

SAFETY DATA SHEET

according to Regulation (EC) 1907/2006

Date of Issue: Jan 11,2012

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name : Artline WHITEBOARD MARKER EK-525T
 Artline WHITEBOARD MARKER EK-525TT
 Artline WHITEBOARD MARKER EK-541T

Color : (Black)



Supplier : Shachihata (Europe) Limited
 Artline Point, Ashville Way, Sutton Weaver, Runcorn, Cheshire WA7 3EZ. UK
 Telephone: 0870 600 5 006 Fax: 0871 200 5 006

Manufacturer : Shachihata Inc. [Japan]
 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
 Telephone:+ 81- 52- 521- 3600 Fax: +81- 52- 521- 3899

e-mail address of person responsible for this SDS : www.artline-xstamper.com

Emergency information : Telephone: 0870 600 5 006

Use of the Product : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Symbols and indications of danger specific



F : Highly flammable



Xn : Harmful
 Xi : Irritant

Hazard designation

R11 : Highly flammable.

R36 : Irritating to eyes.

R41 : Risk of serious damage to eyes.

R67 : Vapours may cause drowsiness and dizziness.



SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation : Preparation

Ingredients :

Chemical Name / Generic name	Composition weight %	EC Registry No.	CAS Registry No.	EU Symbol/ R-Phrase
Ethanol	20~30	200-578-6	64-17-5	F: R11
Propan-2-ol	30~40	200-661-7	67-63-0	R11-Xi; R36-67
Propan-1-ol	20~30	200-746-9	71-23-8	F; R11 Xi; R41-R67
Carbon black	1~10	215-609-9	1333-86-4	Not required
Synthetic resin	1~10	Confidential	Confidential	Not required
Additive	1~10	Confidential	Confidential	Not required

The wording of the symbol(s) and risk phrase(s) is specified in 15.REGULATORY INFORMATION.

SECTION 4 FIRST AID MEASURES

- Inhalation** : Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult a doctor if symptoms persist.
- Ingestion** : Immediately consult a doctor.
- Eye** : Wash the eyes immediately with large amounts of running water for over 15 minutes, and consult a doctor for medical advice.
- Skin** : Wipe off with dry cloth and wash with soap and water. If irritation persists, consult a doctor for medical advice.

SECTION 5 FIRE-FIGHTING MEASURES

- Suitable extinguishing agents** : Dry chemical powder, foam or carbon dioxide.
- For safety reasons unsuitable extinguishing agents** : Water.
- Protective equipment** : Mount respiratory protective device.

SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions** : Avoid contact with skin, eyes and clothing.
- Environmental Precautions** : Do not release to sewer, surface water or ground water.
- Method for Cleaning Up** : Wipe off with wet cloth or paper.

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Avoid inhalation and ingestion.
In case of contact, wash out the contaminated area immediately.
- Storage** : Keep in a cool and dry place. Protect from sunlight.
Keep away from heat and flame.
Keep out of the reach of children.
- Specific Uses** : Ink for permanent marker

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- EXPOSURE LIMIT VALUES** : EH40/2005 Workplace exposure limits
64-17-5 ethanol
Long-term exposure limit (8-hour TWA reference period)
1000 ppm 1920 mg.m⁻³
67-63-0 Propan-2-ol
Long-term exposure limit (8-hour TWA reference period)
400 ppm 999 mg.m⁻³
Short-term exposure limit (15-minute reference period)
500 ppm 1250 mg.m⁻³
71-23-8 Propan-1-ol
Long-term exposure limit (8-hour TWA reference period)
200 ppm 500 mg.m⁻³
Short-term exposure limit (15-minute reference period)
250 ppm 625 mg.m⁻³
- EXPOSURE CONTROLS** : Use adequate ventilation.
- PERSONAL PROTECTION** : Respiratory Protection
Use with local exhaust ventilation, when in long use.

- : Hand Protection
Not required, but wear safety gloves, if necessary.
- : Eye Protection
Not required, but wear safety glasses, if necessary.
- : Skin Protection
To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Black liquid
- Odor** : minor solvent odor
- pH:** : Not applicable
- Boiling point / boiling range** : No data available
- Flash point** : 13 °C (closed cup)
- Explosive properties** : None
- Relative Density (at 25°C)** : 0.9~1.0 (g/cm³)
- Solubility in Water** : Insoluble

SECTION 10 STABILITY AND REACTIVITY

- Stability** : Stable
- Conditions to Avoid** : High temperature, Direct sunlight, Fire
- Materials to avoided** : Strong acid and base
- 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
[Propan-2-ol]			
Oral-rat	LD50		2,000-5,000mg/kg
Dermal-rabbit	LD50		>5,000mg/kg
[Propan-1-ol]			
Oral-rat	LD50		1,900mg/kg
Dermal-rabbit	LD50		6,700mg/kg
- Other information** : Product specific toxicological data are not known.

SECTION 12 ECOLOGICAL INFORMATION

- General notes** : Do not allow product to reach ground water, water course or sewage system.
- Ecotoxicity** : No data available
- Bioaccumulation** : No data available
- Other Adverse Effects** : No data available

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 : 1210
 UN Shipping Name : Printing ink
 UN Classification : 3
 UN Packing Group : II

SECTION 15 REGULATORY INFORMATION

< EU Information >

[ethanol]

Symbol : F : Highly flammable
 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.

