| | Product | INK FOR BIC® ONYX MARKER | Page : 1/7 |
|---|---|--|-------------------|
| | Product code : BIC19 | Version : 1 | Date : 23/09/2003 |
| 1 | CHEMICAL PRODUCT AND CO PRODUCT NAME : | OMPANY IDENTIFICATION INK FOR BIC® ONYX MARKER (1481 - 1591) | |
| | SUPPLIER : | | |
| | Name : Address : | SOCIETE BIC 14, rue Jeanne d'Asnières 92611 CLICHY Cédex | |
| | Telephone number : | 01 45 19 52 00 | |
| | Telefax number : | 01 45 19 52 99 | |
| | EMERGENCY TELEPHONE | | |
| | NUMBER : | ORFILA (France) : 33 1 45 42 59 59 | |
| | Recommended use : | Ink | |
| | Chemical nature : Components contributing to the | Mixture based on solvents and dyes | |
| 2 | COMPOSITION / INFORMATIC PREPARATION : | IN ON INGREDIENTS | |
| | Components contributing to the hazard : | Xylene, mixture of isomers (CAS : 1330-20-7, EINECS : 215- | -535-7 EC |
| | Hazaru . | classification : R10 - Xn; R20/21 - Xi; R38) : < 30 % | -555-7, EC |
| | | Ethylbenzene (CAS : 100-41-4, EINECS : 202-849-4, EC cla | ssification : F; |
| | | R11 - Xn; R20) : < 10 % | ation · E· D11 |
| | | Toluene (CAS : 108-88-3, EINECS : 203-625-9, EC classifica Xn; R20) : < 30 % | auon : F; K I - |
| | | Solvent naphtha (petroleum), light arom. (CAS : 64742-95-6, | |
| | | 265-199-0, EC self-class. : R10 - Xi; R37 - Xn; R65 - N; R51/ | |
| | | Solvent naphtha (petroleum), heavy arom. (CAS : 64742-94- 269-198-5, EC self-class. : Xn; R65 - N; R51/53) : < 20 % | 5, EINECS : |
| | | Phenol (CAS : 108-95-2, EINECS : 203-632-7, EC classificat | tion : T; |
| | | R24/25 - C; R34) : < 5 % | |
| | | Cresol (CAS : 1319-77-3, EINECS : 215-293-2, EC classifica | ation : T; |
| | | R24/25 - C; R34) : < 5 % Xylenol (CAS : 1300-71-6, EINECS : 215-089-3, EC classific | ation : T; |
| | | R24/25 - C; R34 - N; R51/53) : < 2 % | |
| 2 | HAZARDS IDENTIFICATION | | |
| 3 | MOST IMPORTANT HAZARDS : | | |
| | Adverse human health effects : | Harmful by inhalation, on contact with skin and if swallowed Harmfum : May cause lung damage if swallowed | |

| Auverse numan nealth enects . | Harmfum : May cause lung damage if swallowed Irritating to eyes and skin |
|---------------------------------|---|
| Environmental effects : | Toxic to aquatic organisms May cause long-term adverse effects to the aquatic environment. |
| Physical and chemical hazards : | |
| - Fire or explosion : | Very flammable liquid. Burning and thermal decomposition may form toxic by-products |
| Classification of the product : | According to European regulations, this product is classified as : - HIGHLY FLAMMABLE - HARMFUL |

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| | - IRRITANT - DANGEROUS FOR THE ENVIRONMENT. | |
| Further information : | In a usual writing situation, quantities of ink layed down or vap by the marker are normally too small to occasion significant ex cause adverse effects on the user's health | |
| FIRST AID MEASURES | | |
| Inhalation : | Move the affected person away from the contaminated area a fresh air If the person feels unwell : Call a doctor | nd into the |
| Skin contact : | Immediately rinse with plenty of water. In case of redness or irritation, call a doctor | |
| Eye contact : | Rinse immediately and thoroughly, pulling the eyelids well awa (15 minutes minimum) Consult an eye specialist if necessary | ly from the eye |
| Ingestion : | Never attempt to induce vomiting Call a doctor immediately | |
| 5 FIRE FIGHTING MEASURES | | |
| Suitable extinguishing media : | Water spray Carbon dioxide (CO2) Foam Powders | |
| Not suitable extinguishing media | : None to our knowledge. If there is a fire close by, use suitable agents | extinguishing |
| Specific hazards : | During combustion : Toxic vapors may be released Vapour/air mixtures are explosive The vapours are denser than air and may travel along the gro ignition possible. | und. Distance |
| Specific fire fighting methods : | Contain the extinguishing fluids by bunding (the product is had the environment). Do not attempt to fight the fire without suitable protective equi | |
| Protection of fire-fighters : | Self-contained breathing apparatus Complete protective clothing | |

| Personal precautions : | Avoid contact with skin and eyes |
|------------------------|---|
| · | Do not breathe vapours |
| | Do not smoke |
| | No flames, no sparks. Eliminate all sources of ignition |
| | In case of important spillage : |
| | Only qualified personnel equipped with appropriate protective equipment |
| | may intervene |
| | |

