

## 97.011 | Erazo Marker Black

### MSDS | Whiteboard Marker

#### Section 1: Identification of the Substance and the Company

Product name	97.011   Whiteboard Marker Black
Relevant identified uses	Drawing
Company	iSee2, IZ Langevoorde, Groendreef 35, 9880 Aalter, Belgium
Emergency telephone	+32 9 216 67 00

#### Section 2: Composition / Information of Ingredients

Material composition Ink, polypropylene, polyester chip, fiber

Chemical identity of the ink	CAS No.	EC No.	Content (%)	Classification
Ethanol	64-17-5	200-578-6	<30	-
Iso Propanol	67-63-0	200-661-7	<45	-
Pigment Color	84632-65-5		<7.50	-
Poly Vinyl	63148-65-2		<10	-
Butyral Resin				
Additive	Confidential	Confidential	<15	-

Polypropylene	Chemical identity: ethylene-propylene copolymer Common name: 1-propene, polymer with ethylene, propylene, polymer with ethylene Cas no.: 9010-79-1 Content: >99% (additive: <1%)
Polyester chip	Component material: polyethyl eneterephthalate Cas no.: 25038-59-9 WT%: 100
Fiber	Chemical identity: polypropylene Cas no.: 9003-07-0 Content: >99% (additive: <1%)

#### Section 3: Hazards Identification

Regulation (EC) No. 1272/2008 (CLP)	Not classified as hazardous
Ink	Flammable liquids H225, Eye irritation H319, specific target organ toxicity, single exposure; respiratory tract irritation H335, H336
Classification according to EU directives 67/548/EEC or 1999/45/EC	F: highly flammable R11 XI: irritant R36, R67
Polypropylene	Not classified as hazardous

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Polyester chip

Not classified as hazardous

#### Section 4: First Aid Measures

Ink

Consult a physician. Show this safety data sheet to the doctor in attendance.

If swallowed do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water and consult with a physician.

In case of eye contact rinse thoroughly with plenty of water for at least 15 minutes and consult with a physician.

In case of skin contact: wash off with soap and plenty of water.

If inhaled: if breathed in, move the person into fresh air. If not breathing, give artificial respiration and consult a physician.

Polypropylene

In case of eye contact flush eyes thoroughly with water at full. If effects occur, consult a physician.

Skin contact: if molten material comes in contact with the skin, do not apply ice but cool under ice water.

If inhaled move person to fresh air, if effects occur, consult a physician.

Polyester chip

If inhaled: when a person feels unwell by breathing in the gas generated from melting the pellet, move person to fresh air. If effects occur, consult a physician.

Skin contact: cool down by clean water, strongly remove the cooled polymer from the skin and see a doctor.

Eye contact: rinsing and do not rub the eyes.

Ingestion: if the person feels bad, seek medical advice.

Fiber

Skin contact: first aid is normally **not** required.

Eye contact: rinse opened eye for several minutes under running water. If the symptoms persist, consult a physician.

After swallowing no specific measures have to be taken if the product is swallowed. Get medical advice if necessary.

#### Section 5: Accidental Release Measures

Ink

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection, see section 8.

Polypropylene

Personal precautions, protective equipment and emergency

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procedures isolate the hazard area. Use appropriate safety equipment and prevent from entering into soil, ditch, sewers, waterways or groundwater.

Polyester chip

Measure for handling personnel - wear proper protective equipment. Measure for environmental effects: do not wash away into shower. The manual for preventing leakage of plastics - pellet was published in order that the sea-animals and birds would not die by eating plastic pellet.

Fiber

Person related safety precautions: **no** specific measures are necessary.

Measures for environmental protection: **no** specific measures are necessary.

#### Section 6: Fire-Fighting Measures

Ink

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Wear self contained breathing apparatus for fire fighting if necessary.

Polypropylene

Dry chemical fire extinguishers, carbon dioxide fire extinguishers. Form water for or fine spray. During a fire, smoke contains the original material in addition to combustion products of varying composition which may be toxic or irritation.