[Propan-2-ol]

Symbol : F : Highly flammable
 Xi : Irritant
 R-Phrase : R11 : Highly flammable.
 R36 : Irritating to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 : Keep out of the reach of children.
 S7 : Keep container tightly closed.
 S16 : Keep away from sources of ignition - No smoking.
 S24/25 : Avoid contact with skin and eyes.
 S26 : In case of contact with eyes, rinse immediately with plenty of water
 and seek medical advice.

[Propan-1-ol]

Symbol : F : Highly flammable
 Xi : Irritant
 R-Phrase : R11 : Highly flammable.
 R41 : Risk of serious damage to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 : Keep out of the reach of children.
 S7 : Keep container tightly closed.
 S16 : Keep away from sources of ignition - No smoking.
 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.

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 information is furnished in good faith as our present best knowledge of Shachihata Inc. No warranty, either expressed or implied, is hereby made. The Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulations. In no event will the company/manufacturer be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

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Product Name : Artline WHITEBOARD MARKER EK-525T
 Artline WHITEBOARD MARKER EK-525TT
 Artline WHITEBOARD MARKER EK-541T

Color : (Blue)



Supplier : Shachihata (Europe) Limited
 Artline Point, Ashville Way, Sutton Weaver, Runcorn, Cheshire WA7 3EZ. UK
 Telephone: 0870 600 5 006 Fax: 0871 200 5 006

Manufacturer : Shachihata Inc. [Japan]
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Use of the Product : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

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Symbols and indications of danger specific



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Xn : Harmful
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Hazard designation

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Substance/Preparation : Preparation

Ingredients :

Chemical Name / Generic name	Composition weight %	EC Registry No.	CAS Registry No.	EU Symbol/ R-Phrase
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Propan-2-ol	35~45	200-661-7	67-63-0	R11-Xi; R36-67
Propan-1-ol	5~15	200-746-9	71-23-8	F; R11 Xi; R41-R67
Organic pigment	1~10	Confidential	Confidential	Not required
Synthetic resin	1~10	Confidential	Confidential	Not required
Additive	1~10	Confidential	Confidential	Not required

The wording of the symbol(s) and risk phrase(s) is specified in 15.REGULATORY INFORMATION.

SECTION 4 FIRST AID MEASURES

- Inhalation** : Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult a doctor if symptoms persist.
- Ingestion** : Immediately consult a doctor.
- Eye** : Wash the eyes immediately with large amounts of running water for over 15 minutes, and consult a doctor for medical advice.
- Skin** : Wipe off with dry cloth and wash with soap and water. If irritation persists, consult a doctor for medical advice.

SECTION 5 FIRE-FIGHTING MEASURES

- Suitable extinguishing agents** : Dry chemical powder, foam or carbon dioxide.
- For safety reasons unsuitable extinguishing agents** : Water.
- Protective equipment** : Mount respiratory protective device.

SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions** : Avoid contact with skin, eyes and clothing.
- Environmental Precautions** : Do not release to sewer, surface water or ground water.
- Method for Cleaning Up** : Wipe off with wet cloth or paper.

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Avoid inhalation and ingestion.
In case of contact, wash out the contaminated area immediately.
- Storage** : Keep in a cool and dry place. Protect from sunlight.
Keep away from heat and flame.
Keep out of the reach of children.
- Specific Uses** : Ink for permanent marker

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- EXPOSURE LIMIT VALUES** : EH40/2005 Workplace exposure limits
64-17-5 ethanol
Long-term exposure limit (8-hour TWA reference period)
1000 ppm 1920 mg.m⁻³
67-63-0 Propan-2-ol
Long-term exposure limit (8-hour TWA reference period)
400 ppm 999 mg.m⁻³
Short-term exposure limit (15-minute reference period)
500 ppm 1250 mg.m⁻³
71-23-8 Propan-1-ol
Long-term exposure limit (8-hour TWA reference period)
200 ppm 500 mg.m⁻³
Short-term exposure limit (15-minute reference period)
250 ppm 625 mg.m⁻³
- EXPOSURE CONTROLS** : Use adequate ventilation.
- PERSONAL PROTECTION** : Respiratory Protection
Use with local exhaust ventilation, when in long use.

- : Hand Protection
Not required, but wear safety gloves, if necessary.
- : Eye Protection
Not required, but wear safety glasses, if necessary.
- : Skin Protection
To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Blue liquid
- Odor** : minor solvent odor
- pH:** : Not applicable
- Boiling point / boiling range** : No data available
- Flash point** : 13 °C (closed cup)
- Explosive properties** : None
- Relative Density (at 25°C)** : 0.9~1.0 (g/cm³)
- Solubility in Water** : Insoluble

SECTION 10 STABILITY AND REACTIVITY

- Stability** : Stable
- Conditions to Avoid** : High temperature, Direct sunlight, Fire
- Materials to avoided** : Strong acid and base
- 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
[Propan-2-ol]			
Oral-rat	LD50		2,000-5,000mg/kg
Dermal-rabbit	LD50		>5,000mg/kg
[Propan-1-ol]			
Oral-rat	LD50		1,900mg/kg
Dermal-rabbit	LD50		6,700mg/kg
- Other information** : Product specific toxicological data are not known.

