Proprietary solvent "A",

Proprietry surfactant "A" PEL-TWA Not established **OSHA**

STEL Not established CEILING Not established

SKIN DESIGNATION Not established

AGGIH TLV-TWA Not established STFL Not established

CEILING Not established

SKIN DESIGNATION Not established TARGET ORGAN EFFECTS Eve

CARCINOGENIC POTENTIAL None REGULATED BY OSHA No LISTED ON NTP REPORT No

IARC GROUP 1, 2A, 2D Nο

US EPA REQUIREMENTS RELEASE REPORTING CERCLA (40 CFR 302)

LISTED SUBSTANCE(S) Not listed

RQ Not applicable

Category Not applicable RCRA waste number Not applicable

Ethyl Lactate, Fatty Acid Methyl Esters, Proprietary solvent "A", UNLISTED SUBSTANCE(S) Proprietry surfactant "A"

None

Characteristic Not applicable

RCRA waste number Not applicable SARA TITLE III SEC 313 (40 CFR 372)

LISTED TOXIC CHEMICAL

INVENTORY REPORTING SARA TITLE III SEC 311/312 (40

CFR 370)

Substance(s) Not listed Hazard Category Not applicable Planning threshold Not applicable

Emergency planning SARA TITLE III SEC 302-303 (40 CFR 355)

Listed substance(s)

Not applicable Not applicable Planning threshold **US TSCA STATUS** Listed

CANADA INGREDIENT DISCLOSURE LIST SUBSTANCE(S)

CONTROLLED PRODUCT

HAZARD SYMBOLS **CLASS AND DIVISION**

PRODUCT IDENTIFICATION NO. DOMESTIC SUBSTANCE LIST CEPA PRIORITY LIST

Not listed

Not listed

Not listed

Not applicable

Listed Not listed

SECTION 16 REGULATO	RY INFORMATION (CONTINUED)			
CARCINOGENICITY	Not listed in either OSHA, ACGIH, NTP, or IARC			
ACGIH APPENDIX A	Not listed			
A1 - CONFIRMED HUMAN	Not listed			
A1 - SUSPECTED HUMAN	Not listed			
IARC GROUP 1 OR 2	No			
LABEL LANGUAGE (US/CANADA) HEALTH	Not Applicable			
PHYSICAL HANDLING AND STORAGE	Keep container tightly closed. Store in a cool, dry, well-ventilated			
	liquid storage area.			
FIRST AID	In case of contact, immediately flush eyes with water for at least			
	15 minutes. If irritation persists, obtain medical attention. Flush			
	skin with water.			
STATE REGULATIONS				
OFOTION AT ARRITIONAL INFORMATION				

SECTION 17 ADDITIONAL INFORMATION

OSHA permissible exposure limit or ACGIH threshold limit value has not been established.

	SECTION 18	HMIS LABEL		
HEALTH	FLAMMABILITY	REACTIVITY	PERSONAL PROTECTION	
2	2	0		В

DEPARTMENT OF TRANSPORTATION

Hazardous Materials Regulations, 49 CFR

Proper Shipping Name: VertecBio Gold Ink Zapper, IZ-66

(under 119 gallons)

Hazard Class: Combustible liquid

Packaging Group: III
Reportable Quantity: None

Label Required (Drums): Marine pollutant mark (for Ocean Shipment Only)

Placard Required (Bulk): Combustible liquid, 1993

Max. Quantity Pass. Aircraft: 60L/container
Max. Quantity Cargo Aircraft: 220L/container
Stowage on vessles: Above or below deck

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.