Polyester chip

Applying water from a safe distance to cool and protect surrounding area. Move container from fire areas if it can be done without risk. Firefighters should wear proper protective equipment. Keep personnel removed from and upwind of fire. Evacuate personnel to safe area. Fires involving this material produce large amounts of sooty smoke. In case of fire, use water spray, foam, dry chemical powder or carbon dioxide.

Fiber

In case of fire, it can release water, carbon dioxide and oxygen.

#### Section 7: Handling & Storage

Ink

avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Polypropylene

Store in accordance with good manufacturing practices.

Polyester chip

You should not breath in the gas generated in melting the pellet. Store the pellet indoor and far away from heat of the source of fire.

Fiber

Do not smoke. Open flames prohibited. Protect from heat and direct sunlight. Store under dry conditions.

#### Section 8: Exposure Controls/Personal Protection

Ink

Handle in accordance with good industrial hygiene and safety

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practice. Wash hands before breaks and at the end of workday. Face shield and safety glasses, use equipment for eye protection tested and approved under appropriate government standards such as Niosh (US) or EN166 (EU). Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Polypropylene

Exposure limits in the air of the workplace.

Biological limit values: not applicable.

Good general ventilation should be adopted. Local exhaust ventilation may be necessary for some operations.

Individual protection measure

Respiratory protection: use an approved air purifying respirator, when vapors are generated at increased temperatures or when dust or mist is present.

Eye protection: use safety glasses. Wear chemical goggles.

Hand protection: Use gloves with insulation for thermal protection.

Body protection: no precautions other than clean body-covering clothing should be needed.

Polyester chip

Appropriate engineering measures: Good General ventilation should be sufficient for most conditions.

Personal protective equipment

Respiratory protection: for most conditions, no respiratory protection should be needed, however, in dusty atmospheres, use an approved dust respirator.

Eye protection: not applicable.

Hand, skin and body protection: selection of specific items such as gloves, boots, apron or full-body suits will depend on operation.

Fiber

General protective and hygienic measure: do not eat or drink while working. No smoking.

### Section 9: Physical and chemical properties

#### Ink

Appearance	Liquid
Odour	No data
Odour threshold	No data
PH	> 5-25°C

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Melting point	144°C
Initial boiling point	78~82°C
Flash point	14°C
Evaporation rate	No data
Flammability	No data
Water solubility	Insoluble
Auto-ignition temp.	425°C
Viscosity	> 11CPS at 25°C
Surface tension	> 24mN/m at 25°C

#### **Polypropylene**

Appearance	Pellet with white color or transparant colourless
Odour	Odourless
Odour treshold	No data
PH	Not applicable
Meting point	130~150°C
Initial boiling point	Not applicable
Flash point	No data available
Evaporation rate	Not applicable
Flammability	No data available
Specific gravity	0.90~0.92
Partition coefficient	Not applicable
Auto-ignition temp.	375~400°C
Decomposition temp.	No data available
Viscosity	No data available
Molecular weight	>40,000

#### **Polyester chip**

Density	1.35
Appearance	Pellet
Odour	Not applicable
Boiling point	None
Melting point	255~265°C
Vapor pressure	None

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Vapor density	Not applicable
Volatility	None
<b>Fiber</b>	
Appearance	Solid
Odour	Nearly odourless
Boiling point	Not applicable
Flash point	Not applicable
Melting point	160~170°C
Ignition temp.	400°C
Decomposition temp.	300°C
Density at 20°C	0.89~0.91 g/cm <sup>2</sup>
Additional info	Soluble in boiling