SECTION 12 ECOLOGICAL INFORMATION

- General notes** : Do not allow product to reach ground water, water course or sewage system.
- Ecotoxicity** : No data available
- Bioaccumulation** : No data available
- Other Adverse Effects** : No data available

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 : 1210
 UN Shipping Name : Printing ink
 UN Classification : 3
 UN Packing Group : II

SECTION 15 REGULATORY INFORMATION

< EU Information >

[ethanol]

Symbol : F : Highly flammable
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 S-Phrase : S2 : Keep out of the reach of children.
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[Propan-2-ol]

Symbol : F : Highly flammable
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 R-Phrase : R11 : Highly flammable.
 R36 : Irritating to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
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 S16 : Keep away from sources of ignition - No smoking.
 S24/25 : Avoid contact with skin and eyes.
 S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

[Propan-1-ol]

Symbol : F : Highly flammable
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 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.

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).

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SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name : Artline WHITEBOARD MARKER EK-525T
Artline WHITEBOARD MARKER EK-541T

Color : (Brown)

Supplier : Shachihata (Europe) Limited
Artline Point, Ashville Way, Sutton Weaver, Runcorn, Cheshire WA7 3EZ. UK
Telephone: 0870 600 5 006 Fax: 0871 200 5 006

Manufacturer : Shachihata Inc. [Japan]
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e-mail address of person responsible for this SDS : www.artline-xstamper.com

Emergency information : Telephone: 0870 600 5 006

Use of the Product : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Symbols and indications of danger specific



F : Highly flammable



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Substance/Preparation : Preparation

Ingredients :

Chemical Name / Generic name	Composition weight %	EC Registry No.	CAS Registry No.	EU Symbol/ R-Phrase
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Propan-2-ol	30~40	200-661-7	67-63-0	R11-Xi; R36-67
Propan-1-ol	5~15	200-746-9	71-23-8	F; R11 Xi; R41-R67
Organic pigment	1~10	Confidential	Confidential	Not required
Synthetic resin	1~10	Confidential	Confidential	Not required
Additive	1~10	Confidential	Confidential	Not required

The wording of the symbol(s) and risk phrase(s) is specified in 15.REGULATORY INFORMATION.

SECTION 4 FIRST AID MEASURES

- Inhalation** : Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult a doctor if symptoms persist.
- Ingestion** : Immediately consult a doctor.
- Eye** : Wash the eyes immediately with large amounts of running water for over 15 minutes, and consult a doctor for medical advice.
- Skin** : Wipe off with dry cloth and wash with soap and water. If irritation persists, consult a doctor for medical advice.

SECTION 5 FIRE-FIGHTING MEASURES

- Suitable extinguishing agents** : Dry chemical powder, foam or carbon dioxide.
- For safety reasons unsuitable extinguishing agents** : Water.
- Protective equipment** : Mount respiratory protective device.

SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions** : Avoid contact with skin, eyes and clothing.
- Environmental Precautions** : Do not release to sewer, surface water or ground water.
- Method for Cleaning Up** : Wipe off with wet cloth or paper.

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Avoid inhalation and ingestion.
In case of contact, wash out the contaminated area immediately.
- Storage** : Keep in a cool and dry place. Protect from sunlight.
Keep away from heat and flame.
Keep out of the reach of children.
- Specific Uses** : Ink for permanent marker

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- EXPOSURE LIMIT VALUES** : EH40/2005 Workplace exposure limits
64-17-5 ethanol
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- PERSONAL PROTECTION** : Respiratory Protection
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- : Hand Protection
Not required, but wear safety gloves, if necessary.
- : Eye Protection
Not required, but wear safety glasses, if necessary.
- : Skin Protection
To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Brown liquid
- Odor** : minor solvent odor
- pH:** : Not applicable
- Boiling point / boiling range** : No data available
- Flash point** : 13 °C (closed cup)
- Explosive properties** : None
- Relative Density (at 25°C)** : 0.9~1.0 (g/cm³)
- Solubility in Water** : Insoluble

SECTION 10 STABILITY AND REACTIVITY

- Stability** : Stable
- Conditions to Avoid** : High temperature, Direct sunlight, Fire
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- Acute toxicity** : LD/LC50 values that are relevant for classification

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- Other information** : Product specific toxicological data are not known.

SECTION 12 ECOLOGICAL INFORMATION

- General notes** : Do not allow product to reach ground water, water course or sewage system.
- Ecotoxicity** : No data available
- Bioaccumulation** : No data available
- Other Adverse Effects** : No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal must be made according to official regulations.

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SECTION 14 TRANSPORT INFORMATION

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SECTION 15 REGULATORY INFORMATION

< EU Information >

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 S26 : In case of contact with eyes, rinse immediately with plenty of water
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 Artline WHITEBOARD MARKER EK-541T

 Color : (Green)



Supplier : Shachihata (Europe) Limited
 Artline Point, Ashville Way, Sutton Weaver, Runcorn, Cheshire WA7 3EZ. UK
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Manufacturer : Shachihata Inc. [Japan]
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e-mail address of person responsible for this SDS : www.artline-xstamper.com

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Propan-1-ol	5~15	200-746-9	71-23-8	F; R11 Xi; R41-R67
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- Skin** : Wipe off with dry cloth and wash with soap and water. If irritation persists, consult a doctor for medical advice.

SECTION 5 FIRE-FIGHTING MEASURES

- Suitable extinguishing agents** : Dry chemical powder, foam or carbon dioxide.
- For safety reasons unsuitable extinguishing agents** : Water.
- Protective equipment** : Mount respiratory protective device.

SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions** : Avoid contact with skin, eyes and clothing.
- Environmental Precautions** : Do not release to sewer, surface water or ground water.
- Method for Cleaning Up** : Wipe off with wet cloth or paper.