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| | | |
| Environmental precautions : | Contain the spilled material by bunding (product is hazardous for the environment) Do not discharge into drains and rivers | |
| Methods for cleaning up : | | |
| - Neutralization : | Absorb spillage with: - inert absorbent material - earth or sand | |
| - Cleaning/decontamination : | Wash non-recoverable remainder with large amounts of water | |
| - Disposal : | Dispose of contaminated materials in accordance with current regulation | S |
| HANDLING AND STORAGE HANDLING | | |
| Technical measures : | Vapour extraction at source Material and equipment suitable for use under explosive conditions. Use NON-sparking tools. | |
| Precautions : | Avoid any direct contact with the product Work in a well-ventilated area Smoking is forbidden Avoid the build-up of electrostatic charge | |
| STORAGE | | |
| Technical measures : | The floor of the depot must be impermeable, non-combustible and designed to form a basin, in order that stored flammable liquids should n under any circumstances, be released outside | ot, |
| Storage conditions : | | |
| - Recommended : | Store : - in a cool, well-ventilated area - the container tightly closed - away from any source of ignition | |
| Incompatible materials : | Flammable or combustible materials Strong oxidizing agents Acids Halogens | |
| Packaging materials : | - | |
| - Not suitable : | Certain plastic materials. Rubbers. Metals and light alloys | |

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

| Engineering measures : | Ensure good ventilation of the work station Extraction to remove vapours at their source |
|--------------------------------|--|
| Occupational exposure limits : | |
| - France : | Xylene, mixture of isomers : VME = 435 mg/m ³ (100 ppm) Xylene, mixture of isomers : VLE = 650 mg/m ³ (150 ppm). Toluene : VME = 375 mg/m ³ (100 ppm) |

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| | Toluene : VLE = 550 mg/m³ (150 ppm) Phenol : VME = 19 mg/m³ (5 ppm). Ethylbenzene : VME = 435 mg/m³(100 ppm) Cresol : VME = 22 mg/m³ (5 ppm) |
|---------------------------------|---|
| Personal protective equipment : | |
| - Respiratory protection : | Self-contained breathing apparatus |
| - Hand protection : | Impermeable protective gloves |
| - Eye protection : | Safety spectacles |
| Hygiene measures : | Do not drink, eat or smoke in the workplace |

Hygiene measures :

9 PHYSICAL AND CHEMICAL PROPERTIES

| Physical state : | Liquid |
|--------------------------------|--|
| Colour : | Variable |
| Odour : | solvent. |
| pH : | Not applicable |
| Specific temperatures : | |
| - Boiling : | ~ 110 °C |
| Flammability characteristics : | |
| - Flash point : | ~ 6 °C |
| - Auto-ignition temperature : | 470°C (spontaneous ignition temperature) |
| Explosive limits in air : | |
| - Lower : | 0.6% (volume) |
| - Upper : | 7.6 % (volume). |
| Vapour density (air = 1) : | ~ 3.7 |
| Specific gravity : | 0.91 g/cm ³ |
| Solubility : | |
| - in water : | Not available |
| - in organic solvents : | Not available |
| Kinematic viscosity : | 5 mm2/s at 20 °C |

10 STABILITY AND REACTIVITY

Stability :

Hazardous reactions : - Conditions to avoid :

- Materials to avoid :

Stable at ambient temperature and under normal conditions of use

May explode or ignite : - on heating

- strong oxidizing agents - acids
- halogens (F, Cl, Br, I)