#### Section 10: Stability & Reactivity

Ink	<p>Reactivity: no data</p> <p>Chemical stability: stable under recommended storage conditions.</p> <p>Conditions to avoid: heat, flames and sparks. Extremes of temperature and direct sunlight.</p> <p>Hazardous decomposition products: No data</p>
Polypropylene	<p>Chemical stability: stable at room temperature and atmospheric pressure.</p> <p>Possibility of hazardous reactivity: no data.</p> <p>Conditions to avoid: exposure to elevated temperature, flame, ignition source.</p> <p>Materials to avoid: strong oxidizing agents.</p> <p>Hazardous decomposition products: processing may release fumes and other decomposition products.</p>
Polyester chip	<p>Flash point: 346~399°C</p> <p>Flammibility: Probable</p> <p>Oxidizibility: Improbable, in usual storage or handling.</p> <p>Auto-ignition temp.: 483~488°C</p> <p>Combustibility: the ignition temp. 483°C</p> <p>Dust explosion: the lower limit concentration for explosion is 40 g/m<sup>3</sup>.</p>

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Fiber	<p>Thermal decomposition: the product is stable at normal handling and storage conditions, decomposes over 300°C.</p> <p>Dangerous reactions: no dangerous reactions known.</p> <p>Materials to be avoided: strong oxidizing agent.</p> <p>Dangerous products of decomposition: no hazardous decomposition products known at room temperature.</p>
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#### Section 11: Toxicological Information

##### Ink

Acute toxicity	64-17-5 LD50 Oral - Rat - 7060 mg/kg. Remarks: lungs, thorax or respiration: other.
Serious eye damage	67-63-0 eyes - rabbit, result: mild eye irritation 24h.
No data on	Respiratory or skin sensitisation, germ cell mutagenicity, carcinogenicity, reproductive toxicity and aspiration hazard.

##### Polypropylene

Information on the likely routes of exposures:

Inhalation exposure	Dust inhalation might be causing a cough
Delayed and immediate effects	and also chronic effects from short and long term exposure:
Acute toxicity	LD50: >100 gm/kg, intraperitoneal (RAT) LD50: >99 gm/kg, intravenous (RAT)
Germ cell mutagenicity	Not listed in IARC
No data on	Ingestion exposure, skin and eye exposure, respiratory sensitization and skin sensitization.
Not applicable information	Skin corrosion, serious eye damage

##### Polyester chip

Not reported as harmful	Acute toxicity, sub-chronic toxicity, chronic toxicity, carcinogenic & mutagenic effects.
Irritant properties	The generated gas during drying or melting the pellet irritates your eyes.

##### Fiber

Primary irritant effect	On the skin and sensitization: no irritation effect
Additional toxicological information	When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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#### Section 12: Ecological Information

All material No data available: toxicity, bio-accumulative potential & mobility in soil.

#### Section 13: Disposal Considerations

Ink Burn in a chemical incenerator equipped with an afterburner and scrubber but exert extra care in igniting.

Polypropylene All disposal practices must be in compliance with all federal, state and local laws and regulations.

Polyester chip Do not dump into sewers on the ground or into water.

Fiber The material can be re-used or recycled according to regulations of guideline.

#### Section 14: Transport Information

Ink UN number - ADR/RID: 1993, IMDG: 1993, IATA: 1993

UN proper shipping name: Micpic ink

Transport hazard class: 3

Polypropylene No data available

Polyester chip No data available

Fiber According to national and international guidelines, which regulate the road, rail, air and sea transport, this product is classified as not dangerous.

#### Section 15: Regulatory Information

This safety data sheet complies with the requirements of regulation (EC) No. 1907/2006 and regulation (EC) No. 12721/2008. According to EEC directive and following adaptations product is not dangerous.

#### Section 16: Other Information

The information contained in this document is based on data considered accurate.

##### Notes:

This datasheet has been produced to advise our customers regarding possible hazards with iSee2 Erazo Markers in recognition of our responsibility to the Health and Safety at Work Act. The use of our products does not entail any special hazard if they are handled according to normal good safety practices. Nevertheless, we would draw your attention to some specific information concerning their safe use. This information should not be construed as indicative of any new or unusual hazards that we have discovered but rather that you should be properly informed of their characteristics and to discharge our duty as outlined in the act.