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Avoid inhalation and ingestion.
In case of contact, wash out the contaminated area immediately.
- Storage** : Keep in a cool and dry place. Protect from sunlight.
Keep away from heat and flame.
Keep out of the reach of children.
- Specific Uses** : Ink for permanent marker

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- EXPOSURE LIMIT VALUES** : EH40/2005 Workplace exposure limits
64-17-5 ethanol
Long-term exposure limit (8-hour TWA reference period)
1000 ppm 1920 mg.m⁻³
67-63-0 Propan-2-ol
Long-term exposure limit (8-hour TWA reference period)
400 ppm 999 mg.m⁻³
Short-term exposure limit (15-minute reference period)
500 ppm 1250 mg.m⁻³
71-23-8 Propan-1-ol
Long-term exposure limit (8-hour TWA reference period)
200 ppm 500 mg.m⁻³
Short-term exposure limit (15-minute reference period)
250 ppm 625 mg.m⁻³
- EXPOSURE CONTROLS** : Use adequate ventilation.
- PERSONAL PROTECTION** : Respiratory Protection
Use with local exhaust ventilation, when in long use.

- : Hand Protection
Not required, but wear safety gloves, if necessary.
- : Eye Protection
Not required, but wear safety glasses, if necessary.
- : Skin Protection
To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Green liquid
- Odor** : minor solvent odor
- pH:** : Not applicable
- Boiling point / boiling range** : No data available
- Flash point** : 13 °C (closed cup)
- Explosive properties** : None
- Relative Density (at 25°C)** : 0.9~1.0 (g/cm³)
- Solubility in Water** : Insoluble

SECTION 10 STABILITY AND REACTIVITY

- Stability** : Stable
- Conditions to Avoid** : High temperature, Direct sunlight, Fire
- Materials to avoided** : Strong acid and base
- 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
[Propan-2-ol]			
Oral-rat	LD50		2,000-5,000mg/kg
Dermal-rabbit	LD50		>5,000mg/kg
[Propan-1-ol]			
Oral-rat	LD50		1,900mg/kg
Dermal-rabbit	LD50		6,700mg/kg
- Other information** : Product specific toxicological data are not known.

SECTION 12 ECOLOGICAL INFORMATION

- General notes** : Do not allow product to reach ground water, water course or sewage system.
- Ecotoxicity** : No data available
- Bioaccumulation** : No data available
- Other Adverse Effects** : No data available

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 : 1210
 UN Shipping Name : Printing ink
 UN Classification : 3
 UN Packing Group : II

SECTION 15 REGULATORY INFORMATION

< EU Information >

[ethanol]

Symbol : F : Highly flammable
 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.

[Propan-2-ol]

Symbol : F : Highly flammable
 Xi : Irritant
 R-Phrase : R11 : Highly flammable.
 R36 : Irritating to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 : Keep out of the reach of children.
 S7 : Keep container tightly closed.
 S16 : Keep away from sources of ignition - No smoking.
 S24/25 : Avoid contact with skin and eyes.
 S26 : In case of contact with eyes, rinse immediately with plenty of water
 and seek medical advice.

[Propan-1-ol]

Symbol : F : Highly flammable
 Xi : Irritant
 R-Phrase : R11 : Highly flammable.
 R41 : Risk of serious damage to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 : Keep out of the reach of children.
 S7 : Keep container tightly closed.
 S16 : Keep away from sources of ignition - No smoking.
 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.

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 information is furnished in good faith as our present best knowledge of Shachihata Inc. No warranty, either expressed or implied, is hereby made. The Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulations. In no event will the company/manufacturer be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

SAFETY DATA SHEET

according to Regulation (EC) 1907/2006

Date of Issue: Jan 11,2012

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name : Artline WHITEBOARD MARKER EK-525T
Artline WHITEBOARD MARKER EK-541T

Color : (Orange)

Supplier : Shachihata (Europe) Limited
Artline Point, Ashville Way, Sutton Weaver, Runcorn, Cheshire WA7 3EZ. UK
Telephone: 0870 600 5 006 Fax: 0871 200 5 006

Manufacturer : Shachihata Inc. [Japan]
4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
Telephone:+ 81- 52- 521- 3600 Fax: +81- 52- 521- 3899

e-mail address of person responsible for this SDS : www.artline-xstamper.com

Emergency information : Telephone: 0870 600 5 006

Use of the Product : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Symbols and indications of danger specific



F : Highly flammable



Xn : Harmful
Xi : Irritant

Hazard designation

R11 : Highly flammable.

R36 : Irritating to eyes.

R41 : Risk of serious damage to eyes.

R67 : Vapours may cause drowsiness and dizziness.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation : Preparation

Ingredients :

Chemical Name / Generic name	Composition weight %	EC Registry No.	CAS Registry No.	EU Symbol/ R-Phrase
Ethanol	35~45	200-578-6	64-17-5	F: R11
Propan-2-ol	30~40	200-661-7	67-63-0	R11-Xi; R36-67
Propan-1-ol	5~15	200-746-9	71-23-8	F; R11 Xi; R41-R67
Organic pigment	1~10	Confidential	Confidential	Not required
Synthetic resin	1~10	Confidential	Confidential	Not required
Additive	1~10	Confidential	Confidential	Not required

The wording of the symbol(s) and risk phrase(s) is specified in 15.REGULATORY INFORMATION.

SECTION 4 FIRST AID MEASURES

- Inhalation** : Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult a doctor if symptoms persist.
- Ingestion** : Immediately consult a doctor.
- Eye** : Wash the eyes immediately with large amounts of running water for over 15 minutes, and consult a doctor for medical advice.
- Skin** : Wipe off with dry cloth and wash with soap and water. If irritation persists, consult a doctor for medical advice.

