

[ISO11014:2009][Shachihata Inc.] [EK-95_ash_d] 1/5

22192-2004



Safety Data Sheet (MSDS)

Issued Date : May 16,2008
 Revised Date : March 22,2013

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : Artline FURNITURE Marker (Ash) EK-95
Company Name : Shachihata Inc.
Address : 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
Telephone : + 81- 52- 521- 3600
Fax : + 81- 52- 521- 3899
Emergency Call : + 81- 52- 521- 3600 (Shachihata Inc. [Japan])
Recommended use : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

GHS Classification

Physical Hazards	Flammable liquids	Category 2
Health Hazards	Serious eye damage /eye irritation Specific target organ toxicity : single exposure	Category 1 Category 3 (narcotic effects)
Environmental Hazards	Hazardous to the aquatic environment (acute) Hazardous to the aquatic environment (chronic) Hazardous to the ozone layer	Classification not possible Classification not possible Classification not possible



LABEL ELEMENTS

Symbols :

Signal word : Danger

Hazard statement : Highly flammable liquid and vapour (H225)
 Causes serious eye damage (H318)
 May cause drowsiness or dizziness (H336)

Precautionary statement

【Prevention】

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. (P210)
 Take precautionary measures against static discharge. (P243)
 Wear protective gloves/protective clothing/eye protection/face protection. (P280)
 Avoid breathing dust/fume/gas/mist/vapours/spray. (P261)
 Use only outdoors or in a well-ventilated area. (P271)
 Wash hands thoroughly after handling. (P264)

【Response】

In case of fire : Use dry chemical powder,form or carbon dioxide for extinction. (P370+P378)
IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
IF IN EYES : Rinse cautiously with water for several minutes. (P305+P351+P338)
 Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists : Get medical advice/attention. (P337+P313)
IF ON SKIN (or hair) : Remove/Take off immediately all contaminated clothing. (P303+P361+P353)
 Rinse skin with water/shower.
If skin irritation occurs : Get medical advice/attention. (P332+P313)

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- IF SWALLOWED** : Get medical advice/attention if you feel unwell. Rinse mouth. (P301+P314+P330)
- 【Storage】**
Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
- 【Disposal】**
Dispose of contents/container to waste in accordance with local/regional/ national/international regulation (to be specified). (P501)

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture : Mixture
Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Ethanol	45~55	64-17-5	Flam.Liq. 2	H225
1-methoxypropan-2-ol	20~30	107-98-2	Flam.Liq. 3 STOT.SE. 3	H226 H336
Ethyl lactate	5~15	97-64-3	Flam.Liq. 3 Eye Irrit. 1 STOT.SE. 3	H226 H318 H335
Synthetic resin	10~20	Confidential	none	none
Dyestuff	<1	Confidential	none	none
total	100			

SECTION 4 FIRST-AID MEASURES

- IF INHALED** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a doctor if symptoms persist.
- IF ON SKIN** : Remove/Take off immediately all contaminated clothing. Wash with soap and water. If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.
- 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/attention.
- IF SWALLOWED** : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

SECTION 5 FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA : Dry chemical powder, foam or carbon dioxide

UNSUITABLE EXTINGUISHING MEDIA : Water jet

SPECIFIC EXTINGUISHMENT METHOD

For initial stage extinction, carbon dioxide or dry chemical powder.
When a fire extends, fire is extinguished by a large amount of water spray.
Do not discharge extinguishing waters into the aquatic environment.

SPECIAL PROTECTIVE FOR FIRE- FIGHTERS

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn. Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6 ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Evacuate personnel to safe area. Shut off all sources of ignition.
No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not throw the leakage thing directly into environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

In case of a small spill, absorb with dry sand, soil, sawdust, cloth, etc., then place in a chemical waste containers.
In case of large spills, dike and prevent overflow, cover spills with foam, then place in a chemical container using non-sparking tools.

SECONDARY ACCIDENT PREVENTION MEASURE

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All ignition sources should be quickly removed. (No smoking in vicinity, prohibit sparks or fire sources)

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
 Avoid contact with skin, eyes and clothing.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not eat, drink or smoke when using this product.
- Storage** : Keep containers tightly closed and store in a cool and dry place.
 Keep away from heat and flame, ignition source and sunlight.
 Keep out of the reach of children.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**OCCUPATIONAL EXPOSURE LIMIT**

ACGIH (2012)		
Ethanol	STEL	1000ppm
1-methoxypropan-2-ol	TWA	100ppm
OSHA PEL		
Ethanol	TWA	1000ppm
DIRECTIVE 2000/39/EC		
1-methoxypropan-2-ol	TWA	100ppm
Japan Society for Occupational Health (2012)	none	

PERSONAL PROTECTION

- : Respiratory Protection
 Use with local exhaust ventilation, when in long use.
 Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
- : Hand Protection
 Avoid contact with hands. Wear safety gloves, if necessary.
- : Eye Protection
 Avoid contact with eyes. Wear safety glasses, if necessary.
- : Skin Protection
 Avoid skin contact. Wear personal protection apron, boots, if necessary.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: ash color liquid
Odour	: minor solvent odour
pH	: Not applicable
Boiling point	: No data available
Flash point	: 16.5 °C (closed cup)
Relative Density (at 25°C)	: 0.85 - 0.95 (g/cm ³)
Solubility in Water	: Insoluble