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| | - Hazardous decomposition | | |
| | products : | On combustion or on thermal decomposition (pyrolysis) releas Carbon oxides (CO, CO2) | ses : |
| 11 | TOXICOLOGICAL INFORMATION | | |
| | Acute toxicity : | Harmful by inhalation. Vapours may cause drowsiness and dizziness (published data) Harmful in contact with skin Harmful if swallowed Harmful : May cause lung damage if swallowed | |
| | Local effects : | Irritating to the skin Irritating to the eyes | |
| | Chronic/long term toxicity : | Harmful: risk of serious damage to health by prolonged expos inhalation. (Bibliographic results). | sure through |
| | Specific effects : | | |
| | - Mutagenicity : | Possible risk of irreversible effects. (published data) | |
| | - Reproductive toxicity : | Possible risk of harm to the unborn child. (published data) | |
| | Further information : | Above information is for the ink. The ink will be contained in the reservoir of a small capacity marker which will limit considerab exposure possibilities for the user | |
| 12 | ECOLOGICAL INFORMATION | | |
| | Product as is : ECOTOXICITY : | Avoid discharge of the product as is into the environment | |
| | Effects on the aquatic environment : | Toxic to aquatic organisms May cause long-term adverse effects to the aquatic environme | ent. |
| 13 | DISPOSAL CONSIDERATIONS WASTE FROM PRODUCT : | | |
| | Destruction/Disposal : CONTAMINATED PACKAGING : | Dispose of in accordance with relevant local regulations | |
| | Destruction/disposal : | Destroy at an authorised site | |
| | NOTE : | The user's attention is drawn to the possible existence of spec | cific european, |

national or local regulations regarding disposal

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| | Product | INK FOR BIC® ONYX MARKER | Page: 6/7 |
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| 14 | TRANSPORT INFORMATION INTERNATIONAL REGULATIONS : | | |
| | Land transportation : - Rail/road (RID/ADR) : | UN number : 1210 Class : 3 Classification code : F1 Packaging group : II Labelling : 3 Hazard identification number : 33 | |
| | Sea (IMO/IMDG) : | UN number : 1210 Class : 3 Packaging group : II Labelling : 3 | |
| | Air (ICAO-IATA) : | UN number : 1210 Class : 3 Packing group : II Labelling : 3 | |
| | Further information : | Prescriptions on the transport of dangerous goods apply to They don't apply to the marker | the ink only. |
| | NOTE : | The above regulatory prescriptions are those valid on the da of this sheet. Given the possible evolution of transport regulations for haz materials, in case the present sheet is dating back to more ago, it would be advisable to check their validity with your co agency | ardous than 12 months |
| 15 | REGULATORY INFORMATION | | |
| | EC LABELLING : | Marker : not applicable Ink : Mandatory labelling (self-classification) of hazardous prepar applicable | ations : |
| | Identification of the hazardous | | |
| | product : | Contains : Xylene, mixture of isomers Toluene Phenol Cresol | |
| | - Symbols and indications of danger | : - HIGHLY FLAMMABLE (F) - HARMFUL (Xn) - DANGEROUS FOR THE ENVIRONMENT (N) | |
| | - R phrases : | R 11: Highly flammable. R 20/21/22 : Harmful by inhalation, in contact with skin and R 36/38 : Irritating to eyes and skin R 65 : Harmful : May cause lung damage if swallowed | if swallowed |

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| | R 51/53: Toxic to aquatic organisms, may cause long-term adve in the aquatic environment. | erse effects | |
| - S phrases : | S 1/2 : Keep locked up and out of the reach of children S 9 : Keep container in a well-ventilated place. S 16 : Keep away from sources of ignition - No smoking S 26 : In case of contact with eyes, rinse immediately with plent and seek medical advice S 36/37 : Wear suitable protective clothing and gloves S 62 : If swallowed, do not induce vomiting : seek medical advice immediately and show this container or label | - | |
| FURTHER REGULATIONS : | | | |
| National prescriptions : | | | |
| France : | Maladies professionnelles (tableau(x) n° 4 bis, 84) : concerné | | |
| NOTE : | The regulatory information given above only indicate the princip regulations specifically applicable to the product described in th The cited basic community texts are being updated and transcr national law Refer to all applicable international, national and local regulation provisions The user's attention is drawn to the possible existence of addition provisions which complete these regulations | e MSDS ibed in ns or | |
| I6 OTHER INFORMATION Restrictions on use : Safety data sheet established by : | This product must not be used for other applications than ment TELEGIS SARL, 6 rue des Boucheries F-60400 NOYON | ioned in §1 | |

This sheet completes the technical sheets but it does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith.

The attention of the user is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended.

This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product.

The mandatory regulations mentioned are only intended to help the user to fulfil his obligations regarding the use of hazardous products.

This listing must not be considered exhaustive. It does not exonerate the user from ensuring that other legal obligations than those mentioned do not exist, relating to the use and storage of the product for which he solely is responsible. Note : the supplying of a material safety data sheet is not mandatory for manufactured articles which contain dangerous substances or preparations, when these latters are packaged so that they do not present any danger for the user.

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