SECTION 5 FIRE-FIGHTING MEASURES

- Suitable extinguishing agents** : Dry chemical powder, foam or carbon dioxide.
- For safety reasons unsuitable extinguishing agents** : Water.
- Protective equipment** : Mount respiratory protective device.

SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions** : Avoid contact with skin, eyes and clothing.
- Environmental Precautions** : Do not release to sewer, surface water or ground water.
- Method for Cleaning Up** : Wipe off with wet cloth or paper.

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Avoid inhalation and ingestion.
In case of contact, wash out the contaminated area immediately.
- Storage** : Keep in a cool and dry place. Protect from sunlight.
Keep away from heat and flame.
Keep out of the reach of children.
- Specific Uses** : Ink for permanent marker

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- EXPOSURE LIMIT VALUES** : EH40/2005 Workplace exposure limits
64-17-5 ethanol
Long-term exposure limit (8-hour TWA reference period)
1000 ppm 1920 mg.m⁻³
67-63-0 Propan-2-ol
Long-term exposure limit (8-hour TWA reference period)
400 ppm 999 mg.m⁻³
Short-term exposure limit (15-minute reference period)
500 ppm 1250 mg.m⁻³
71-23-8 Propan-1-ol
Long-term exposure limit (8-hour TWA reference period)
200 ppm 500 mg.m⁻³
Short-term exposure limit (15-minute reference period)
250 ppm 625 mg.m⁻³
- EXPOSURE CONTROLS** : Use adequate ventilation.
- PERSONAL PROTECTION** : Respiratory Protection
Use with local exhaust ventilation, when in long use.

- : Hand Protection
Not required, but wear safety gloves, if necessary.
- : Eye Protection
Not required, but wear safety glasses, if necessary.
- : Skin Protection
To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Orange liquid
- Odor** : minor solvent odor
- pH:** : Not applicable
- Boiling point / boiling range** : No data available
- Flash point** : 13 °C (closed cup)
- Explosive properties** : None
- Relative Density (at 25°C)** : 0.9~1.0 (g/cm³)
- Solubility in Water** : Insoluble

SECTION 10 STABILITY AND REACTIVITY

- Stability** : Stable
- Conditions to Avoid** : High temperature, Direct sunlight, Fire
- Materials to avoided** : Strong acid and base
- 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
[Propan-2-ol]			
Oral-rat	LD50		2,000-5,000mg/kg
Dermal-rabbit	LD50		>5,000mg/kg
[Propan-1-ol]			
Oral-rat	LD50		1,900mg/kg
Dermal-rabbit	LD50		6,700mg/kg
- Other information** : Product specific toxicological data are not known.

SECTION 12 ECOLOGICAL INFORMATION

- General notes** : Do not allow product to reach ground water, water course or sewage system.
- Ecotoxicity** : No data available
- Bioaccumulation** : No data available
- Other Adverse Effects** : No data available

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 : 1210
 UN Shipping Name : Printing ink
 UN Classification : 3
 UN Packing Group : II

SECTION 15 REGULATORY INFORMATION

< EU Information >

[ethanol]

Symbol : F : Highly flammable
 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.

[Propan-2-ol]

Symbol : F : Highly flammable
 Xi : Irritant
 R-Phrase : R11 : Highly flammable.
 R36 : Irritating to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 : Keep out of the reach of children.
 S7 : Keep container tightly closed.
 S16 : Keep away from sources of ignition - No smoking.
 S24/25 : Avoid contact with skin and eyes.
 S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

[Propan-1-ol]

Symbol : F : Highly flammable
 Xi : Irritant
 R-Phrase : R11 : Highly flammable.
 R41 : Risk of serious damage to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 : Keep out of the reach of children.
 S7 : Keep container tightly closed.
 S16 : Keep away from sources of ignition - No smoking.
 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.

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 information is furnished in good faith as our present best knowledge of Shachihata Inc. No warranty, either expressed or implied, is hereby made. The Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulations. In no event will the company/manufacturer be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

SAFETY DATA SHEET

according to Regulation (EC) 1907/2006

Date of Issue: Jan 11,2012

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name : Artline WHITEBOARD MARKER EK-525T
 Artline WHITEBOARD MARKER EK-541T

Color : (Pink)

Supplier : Shachihata (Europe) Limited
 Artline Point, Ashville Way, Sutton Weaver, Runcorn, Cheshire WA7 3EZ. UK
 Telephone: 0870 600 5 006 Fax: 0871 200 5 006

Manufacturer : Shachihata Inc. [Japan]
 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
 Telephone:+ 81- 52- 521- 3600 Fax: +81- 52- 521- 3899

e-mail address of person responsible for this SDS : www.artline-xstamper.com

Emergency information : Telephone: 0870 600 5 006

Use of the Product : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Symbols and indications of danger specific



F : Highly flammable



Xn : Harmful
 Xi : Irritant

Hazard designation

- R11 : Highly flammable.
- R36 : Irritating to eyes.
- R41 : Risk of serious damage to eyes.
- R67 : Vapours may cause drowsiness and dizziness.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation : Preparation

Ingredients :

Chemical Name / Generic name	Composition weight %	EC Registry No.	CAS Registry No.	EU Symbol/ R-Phrase
Ethanol	35~45	200-578-6	64-17-5	F: R11
Propan-2-ol	30~40	200-661-7	67-63-0	R11-Xi; R36-67
Propan-1-ol	5~15	200-746-9	71-23-8	F; R11 Xi; R41-R67
Organic pigment	1~10	Confidential	Confidential	Not required
Synthetic resin	1~10	Confidential	Confidential	Not required
Additive	1~10	Confidential	Confidential	Not required

The wording of the symbol(s) and risk phrase(s) is specified in 15.REGULATORY INFORMATION.