SECTION 10 STABILITY AND REACTIVITY

Stability	: Stable under normal handling.
Conditions to Avoid	: High temperature, Direct sunlight, Fire
Incompatible Materials	: Strong oxidising agents
Hazardous Decomposition Products	: CO, CO ₂

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity	: LD/LC50 values that are relevant for classification		
	[Ethanol]		
	Oral-rat	LD50	7,060mg/kg
	Inhalation-rat	LC50	20,000ppm/10h
	[1-methoxypropan-2-ol]		
	Oral-rat	LD50	>5,000mg/kg
	Dermal-rabbit	LD50	13,000mg/kg
	Inhalation-rat	LC50	>7,559ppm/6h

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	[Ethyl lactate]		
	Oral-rat	LD50	2,500mg/kg
	Inhalation-rat	LC50	>5,400mg/m ³ /8H
Serious eye damage /eye irritation	: Category 1	Causes serious eye damage	
Specific target organ toxicity (single exposure)	: Category 3	May cause drowsiness or dizziness	
Carcinogenicity	: Not listed by IARC, EPA, EU, NTP.		

SECTION 12 ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	: Classification not possible
Hazardous to the aquatic environment (chronic)	: Classification not possible
Hazardous to the ozone layer	: Classification not possible

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal must be made according to official regulations.
Comply with all Federal, State, and Local regulations regarding disposal.
Do not allow product to reach ground, any water course or sewage system.

SECTION 14 TRANSPORT INFORMATION

UN number	(DOT, ADR, IMDG, IATA)	: UN1210
UN proper shipping name	(DOT, ADR, IMDG, IATA)	: PRINTING INK ,flammable
UN Classification		: 3
Packing group	(DOT, ADR, IMDG, IATA)	: II
Marine pollutant (Y/N)		: N
EmS number		: F-E,S-D

**SECTION 15 REGULATORY INFORMATION**

< EU Information >

Regulation (EC) No 1272/2008 (CLP)

Substance name	: [Ethanol]
Hazard Class & Category	: Flammable liquids, Category 2
Symbols	: GHS02
Signal word	: Danger
Hazard statements	: H225 Highly flammable liquid and vapour
Substance name	: [1-methoxypropan-2-ol]
Hazard Class & Category	: Flammable liquids, Category 3 Specific target organ toxicity - single exposure, Category 3
Symbols	: GHS02,GHS07
Signal word	: Warning
Hazard statements	: H226 Flammable liquid and vapour H336 May cause drowsiness or dizziness
Substance name	: [Ethyl lactate]
Hazard Class & Category	: Flammable liquids, Category 3 Eye irritation,Category 1 Specific target organ toxicity - single exposure, Category 3
Symbols	: GHS02,GHS07,GHS05
Signal word	: Danger
Hazard statements	: H226 Flammable liquid and vapour H318 Causes serious eye damage H335 May cause respiratory irritation

Directive 67/548/EEC or 1999/45/EC

Hazard designation	
Substance name	: [Ethanol]
Classification	: F: R11
R-Phrase	: R11 Highly flammable.
S-Phrase	: S2 Keep out of the reach of children. S7 Keep container tightly closed. S16 Keep away from sources of ignition - No smoking.

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Symbols and indications of danger specific F : Highly flammable

Hazard designation

Substance name : [1-methoxypropan-2-ol]
 Classification : R10 - R67
 R-Phrase : R10 Flammable.
 : R67 Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 Keep out of the reach of children.

Symbols and indications of danger specific none

Hazard designation

Substance name : [Ethyl lactate]
 Classification : R10 - Xi; R37-41
 R-Phrase : R10 Flammable.
 : R37 Irritating to respiratory system.
 : R41 Risk of serious damage to eyes.
 S-Phrase : S2 Keep out of the reach of children.
 : S24 Avoid contact with skin.
 : S26 In case of contact with eyes, rinse immediately with plenty of water
 and seek medical advice.
 : S39 Wear eye/face protection.

Symbols and indications of danger specific Xi : Irritant

< USA Information >

OSHA STATUS : This product is hazardous under 29 CFR 1910.1200.

TSCA STATUS : All components on TSCA INVENTORY.

TSCA Hazard Communication Program (40 CFR Part 721) (SNUR) : not Listed

CERCLA REPORTABLE QUANTITY (40 CFR 117.302) : not Listed

SARA TITLE III Section 313 (40 CFR 372) : not Listed

California Proposition 65 (Chemicals known to cause cancer) : not Listed

Refer to any other federal , state , EU , national and local regulations.

SECTION 16 OTHER INFORMATION

EU RoHS Directive(2002/95/EC) and ELV Directive(2000/53/EC)
 This product not contain lead,mercury, cadmium, hexavalent chromium,
 polybromiated biphenyls (PBB) or polybrominated diphenylathers (PBDE).

This data sheet may not be enough when evaluating danger or hazard.The above information, which is created from currently available documents, information and data, may be revised when new findings announced.This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency.When handling as a normal product, please refer to the notes that is described in the produce or packaging.The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.

