SAFETY DATA SHEET

SDS No: SDS-LDT-03/08

Revision No: 1 Date of issue: 8/07/11

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Product name : Double Side Marker Pen

Name of the company: ARTEL S.A.I.C

Av. Presidente Eduardo Frei Montalva 9700, Quilicura.

Santiago de Chile. Tel : (56 2) 2 390 15 50

2. HAZARDS IDENTIFICATION

Note 1: (1)

Hazard classification of product (2): Not classified as hazardous

Hazard symbols and signal words (3): Not applicable
Risk / Safety (R/S) Phrases (4): Not applicable

Health effect of skin contact with molten polymer, see

Section 4.

Routes of exposure: Health effect of eye contact with ink, see Section 4.

Symptoms of exposure : Not applicable
Effects of acute exposure : Not applicable
Effects of chronic exposure : Not applicable
Conditions aggravated by exposure : Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Note 2: (5)

Ingredient name	CAS No.	EINECS No.	Conc'n %	Hazard symbols	R / S Phrases (6)	LC50 (Species & route)	LD50 (Species & route)	Exposure limit values
Water based ink	N/A	N/A	20.0	N/A	N/A	N/A	N/A	N/A
Polyester	N/A	N/A	5.0	N/A	N/A	N/A	N/A	N/A
Polyethylene	9002-88-4	N/A	35.0	N/A	N/A	N/A	N/A	N/A
Polypropylene	9003-07-0	N/A	40.0	N/A	N/A	N/A	N/A	N/A

4. FIRST AID MEASURES

Inhalation : Not applicable
Ingestion : Not applicable

If contact with molten product, treat as Thermal Burn

Skin contact: injury. Thermal burns require immediate medical attention.
Ink may cause eye irritation. Immediately flush with water

continuously for at least 15 minutes. Seek medical

Eye contact: attention as needed.

First aid is normally not required. If swallowed, obtain

Additional information: medical attention.

5. FIRE FIGHTING MEASURES

Conditions of flammability: Excessive heat at 200 Deg C.

Foam, water spray of fog, dry chemical powder, carbon

Suitable extinguishing media: dioxide.

Do not use water jets since they could help to spread the

Extinguishing media to be avoided: flames. Special fire fighting procedures: Not required

Special protective equipment for fire: Respiratory & eye protection.

> Treat solid that can burn. Molded parts generally burn slowly with a low smoke density & flaming drips. Under certain conditions can burn with a high smoke density.

Unusual fire / explosion hazard: Under Oxygen lean condition, Carbon monoxide & irritating

Hazardous combustion products: smoke may be produced.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Not required **Environmental precautions:** Not required

Methods for containment and

cleaning up: Pick up & collect in suitable container for disposal.

Special indications: Not required

7. HANDLING AND STORAGE

Handling procedures and equipment: Not required

Store in a cool, dry and well ventilated place, away from

Conditions for safe storage: direct heat or sunlight.

Precautions during handling and Avoid freezing, sparks & open flames. Do not store near

> storage: strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit values of product (7): Not established.

Personal protective equipment to be

used

Gloves / Type: Not required Not required Respiratory / Type: Not required Eye / Type: Footwear / Type: Not required Clothing / Type: Not required Other / Type: Not required

Specific engineering controls to be

Not required used:

Environmental exposure controls to

be used: Not required

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid

Appearance and odour: Solid & odourless Odour threshold (ppm): Not applicable

> Colour: As per product characteristic

pH: Not applicable Boiling point:

Freezing point:

Melting point:

Not applicable

Not applicable

> 165 Deg C

Flammability (Solid, Gas) : Not applicable

Flash point and method of

determination : Not applicable

Flammable limits

UFL / UEL : Not available
LFL / LEL : Not available
Auto ignition temperature : Not applicable

Explosion data : Not applicable
Sensitivity to mechanical impact : Not applicable
Sensitivity to static discharge : Not applicable
Vapour pressure (mmHg) : Not applicable

Specific gravity / Relative density

(H2O=1): Less than 1

Solubility(ies) : Insoluble

Coefficient of H2O / oil distribution : Not applicable

Viscosity in centistokes or SUS (at 40

deg C or 100 deg F):

Vapour density (Air = 1):

Decomposition temperature:

More 250deg C

Evaporation rate (Butyl Acetate = 1):

Not applicable

Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: Product is stable.

Conditions of reactivity: Excessive heat at 200 Deg C.

Incompatible materials and

conditions : Strong oxidizing agent.

Under Oxygen lean condition, Carbon monoxide & irritating

Hazardous decomposition products : smoke may be produced.
Hazardous polymerisation products : Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

LC50 / LD50 of product (Species and

route) (8) : Not applicable

Irritancy of product : Ink may cause eye irritation.

Sensitisation to product: Not a skin sensitiser.

Carcinogenicity

Type of carcinogen: Not carcinogenic

Organisation recognising carcinogen : Not available

Mutagenicity: Not mutagenic Reproductive toxicity: Not available

Teratogenicity / Developmental

toxicity: Not toxic

Toxicologically synergistic products : Not available
Other toxicological information : Refer Heading 2.

12. ECOLOGICAL INFORMATION

Eco-toxicity: The product is not toxic.

Persistence and degradability in

environment: The product is not biodegradable.

Floats on water. The product is not expected to

Environmental fate : bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Place in an appropriate disposal facility in compliance

Waste disposal method :

with local regulations.

Handling of dangerous residues

residues

disposal : Not ordinially required.

during disposal: Local / National regulations relating

to waste : None

14. TRANSPORT INFORMATION

Transport classification: Non-hazardous for air, sea and road freight.

Proper shipping name : Not regulated Hazardous material description : Not available

Product is not included in the UN classification of

PIN / UN number : dangerous substances.

Transport Hazard class: Not available

Packing group:
Marine pollutant:
No
Other applicable information:
None

Special precautions during transport : No additional remark.

15. REGULATORY INFORMATION

Label information : No

National regulations / local

None

recommendations : Not available

16. OTHER INFORMATION

Full text of R phrases (Under

Headings 2, 3 & 15):

Sections revised in the SDS ⁽⁹⁾: Changed informations in the Section 2.

Other important information : Not for children under 3 years.

<u>FOOTNOTE</u>					
(1) Note 1	This section needs information on the product as a whole				
(2)Hazard classification of product	International / National / Regional classification				

(3)Hazard symbols and signal words	Hazard symbols: Graphical reproduction of the symbols in black and white or the name of the symbol e.g. flame, skull with crossbones. Signal words: Danger, Warning, Caution etc.
(4)R/S Phrases	Just specify the R/S phrasesThe full explanation of the R/S phrases can be given under Heading 16.
(5)Note 2	The below values should be specific to the individual ingredientsand not the product as a whole.
(6)R / S Phrases	Just specify the R/S phrasesThe full explanation of the R/S phrases can be given under Heading 16.
(7)Exposure limit values of product	These values are to be specified for the product as a whole.
(8)LC50 / LD50 of product (Species and route)	These values are to be specified for the product as a whole.
(9)Sections revised in the SDS	This information is needed only when the SDS is revised.