SECTION 4 FIRST AID MEASURES

- Inhalation** : Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult a doctor if symptoms persist.
- Ingestion** : Immediately consult a doctor.
- Eye** : Wash the eyes immediately with large amounts of running water for over 15 minutes, and consult a doctor for medical advice.
- Skin** : Wipe off with dry cloth and wash with soap and water. If irritation persists, consult a doctor for medical advice.

SECTION 5 FIRE-FIGHTING MEASURES

- Suitable extinguishing agents** : Dry chemical powder, foam or carbon dioxide.
- For safety reasons unsuitable extinguishing agents** : Water.
- Protective equipment** : Mount respiratory protective device.

SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions** : Avoid contact with skin, eyes and clothing.
- Environmental Precautions** : Do not release to sewer, surface water or ground water.
- Method for Cleaning Up** : Wipe off with wet cloth or paper.

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Avoid inhalation and ingestion.
In case of contact, wash out the contaminated area immediately.
- Storage** : Keep in a cool and dry place. Protect from sunlight.
Keep away from heat and flame.
Keep out of the reach of children.
- Specific Uses** : Ink for permanent marker

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- EXPOSURE LIMIT VALUES** : EH40/2005 Workplace exposure limits
64-17-5 ethanol
Long-term exposure limit (8-hour TWA reference period)
1000 ppm 1920 mg.m⁻³
67-63-0 Propan-2-ol
Long-term exposure limit (8-hour TWA reference period)
400 ppm 999 mg.m⁻³
Short-term exposure limit (15-minute reference period)
500 ppm 1250 mg.m⁻³
71-23-8 Propan-1-ol
Long-term exposure limit (8-hour TWA reference period)
200 ppm 500 mg.m⁻³
Short-term exposure limit (15-minute reference period)
250 ppm 625 mg.m⁻³
- EXPOSURE CONTROLS** : Use adequate ventilation.
- PERSONAL PROTECTION** : Respiratory Protection
Use with local exhaust ventilation, when in long use.

- : Hand Protection
Not required, but wear safety gloves, if necessary.
- : Eye Protection
Not required, but wear safety glasses, if necessary.
- : Skin Protection
To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Pink liquid
- Odor** : minor solvent odor
- pH:** : Not applicable
- Boiling point / boiling range** : No data available
- Flash point** : 13 °C (closed cup)
- Explosive properties** : None
- Relative Density (at 25°C)** : 0.9~1.0 (g/cm³)
- Solubility in Water** : Insoluble

SECTION 10 STABILITY AND REACTIVITY

- Stability** : Stable
- Conditions to Avoid** : High temperature, Direct sunlight, Fire
- Materials to avoided** : Strong acid and base
- 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
[Propan-2-ol]			
Oral-rat	LD50		2,000-5,000mg/kg
Dermal-rabbit	LD50		>5,000mg/kg
[Propan-1-ol]			
Oral-rat	LD50		1,900mg/kg
Dermal-rabbit	LD50		6,700mg/kg
- Other information** : Product specific toxicological data are not known.

SECTION 12 ECOLOGICAL INFORMATION

- General notes** : Do not allow product to reach ground water, water course or sewage system.
- Ecotoxicity** : No data available
- Bioaccumulation** : No data available
- Other Adverse Effects** : No data available

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 : 1210
 UN Shipping Name : Printing ink
 UN Classification : 3
 UN Packing Group : II

SECTION 15 REGULATORY INFORMATION

< EU Information >

[ethanol]

Symbol : F : Highly flammable
 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.

[Propan-2-ol]

Symbol : F : Highly flammable
 Xi : Irritant
 R-Phrase : R11 : Highly flammable.
 R36 : Irritating to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 : Keep out of the reach of children.
 S7 : Keep container tightly closed.
 S16 : Keep away from sources of ignition - No smoking.
 S24/25 : Avoid contact with skin and eyes.
 S26 : In case of contact with eyes, rinse immediately with plenty of water
 and seek medical advice.

[Propan-1-ol]

Symbol : F : Highly flammable
 Xi : Irritant
 R-Phrase : R11 : Highly flammable.
 R41 : Risk of serious damage to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 : Keep out of the reach of children.
 S7 : Keep container tightly closed.
 S16 : Keep away from sources of ignition - No smoking.
 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.