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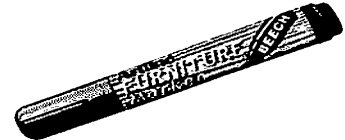


Safety Data Sheet (MSDS)

Issued Date : May 16,2008
 Revised Date : March 22,2013

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : Artline FURNITURE Marker (Beech) EK-95
Company Name : Shachihata Inc.
Address : 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
Telephone : + 81- 52- 521- 3600
Fax : + 81- 52- 521- 3899
Emergency Call : + 81- 52- 521- 3600 (Shachihata Inc. [Japan])
Recommended use : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

GHS Classification

Physical Hazards
 Flammable liquids Category 2

Health Hazards
 Serious eye damage /eye irritation Category 1
 Specific target organ toxicity ; single exposure Category 3 (narcotic effects)

Environmental Hazards
 Hazardous to the aquatic environment (acute) Classification not possible
 Hazardous to the aquatic environment (chronic) Classification not possible
 Hazardous to the ozone layer Classification not possible



LABEL ELEMENTS

Symbols :   

Signal word : Danger

Hazard statement : Highly flammable liquid and vapour (H225)
 Causes serious eye damage (H318)
 May cause drowsiness or dizziness (H336)

Precautionary statement

[Prevention]
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. (P210)
 Take precautionary measures against static discharge. (P243)
 Wear protective gloves/protective clothing/eye protection/face protection. (P280)
 Avoid breathing dust/fume/gas/mist/vapours/spray. (P261)
 Use only outdoors or in a well-ventilated area. (P271)
 Wash hands thoroughly after handling. (P264)

[Response]
In case of fire : Use dry chemical powder,form or carbon dioxide for extinction. (P370+P378)
IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
IF IN EYES : Rinse cautiously with water for several minutes. (P305+P351+P338)
 Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists : Get medical advice/attention. (P337+P313)
IF ON SKIN (or hair) : Remove/Take off immediately all contaminated clothing. (P303+P361+P353)
 Rinse skin with water/shower.

If skin irritation occurs : Get medical advice/attention. (P332+P313)

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IF SWALLOWED : Get medical advice/attention if you feel unwell. Rinse mouth. (P301+P314+P330)
【Storage】
 Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
【Disposal】
 Dispose of contents/container to waste in accordance with (P501)
 local/regional/ national/international regulation (to be specified).

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture : Mixture
 Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Ethanol	45~55	64-17-5	Flam.Liq. 2	H225
1-methoxypropan-2-ol	20~30	107-98-2	Flam.Liq. 3 STOT.SE. 3	H226 H336
Ethyl lactate	5~15	97-64-3	Flam.Liq. 3 Eye Irrit. 1 STOT.SE. 3	H226 H318 H335
Synthetic resin	10~20	Confidential	none	none
Dyestuff	<1	Confidential	none	none
total	100			

SECTION 4 FIRST-AID MEASURES

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a doctor if symptoms persist.
 IF ON SKIN : Remove/Take off immediately all contaminated clothing. Wash with soap and water. If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.
 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/attention.
 IF SWALLOWED : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

SECTION 5 FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA : Dry chemical powder, foam or carbon dioxide

UNSUITABLE EXTINGUISHING MEDIA : Water jet

SPECIFIC EXTINCTION METHOD

For initial stage extinction, carbon dioxide or dry chemical powder.
 When a fire extends, fire is extinguished by a large amount of water spray.
 Do not discharge extinguishing waters into the aquatic environment.

SPECIAL PROTECTIVE FOR FIRE- FIGHTERS

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn.
 Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6 ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Evacuate personnel to safe area. Shut off all sources of ignition.
 No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not throw the leakage thing directly into environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

In case of a small spill, absorb with dry sand, soil, sawdust, cloth, etc., then place in a chemical waste containers.
 In case of large spills, dike and prevent overflow, cover spills with foam, then place in a chemical container using non-sparking tools.

SECONDARY ACCIDENT PREVENTION MEASURE

[ISO11014:2009][Shachihata Inc.] [EK-95_beech_d] 3/5

All ignition sources should be quickly removed. (No smoking in vicinity, prohibit sparks or fire sources)

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not eat, drink or smoke when using this product.
- Storage** : Keep containers tightly closed and store in a cool and dry place.
Keep away from heat and flame, ignition source and sunlight.
Keep out of the reach of children.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**OCCUPATIONAL EXPOSURE LIMIT**

ACGIH (2012)

Ethanol	STEL	1000ppm
1-methoxypropan-2-ol	TWA	100ppm

OSHA PEL

Ethanol	TWA	1000ppm
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DIRECTIVE 2000/39/EC

1-methoxypropan-2-ol	TWA	100ppm
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Japan Society for Occupational Health (2012)	none	
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PERSONAL PROTECTION

- : Respiratory Protection
Use with local exhaust ventilation, when in long use.
Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
- : Hand Protection
Avoid contact with hands. Wear safety gloves, if necessary.
- : Eye Protection
Avoid contact with eyes. Wear safety glasses, if necessary.
- : Skin Protection
Avoid skin contact. Wear personal protection apron, boots, if necessary.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : beech color liquid
- Odour** : minor solvent odour
- pH** : Not applicable
- Boiling point** : No data available
- Flash point** : 16.5 °C (closed cup)
- Relative Density (at 25°C)** : 0.85 - 0.95 (g/cm³)
- Solubility in Water** : Insoluble

SECTION 10 STABILITY AND REACTIVITY

- Stability** : Stable under normal handling.
- Conditions to Avoid** : High temperature, Direct sunlight, Fire
- Incompatible Materials** : Strong oxidising agents
- Hazardous Decomposition Products** : CO, CO₂