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 information is furnished in good faith as our present best knowledge of Shachihata Inc. No warranty, either expressed or implied, is hereby made. The Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulations. In no event will the company/manufacturer be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

SAFETY DATA SHEET

according to Regulation (EC) 1907/2006

Date of Issue: Jan 11,2012

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name : Artline WHITEBOARD MARKER EK-525T
 Artline WHITEBOARD MARKER EK-541T

Color : (Purple)



Supplier : Shachihata (Europe) Limited
 Artline Point, Ashville Way, Sutton Weaver, Runcorn, Cheshire WA7 3EZ. UK
 Telephone: 0870 600 5 006 Fax: 0871 200 5 006

Manufacturer : Shachihata Inc. [Japan]
 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
 Telephone:+ 81- 52- 521- 3600 Fax: +81- 52- 521- 3899

e-mail address of person responsible for this SDS : www.artline-xstamper.com

Emergency information : Telephone: 0870 600 5 006

Use of the Product : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Symbols and indications of danger specific



F : Highly flammable



Xn : Harmful
 Xi : Irritant

Hazard designation

- R11 : Highly flammable.
- R36 : Irritating to eyes.
- R41 : Risk of serious damage to eyes.
- R67 : Vapours may cause drowsiness and dizziness.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation : Preparation

Ingredients :

Chemical Name / Generic name	Composition weight %	EC Registry No.	CAS Registry No.	EU Symbol/ R-Phrase
Ethanol	45~55	200-578-6	64-17-5	F: R11
Propan-2-ol	30~40	200-661-7	67-63-0	R11·Xi; R36·67
Organic pigment	1~10	Confidential	Confidential	Not required
Synthetic resin	1~10	Confidential	Confidential	Not required
Additive	1~10	Confidential	Confidential	Not required

The wording of the symbol(s) and risk phrase(s) is specified in 15.REGULATORY INFORMATION.

SECTION 4 FIRST AID MEASURES

Inhalation : Supply fresh air. If required, provide artificial respiration. Keep patient warm.
 Consult a doctor if symptoms persist.

- Ingestion** : Immediately consult a doctor.
- Eye** : Wash the eyes immediately with large amounts of running water for over 15 minutes, and consult a doctor for medical advice.
- Skin** : Wipe off with dry cloth and wash with soap and water.
If irritation persists, consult a doctor for medical advice.

SECTION 5 FIRE-FIGHTING MEASURES

- Suitable extinguishing agents** : Dry chemical powder, foam or carbon dioxide.
- For safety reasons unsuitable extinguishing agents** : Water.
- Protective equipment** : Mount respiratory protective device.

SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions** : Avoid contact with skin, eyes and clothing.
- Environmental Precautions** : Do not release to sewer, surface water or ground water.
- Method for Cleaning Up** : Wipe off with wet cloth or paper.

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Avoid inhalation and ingestion.
In case of contact, wash out the contaminated area immediately.
- Storage** : Keep in a cool and dry place. Protect from sunlight.
Keep away from heat and flame.
Keep out of the reach of children.
- Specific Uses** : Ink for permanent marker

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- EXPOSURE LIMIT VALUES** : EH40/2005 Workplace exposure limits
64-17-5 ethanol
Long-term exposure limit (8-hour TWA reference period)
1000 ppm 1920 mg.m⁻³
67-63-0 Propan-2-ol
Long-term exposure limit (8-hour TWA reference period)
400 ppm 999 mg.m⁻³
Short-term exposure limit (15-minute reference period)
500 ppm 1250 mg.m⁻³
- EXPOSURE CONTROLS** : Use adequate ventilation.
- PERSONAL PROTECTION** : Respiratory Protection
Use with local exhaust ventilation, when in long use.
: Hand Protection
Not required, but wear safety gloves, if necessary.
: Eye Protection
Not required, but wear safety glasses, if necessary.
: Skin Protection
To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Purple liquid
Odor	: minor solvent odor
pH:	: Not applicable
Boiling point / boiling range	: No data available
Flash point	: 13 °C (closed cup)
Explosive properties	: None
Relative Density (at 25°C)	: 0.9~1.0 (g/cm ³)
Solubility in Water	: Insoluble

SECTION 10 STABILITY AND REACTIVITY

Stability	: Stable
Conditions to Avoid	: High temperature, Direct sunlight, Fire
Materials to avoided	: Strong acid and base
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
	[Propan-2-ol]
	Oral-rat LD50 2,000-5,000mg/kg
	Dermal-rabbit LD50 >5,000mg/kg
Other information	: Product specific toxicological data are not known.

SECTION 12 ECOLOGICAL INFORMATION

General notes	: Do not allow product to reach ground water, water course or sewage system.
Ecotoxicity	: No data available
Bioaccumulation	: No data available
Other Adverse Effects	: No data available

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	: 1210
UN Shipping Name	: Printing ink
UN Classification	: 3
UN Packing Group	: II

SECTION 15 REGULATORY INFORMATION

< EU Information >

[ethanol]

Symbol : F : Highly flammable
 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.

[Propan-2-ol]

Symbol : F : Highly flammable
 Xi : Irritant
 R-Phrase : R11 : Highly flammable.
 R36 : Irritating to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 : Keep out of the reach of children.
 S7 : Keep container tightly closed.
 S16 : Keep away from sources of ignition - No smoking.
 S24/25 : Avoid contact with skin and eyes.
 S26 : In case of contact with eyes, rinse immediately with plenty of water
 and seek medical advice.

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 information is furnished in good faith as our present best knowledge of Shachihata Inc. No warranty,either expressed or implied,is hereby made. The Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal,state and local laws and regulations. In no event will the company/manufacturer be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

SAFETY DATA SHEET

according to Regulation (EC) 1907/2006

Date of Issue: Jan 11,2012

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name : Artline WHITEBOARD MARKER EK-525T
 Artline WHITEBOARD MARKER EK-525TT
 Artline WHITEBOARD MARKER EK-541T

 Color : (Red)



Supplier : Shachihata (Europe) Limited
 Artline Point, Ashville Way, Sutton Weaver, Runcorn, Cheshire WA7 3EZ. UK
 Telephone: 0870 600 5 006 Fax: 0871 200 5 006

Manufacturer : Shachihata Inc. [Japan]
 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
 Telephone:+ 81- 52- 521- 3600 Fax: +81- 52- 521- 3899

e-mail address of person responsible for this SDS : www.artline-xstamper.com

Emergency information : Telephone: 0870 600 5 006

Use of the Product : Permanent marker ink



SECTION 2 HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Symbols and indications of danger specific



F : Highly flammable



Xn : Harmful
Xi : Irritant

Hazard designation

- R11 : Highly flammable.
- R36 : Irritating to eyes.
- R41 : Risk of serious damage to eyes.
- R67 : Vapours may cause drowsiness and dizziness.



SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation : Preparation

Ingredients :

Chemical Name / Generic name	Composition weight %	EC Registry No.	CAS Registry No.	EU Symbol/ R-Phrase
Ethanol	30~40	200-578-6	64-17-5	F: R11
Propan-2-ol	35~45	200-661-7	67-63-0	R11-Xi; R36-67
Propan-1-ol	5~15	200-746-9	71-23-8	F; R11 Xi; R41-R67
Organic pigment	1~10	Confidential	Confidential	Not required
Synthetic resin	1~10	Confidential	Confidential	Not required
Additive	1~10	Confidential	Confidential	Not required

The wording of the symbol(s) and risk phrase(s) is specified in 15.REGULATORY INFORMATION.

SECTION 4 FIRST AID MEASURES

- Inhalation** : Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult a doctor if symptoms persist.
- Ingestion** : Immediately consult a doctor.
- Eye** : Wash the eyes immediately with large amounts of running water for over 15 minutes, and consult a doctor for medical advice.
- Skin** : Wipe off with dry cloth and wash with soap and water. If irritation persists, consult a doctor for medical advice.

SECTION 5 FIRE-FIGHTING MEASURES

- Suitable extinguishing agents** : Dry chemical powder, foam or carbon dioxide.
- For safety reasons unsuitable extinguishing agents** : Water.
- Protective equipment** : Mount respiratory protective device.

SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions** : Avoid contact with skin, eyes and clothing.
- Environmental Precautions** : Do not release to sewer, surface water or ground water.
- Method for Cleaning Up** : Wipe off with wet cloth or paper.

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
Avoid contact with skin, eyes and clothing.
Avoid inhalation and ingestion.
In case of contact, wash out the contaminated area immediately.
- Storage** : Keep in a cool and dry place. Protect from sunlight.
Keep away from heat and flame.
Keep out of the reach of children.
- Specific Uses** : Ink for permanent marker

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- EXPOSURE LIMIT VALUES** : EH40/2005 Workplace exposure limits
64-17-5 ethanol
Long-term exposure limit (8-hour TWA reference period)
1000 ppm 1920 mg.m⁻³
67-63-0 Propan-2-ol
Long-term exposure limit (8-hour TWA reference period)
400 ppm 999 mg.m⁻³
Short-term exposure limit (15-minute reference period)
500 ppm 1250 mg.m⁻³
71-23-8 Propan-1-ol
Long-term exposure limit (8-hour TWA reference period)
200 ppm 500 mg.m⁻³
Short-term exposure limit (15-minute reference period)
250 ppm 625 mg.m⁻³
- EXPOSURE CONTROLS** : Use adequate ventilation.
- PERSONAL PROTECTION** : Respiratory Protection
Use with local exhaust ventilation, when in long use.

- : Hand Protection
Not required, but wear safety gloves, if necessary.
- : Eye Protection
Not required, but wear safety glasses, if necessary.
- : Skin Protection
To prevent ANY contact, wear impervious clothing such as gloves, apron, as appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Red liquid
- Odor** : minor solvent odor
- pH:** : Not applicable
- Boiling point / boiling range** : No data available
- Flash point** : 13 °C (closed cup)
- Explosive properties** : None
- Relative Density (at 25°C)** : 0.9~1.0 (g/cm³)
- Solubility in Water** : Insoluble

SECTION 10 STABILITY AND REACTIVITY

- Stability** : Stable
- Conditions to Avoid** : High temperature, Direct sunlight, Fire
- Materials to avoided** : Strong acid and base
- 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
[Propan-2-ol]			
Oral-rat	LD50		2,000-5,000mg/kg
Dermal-rabbit	LD50		>5,000mg/kg
[Propan-1-ol]			
Oral-rat	LD50		1,900mg/kg
Dermal-rabbit	LD50		6,700mg/kg
- Other information** : Product specific toxicological data are not known.

SECTION 12 ECOLOGICAL INFORMATION

- General notes** : Do not allow product to reach ground water, water course or sewage system.
- Ecotoxicity** : No data available
- Bioaccumulation** : No data available
- Other Adverse Effects** : No data available

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 : 1210
 UN Shipping Name : Printing ink
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SECTION 15 REGULATORY INFORMATION

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[Propan-2-ol]

Symbol : F : Highly flammable
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 S16 : Keep away from sources of ignition - No smoking.
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 S26 : In case of contact with eyes, rinse immediately with plenty of water
 and seek medical advice.

[Propan-1-ol]

Symbol : F : Highly flammable
 Xi : Irritant
 R-Phrase : R11 : Highly flammable.
 R41 : Risk of serious damage to eyes.
 R67 : Vapours may cause drowsiness and dizziness.
 S-Phrase : S2 : Keep out of the reach of children.
 S7 : Keep container tightly closed.
 S16 : Keep away from sources of ignition - No smoking.
 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.

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,
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