SECTION 11 TOXICOLOGICAL INFORMATION

- Acute toxicity** : LD/LC50 values that are relevant for classification
- | | | | |
|------------------------|------|--|---------------|
| [Ethanol] | | | |
| Oral-rat | LD50 | | 7,060mg/kg |
| Inhalation-rat | LC50 | | 20,000ppm/10h |
| [1-methoxypropan-2-ol] | | | |
| Oral-rat | LD50 | | >5,000mg/kg |
| Dermal-rabbit | LD50 | | 13,000mg/kg |
| Inhalation-rat | LC50 | | >7,559ppm/6h |

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	[Ethyl lactate]		
	Oral-rat	LD50	2,500mg/kg
	Inhalation-rat	LC50	>5,400mg/m ³ /8H
Serious eye damage /eye irritation	: Category 1		Causes serious eye damage
Specific target organ toxicity (single exposure)	: Category 3		May cause drowsiness or dizziness
Carcinogenicity	: Not listed by IARC, EPA, EU, NTP.		

SECTION 12 ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	: Classification not possible
Hazardous to the aquatic environment (chronic)	: Classification not possible
Hazardous to the ozone layer	: Classification not possible

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal must be made according to official regulations.
Comply with all Federal, State, and Local regulations regarding disposal.
Do not allow product to reach ground, any water course or sewage system.

SECTION 14 TRANSPORT INFORMATION

UN number	(DOT, ADR, IMDG, IATA)	: UN1210
UN proper shipping name	(DOT, ADR, IMDG, IATA)	: PRINTING INK ,flammable
UN Classification		: 3
Packing group	(DOT, ADR, IMDG, IATA)	: II
Marine pollutant (Y/N)		: N
EmS number		: F-E,S-D

**SECTION 15 REGULATORY INFORMATION**

< EU Information >

Regulation (EC) No 1272/2008 (CLP)

Substance name	: [Ethanol]
Hazard Class & Category	: Flammable liquids, Category 2
Symbols	: GHS02
Signal word	: Danger
Hazard statements	: H225 Highly flammable liquid and vapour
Substance name	: [1-methoxypropan-2-ol]
Hazard Class & Category	: Flammable liquids, Category 3 Specific target organ toxicity - single exposure, Category 3
Symbols	: GHS02,GHS07
Signal word	: Warning
Hazard statements	: H226 Flammable liquid and vapour H336 May cause drowsiness or dizziness
Substance name	: [Ethyl lactate]
Hazard Class & Category	: Flammable liquids, Category 3 Eye irritation,Category 1 Specific target organ toxicity - single exposure, Category 3
Symbols	: GHS02,GHS07,GHS05
Signal word	: Danger
Hazard statements	: H226 Flammable liquid and vapour H318 Causes serious eye damage H335 May cause respiratory irritation

Directive 67/548/EEC or 1999/45/EC

Hazard designation

Substance name	: [Ethanol]
Classification	: F+ R11
R-Phrase	: R11 Highly flammable.
S-Phrase	: S2 Keep out of the reach of children. S7 Keep container tightly closed. S16 <u>Keep away from sources of ignition - No smoking.</u>

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Symbols and indications of danger specific F : Highly flammable

Hazard designation

Substance name : [1-methoxypropan-2-ol]
 Classification : R10 · R67
 R-Phrase : R10 Flammable.
 R67 Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 Keep out of the reach of children.
 Symbols and indications of danger specific none

Hazard designation

Substance name : [Ethyl lactate]
 Classification : R10 · Xi; R37-41
 R-Phrase : R10 Flammable.
 R37 Irritating to respiratory system.
 R41 Risk of serious damage to eyes.
 S-Phrase : S2 Keep out of the reach of children.
 S24 Avoid contact with skin.
 S26 In case of contact with eyes, rinse immediately with plenty of water
 and seek medical advice.
 S39 Wear eye/face protection.

Symbols and indications of danger specific Xi : Irritant

< USA Information >

OSHA STATUS : This product is hazardous under 29 CFR 1910.1200.

TSCA STATUS : All components on TSCA INVENTORY.

TSCA Hazard Communication Program (40 CFR Part 721) (SNUR) : not Listed

CERCLA REPORTABLE QUANTITY (40 CFR 117.302) : not Listed

SARA TITLE III Section 313 (40 CFR 372) : not Listed

California Proposition 65 (Chemicals known to cause cancer) : not Listed

Refer to any other federal , state , EU , national and local regulations.

SECTION 16 OTHER INFORMATION

EU RoHS Directive(2002/95/EC) and ELV Directive(2000/53/EC)
 This product not contain lead,mercury, cadmium, hexavalent chromium,
 polybromiated biphenyls (PBB) or polybrominated diphenylethers (PBDE).

This data sheet may not be enough when evaluating danger or hazard.The above information, which is created from currently available documents, information and data, may be revised when new findings announced.This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency.When handling as a normal product, please refer to the notes that is described in the produce or packaging.The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.

[ISO11014:2009][Shachihata Inc.] [EK-95_birchbrown_d] 1/5


Artline
Xstamper

Safety Data Sheet (MSDS)

Issued Date : May 16,2008

Revised Date : March 22,2013

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : Artline FURNITURE Marker (Birchbrown)
 EK-95

Company Name : Shachihata Inc.
Address : 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
Telephone : + 81- 52- 521- 3600
Fax : + 81- 52- 521- 3899
Emergency Call : + 81- 52- 521- 3600 (Shachihata Inc. [Japan])
Recommended use : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

GHS Classification

Physical Hazards

Flammable liquids

Category 2

Health Hazards

 Serious eye damage /eye irritation
 Specific target organ toxicity ; single exposure

Category 1

Category 3

(narcotic effects)

Environmental Hazards

 Hazardous to the aquatic environment (acute)
 Hazardous to the aquatic environment (chronic)
 Hazardous to the ozone layer

Classification not possible

Classification not possible

Classification not possible



LABEL ELEMENTS

Symbols


Signal word : Danger

Hazard statement : Highly flammable liquid and vapour (H225)
 Causes serious eye damage (H318)
 May cause drowsiness or dizziness (H336)

Precautionary statement

[Prevention]

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. (P210)

Take precautionary measures against static discharge. (P243)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Avoid breathing dust/fume/gas/mist/vapours/spray. (P261)

Use only outdoors or in a well-ventilated area. (P271)

Wash hands thoroughly after handling. (P264)

[Response]

In case of fire : Use dry chemical powder,form or carbon dioxide for extinction. (P370+P378)

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)

IF IN EYES : Rinse cautiously with water for several minutes. (P305+P351+P338)

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists : Get medical advice/attention. (P337+P313)

IF ON SKIN (or hair) : Remove/Take off immediately all contaminated clothing. (P303+P361+P353)

Rinse skin with water/shower.

If skin irritation occurs : Get medical advice/attention. (P332+P313)

[ISO11014:2009][Shachihata Inc.] [EK-95_birchbrown_d] 2/5

IF SWALLOWED : Get medical advice/attention if you feel unwell. Rinse mouth. (P301+P314+P330)
[Storage]
 Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
[Disposal]
 Dispose of contents/container to waste in accordance with (P501)
 local/regional/ national/international regulation (to be specified).

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture : Mixture
Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Ethanol	40~50	64-17-5	Flam.Liq. 2	H225
1-methoxypropan-2-ol	20~30	107-98-2	Flam.Liq. 3 STOT.SE. 3	H226 H336
Ethyl lactate	5~15	97-64-3	Flam.Liq. 3 Eye Irrit. 1 STOT.SE. 3	H226 H318 H335
Synthetic resin	10~20	Confidential	none	none
Dyestuff	1~10	Confidential	none	none
total	100			

SECTION 4 FIRST-AID MEASURES

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a doctor if symptoms persist.
IF ON SKIN : Remove/Take off immediately all contaminated clothing. Wash with soap and water. If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.
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/attention.
IF SWALLOWED : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

SECTION 5 FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA : Dry chemical powder, foam or carbon dioxide

UNSUITABLE EXTINGUISHING MEDIA : Water jet

SPECIFIC EXTINCTION METHOD

For initial stage extinction, carbon dioxide or dry chemical powder.
 When a fire extends, fire is extinguished by a large amount of water spray.
 Do not discharge extinguishing waters into the aquatic environment.

SPECIAL PROTECTIVE FOR FIRE-FIGHTERS

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn. Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6 ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Evacuate personnel to safe area. Shut off all sources of ignition.
 No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not throw the leakage thing directly into environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

In case of a small spill, absorb with dry sand, soil, sawdust, cloth, etc., then place in a chemical waste containers.
 In case of large spills, dike and prevent overflow, cover spills with foam, then place in a chemical container using non-sparking tools.

SECONDARY ACCIDENT PREVENTION MEASURE

[ISO11014:2009][Shachihata Inc.] [EK-95_birchbrown_d] 3/5

All ignition sources should be quickly removed. (No smoking in vicinity, prohibit sparks or fire sources)

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
 Avoid contact with skin, eyes and clothing.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not eat, drink or smoke when using this product.
- Storage** : Keep containers tightly closed and store in a cool and dry place.
 Keep away from heat and flame, ignition source and sunlight.
 Keep out of the reach of children.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMIT

ACGIH (2012)		
Ethanol	STEL	1000ppm
1-methoxypropan-2-ol	TWA	100ppm
OSHA PEL		
Ethanol	TWA	1000ppm
DIRECTIVE 2000/39/EC		
1-methoxypropan-2-ol	TWA	100ppm
Japan Society for Occupational Health (2012)	none	

PERSONAL PROTECTION

- : Respiratory Protection
 Use with local exhaust ventilation, when in long use.
 Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
- : Hand Protection
 Avoid contact with hands. Wear safety gloves, if necessary.
- : Eye Protection
 Avoid contact with eyes. Wear safety glasses, if necessary.
- : Skin Protection
 Avoid skin contact. Wear personal protection apron, boots, if necessary.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : birchbrown color liquid
- Odour** : minor solvent odour
- pH** : Not applicable
- Boiling point** : No data available
- Flash point** : 16.5 °C (closed cup)
- Relative Density (at 25°C)** : 0.85 - 0.95 (g/cm³)
- Solubility in Water** : Insoluble

SECTION 10 STABILITY AND REACTIVITY

- Stability** : Stable under normal handling.
- Conditions to Avoid** : High temperature, Direct sunlight, Fire
- Incompatible Materials** : Strong oxidising agents
- Hazardous Decomposition Products** : CO, CO₂

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity : LD/LC50 values that are relevant for classification

[Ethanol]		
Oral-rat	LD50	7,060mg/kg
Inhalation-rat	LC50	20,000ppm/10h
[1-methoxypropan-2-ol]		
Oral-rat	LD50	>5,000mg/kg
Dermal-rabbit	LD50	13,000mg/kg
Inhalation-rat	LC50	>7,559ppm/6h

[ISO11014:2009][Shachihata Inc.] [EK-95_birchbrown_d] 4/5

	[Ethyl lactate]		
	Oral-rat	LD50	2,500mg/kg
	Inhalation-rat	LC50	>5,400mg/m ³ /8H
Serious eye damage /eye irritation	: Category 1	Causes serious eye damage	
Specific target organ toxicity (single exposure)	: Category 3	May cause drowsiness or dizziness	
Carcinogenicity	: Not listed by IARC, EPA, EU, NTP.		

SECTION 12 ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	: Classification not possible
Hazardous to the aquatic environment (chronic)	: Classification not possible
Hazardous to the ozone layer	: Classification not possible

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal must be made according to official regulations.
Comply with all Federal, State, and Local regulations regarding disposal.
Do not allow product to reach ground, any water course or sewage system.

SECTION 14 TRANSPORT INFORMATION

UN number	(DOT, ADR, IMDG, IATA)	: UN1210	
UN proper shipping name	(DOT, ADR, IMDG, IATA)	: PRINTING INK ,flammable	
UN Classification		: 3	
Packing group	(DOT, ADR, IMDG, IATA)	: II	
Marine pollutant (Y/N)		: N	
EmS number		: F-E,S-D	

**SECTION 15 REGULATORY INFORMATION**

< EU Information >

Regulation (EC) No 1272/2008 (CLP)

Substance name	: [Ethanol]
Hazard Class & Category	: Flammable liquids, Category 2
Symbols	: GHS02
Signal word	: Danger
Hazard statements	: H225 Highly flammable liquid and vapour
Substance name	: [1-methoxypropan-2-ol]
Hazard Class & Category	: Flammable liquids, Category 3 Specific target organ toxicity - single exposure, Category 3
Symbols	: GHS02,GHS07
Signal word	: Warning
Hazard statements	: H226 Flammable liquid and vapour H336 May cause drowsiness or dizziness
Substance name	: [Ethyl lactate]
Hazard Class & Category	: Flammable liquids, Category 3 Eye irritation,Category 1 Specific target organ toxicity - single exposure, Category 3
Symbols	: GHS02,GHS07,GHS05
Signal word	: Danger
Hazard statements	: H226 Flammable liquid and vapour H318 Causes serious eye damage H335 May cause respiratory irritation

Directive 67/548/EEC or 1999/45/EC

Hazard designation

Substance name	: [Ethanol]
Classification	: F: R11
R-Phrase	: R11 Highly flammable.
S-Phrase	: S2 Keep out of the reach of children. S7 Keep container tightly closed. S10 Keep away from sources of ignition - No smoking.

[ISO11014:2009][Shachihata Inc.] [EK-95_birchbrown_d] 5/5

Symbols and indications of danger specific F : Highly flammable

Hazard designation

Substance name : [1-methoxypropan-2-ol]
 Classification : R10 · R67
 R-Phrase : R10 Flammable.
 R67 Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 Keep out of the reach of children.
 Symbols and indications of danger specific none

Hazard designation

Substance name : [Ethyl lactate]
 Classification : R10 · Xi: R37-41
 R-Phrase : R10 Flammable.
 R37 Irritating to respiratory system.
 R41 Risk of serious damage to eyes.
 S-Phrase : S2 Keep out of the reach of children.
 S24 Avoid contact with skin.
 S26 In case of contact with eyes, rinse immediately with plenty of water
 and seek medical advice.
 S39 Wear eye/face protection.

Symbols and indications of danger specific Xi : Irritant

< USA Information >

OSHA STATUS : This product is hazardous under 29 CFR 1910.1200.

TSCA STATUS : All components on TSCA INVENTORY.

TSCA Hazard Communication Program (40 CFR Part 721) (SNUR) : not Listed

CERCLA REPORTABLE QUANTITY (40 CFR 117.302) : not Listed

SARA TITLE III Section 313 (40 CFR 372) : not Listed

California Proposition 65 (Chemicals known to cause cancer) : not Listed

Refer to any other federal , state , EU , national and local regulations.

SECTION 16 OTHER INFORMATION

EU RoHS Directive(2002/95/EC) and ELV Directive(2000/53/EC)
 This product not contain lead,mercury, cadmium, hexavalent chromium,
 polybromiated biphenyls (PBB) or polybrominated diphenylethers (PBDE).

This data sheet may not be enough when evaluating danger or hazard.The above information, which is created from currently available documents, information and data, may be revised when new findings announced.This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency.When handling as a normal product, please refer to the notes that is described in the produce or packaging.The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.

[ISO11014:2009][Shachihata Inc.] [EK-95_black_d] 1/5


Artline
Xstamper

Safety Data Sheet (MSDS)

 Issued Date : May 16,2008
 Revised Date : March 22,2013

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : Artline FURNITURE Marker (Black)
 EK-95
Company Name : Shachihata Inc.
Address : 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
Telephone : + 81- 52- 521- 3600
Fax : + 81- 52- 521- 3899
Emergency Call : + 81- 52- 521- 3600 (Shachihata Inc. [Japan])
Recommended use : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

GHS Classification

Physical Hazards

Flammable liquids

Category 2

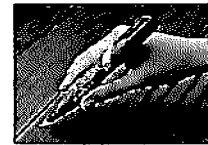
Health Hazards

 Serious eye damage /eye irritation
 Specific target organ toxicity ; single exposure

Category 1

Category 3

(respiratory tract irritation, narcotic effects)



Environmental Hazards

 Hazardous to the aquatic environment (acute)
 Hazardous to the aquatic environment (chronic)
 Hazardous to the ozone layer

Classification not possible

Classification not possible

Classification not possible

LABEL ELEMENTS

Symbols


Signal word : Danger

Hazard statement : Highly flammable liquid and vapour (H225)
 Causes serious eye damage (H318)
 May cause respiratory irritation (H335)
 May cause drowsiness or dizziness (H336)

Precautionary statement

[Prevention]

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. (P210)
 Take precautionary measures against static discharge. (P243)
 Wear protective gloves/protective clothing/eye protection/face protection. (P280)
 Avoid breathing dust/fume/gas/mist/vapours/spray. (P261)
 Use only outdoors or in a well-ventilated area. (P271)
 Wash hands thoroughly after handling. (P264)

[Response]

In case of fire : Use dry chemical powder,form or carbon dioxide for extinction. (P370+P378)
IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
IF IN EYES : Rinse cautiously with water for several minutes. (P305+P351+P338)
 Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists : Get medical advice/attention. (P337+P313)

~~IF ON SKIN (or hair) : Remove/Take off immediately all contaminated clothing. (P303+P361+P353)~~
 Rinse skin with water/shower.

[ISO11014:2009][Shachihata Inc.] [EK-95_black_d] 2/5

If skin irritation occurs : Get medical advice/attention. (P332+P313)
 IF SWALLOWED : Get medical advice/attention if you feel unwell. Rinse mouth. (P301+P314+P330)
【Storage】
 Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
【Disposal】
 Dispose of contents/container to waste in accordance with (P501)
 local/regional/ national/international regulation (to be specified).

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture : Mixture
 Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Ethanol	25~35	64-17-5	Flam.Liq. 2	H225
1-methoxypropan-2-ol	20~25	107-98-2	Flam.Liq. 3 STOT.SE. 3	H226 H336
Ethyl lactate	20~25	97-64-3	Flam.Liq. 3 Eye Irrit. 1 STOT.SE. 3	H226 H318 H335
Synthetic resin	5~15	Confidential	none	none
Dyestuff	10~20	Confidential	none	none
total	100			

SECTION 4 FIRST-AID MEASURES

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a doctor if symptoms persist.
IF ON SKIN : Remove/Take off immediately all contaminated clothing. Wash with soap and water. If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.
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/attention.
IF SWALLOWED : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

SECTION 5 FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA : Dry chemical powder, foam or carbon dioxide
UNSUITABLE EXTINGUISHING MEDIA : Water jet

SPECIFIC EXTINCTION METHOD

For initial stage extinction, carbon dioxide or dry chemical powder.
 When a fire extends, fire is extinguished by a large amount of water spray.
 Do not discharge extinguishing waters into the aquatic environment.

SPECIAL PROTECTIVE FOR FIRE- FIGHTERS

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn. Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6 ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Evacuate personnel to safe area. Shut off all sources of ignition.
 No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not throw the leakage thing directly into environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

In case of a small spill, absorb with dry sand, soil, sawdust, cloth, etc., then place in a chemical waste containers.

In case of large spills, dike and prevent overflow, cover spills with foam.

Item Numbers: 22192-2004 then place in a chemical container using non-sparking tools.

[ISO11014:2009][Shachihata Inc.] [EK-95_black_d] 3/5

SECONDARY ACCIDENT PREVENTION MEASURE

All ignition sources should be quickly removed. (No smoking in vicinity, prohibit sparks or fire sources)

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not eat, drink or smoke when using this product.
- Storage** : Keep containers tightly closed and store in a cool and dry place.
Keep away from heat and flame, ignition source and sunlight.
Keep out of the reach of children.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**OCCUPATIONAL EXPOSURE LIMIT**

ACGIH (2012)

Ethanol	STEL	1000ppm
1-methoxypropan-2-ol	TWA	100ppm

OSHA PEL

Ethanol	TWA	1000ppm
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DIRECTIVE 2000/39/EC

1-methoxypropan-2-ol	TWA	100ppm
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Japan Society for Occupational Health (2012) none

PERSONAL PROTECTION

- : Respiratory Protection
Use with local exhaust ventilation, when in long use.
Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
- : Hand Protection
Avoid contact with hands. Wear safety gloves, if necessary.
- : Eye Protection
Avoid contact with eyes. Wear safety glasses, if necessary.
- : Skin Protection
Avoid skin contact. Wear personal protection apron, boots, if necessary.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: black liquid
Odour	: minor solvent odour
pH	: Not applicable
Boiling point	: No data available
Flash point	: 19.0 °C (closed cup)
Relative Density (at 25°C)	: 0.85 - 0.95 (g/cm ³)
Solubility in Water	: Insoluble

SECTION 10 STABILITY AND REACTIVITY

Stability	: Stable under normal handling.
Conditions to Avoid	: High temperature, Direct sunlight, Fire
Incompatible Materials	: Strong oxidising agents
Hazardous Decomposition Products	: CO, CO ₂

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity	: LD/LC50 values that are relevant for classification		
	[Ethanol]		
	Oral-rat	LD50	7,060mg/kg
	Inhalation-rat	LC50	20,000ppm/10h
	[1-methoxypropan-2-ol]		
	Oral-rat	LD50	>5,000mg/kg
	Dermal-rabbit	LD50	13,000mg/kg

[ISO11014:2009][Shachihata Inc.] [EK-95_black_d] 4/5

Inhalation-rat [Ethyl lactate]	LC50	>7,559ppm/6h
Oral-rat	LD50	2,500mg/kg
Inhalation-rat	LC50	>5,400mg/m ³ /8H
Serious eye damage /eye irritation	: Category 1	Causes serious eye damage
Specific target organ toxicity (single exposure)	: Category 3	May cause respiratory irritation May cause drowsiness or dizziness
Carcinogenicity	: Not listed by IARC, EPA, EU, NTP.	

SECTION 12 ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	: Classification not possible
Hazardous to the aquatic environment (chronic)	: Classification not possible
Hazardous to the ozone layer	: Classification not possible

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal must be made according to official regulations.
Comply with all Federal, State, and Local regulations regarding disposal.
Do not allow product to reach ground, any water course or sewage system.

SECTION 14 TRANSPORT INFORMATION

UN number	(DOT, ADR, IMDG, IATA)	: UN1210
UN proper shipping name	(DOT, ADR, IMDG, IATA)	: PRINTING INK, flammable
UN Classification		: 3
Packing group	(DOT, ADR, IMDG, IATA)	: II
Marine pollutant (Y/N)		: N
EmS number		: F-E,S-D

**SECTION 15 REGULATORY INFORMATION**

< EU Information >

Regulation (EC) No 1272/2008 (CLP)

Substance name	: [Ethanol]
Hazard Class & Category	: Flammable liquids, Category 2
Symbols	: GHS02
Signal word	: Danger
Hazard statements	: H225 Highly flammable liquid and vapour
Substance name	: [1-methoxypropan-2-ol]
Hazard Class & Category	: Flammable liquids, Category 3 Specific target organ toxicity - single exposure, Category 3
Symbols	: GHS02,GHS07
Signal word	: Warning
Hazard statements	: H226 Flammable liquid and vapour H336 May cause drowsiness or dizziness
Substance name	: [Ethyl lactate]
Hazard Class & Category	: Flammable liquids, Category 3 Eye irritation, Category 1 Specific target organ toxicity - single exposure, Category 3
Symbols	: GHS02,GHS07,GHS05
Signal word	: Danger
Hazard statements	: H226 Flammable liquid and vapour H318 Causes serious eye damage H335 May cause respiratory irritation

Directive 67/548/EEC or 1999/45/EC

Hazard designation

Substance name	: [Ethanol]
Classification	: F+ R11
R-Phrase	: R11 Highly flammable.
S-Phrase	: S2 Keep out of the reach of children. S7 Keep container tightly closed. S16 Keep away from sources of ignition - No smoking.

[ISO11014:2009][Shachihata Inc.] [EK-95_black_d] 5/5

Symbols and indications of danger specific F : Highly flammable

Hazard designation

Substance name : [1-methoxypropan-2-ol]
 Classification : R10 · R67
 R-Phrase : R10 Flammable.
 R67 Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 Keep out of the reach of children.
 Symbols and indications of danger specific none

Hazard designation

Substance name : [Ethyl lactate]
 Classification : R10 · Xi; R37-41
 R-Phrase : R10 Flammable.
 R37 Irritating to respiratory system.
 R41 Risk of serious damage to eyes.
 S-Phrase : S2 Keep out of the reach of children.
 S24 Avoid contact with skin.
 S26 In case of contact with eyes, rinse immediately with plenty of water
 and seek medical advice.
 S39 Wear eye/face protection.

Symbols and indications of danger specific Xi : Irritant

< USA Information >

OSHA STATUS : This product is hazardous under 29 CFR 1910.1200.

TSCA STATUS : All components on TSCA INVENTORY.

TSCA Hazard Communication Program (40 CFR Part 721) (SNUR) : not Listed

CERCLA REPORTABLE QUANTITY (40 CFR 117.302) : not Listed

SARA TITLE III Section 313 (40 CFR 372) : not Listed

California Proposition 65 (Chemicals known to cause cancer) : not Listed

Refer to any other federal , state , EU , national and local regulations.

SECTION 16 OTHER INFORMATION

EU RoHS Directive(2002/95/EC) and ELV Directive(2000/53/EC)
**This product not contain lead,mercury, cadmium, hexavalent chromium,
 polybromiated biphenyls (PBB) or polybrominated diphenylethers (PBDE).**

This data sheet may not be enough when evaluating danger or hazard.The above information, which is created from currently available documents, information and data, may be revised when new findings announced.This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency.When handling as a normal product, please refer to the notes that is described in the produce or packaging.The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.