DETECTAMET

Technical Data Sheet

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148
Metal Detectable Food and Meat Marker

Technical Data Sheet Applicable To:

148-T040-P0*	Metal Detectable Food Marker All Colour Inks
148-T041-P0*	Metal Detectable Meat Marker All Colour Inks

Industry Usage:
These retractable food and meat markers come in blue housing with four ink colours and use food safe ink which is quick drying to prevent bleeding on the product.

Features and Benefits:
- Metal detectable & X-ray visible
- Made from FDA and EU approved polymers
- Retractable – No need for a cap
- Can be drilled with a hole to fit split ring for attaching to a safety chain/lanyard
- Store between 15 and 30°C (59 and 86°F)
- Do not expose to temperatures lower than 5 and higher than 35°C (41 and 95°F)
- Maximum temperature before ink degradation: 80°c (176°f)
- Ink application temperature: Room temperature

Material and Compliance Information:
The above is manufactured using pigments which are in accordance with: -

- European Resolution AP (89) 1
- Recommendation IX of the BfR for colouring plastics
- EN71-3 Toy regulation
- EU regulation EU No 2019/1381 amending Regulation EU No 1935/2004
- Is based on a polymer carrier that is compliant with: -
- EU regulation EU No 2020/1245 amending and correcting Regulation (EU) No 10/2011
- EU regulation EU No 2019/1381 amending Regulation EU No 1935/2004
- Has been produced according to Regulation 2023/2006EC on good manufacturing practice for materials and articles intended to come into contact with food, applicable to plastic raw materials.

This compliance statement is based on information supplied by the polymer and pigment manufacturers, migration testing according to Regulation 10/2011, migration modelling and quality control systems in place at Detectamet.

REACH – No substances of very high concern (SVHC) above the 0.1% weight (w/w) threshold limit are present in the materials.

Regulations and Standards
We confirm that the above-mentioned products are suitable for use in contact with all food types and are in conformity with the applicable requirements of the following regulations and standards:

- Regulation (EC) no.1935/2004 on Materials and Articles intended to come into contact with food.
- Commission Regulation (EU) No.10/2011 on Plastic materials intended to come into contact with food including its updates Regulation 1282/2011 and Regulation 1183/2012.
- Regulation (EC) no. 2023/2006 on Good Manufacturing Practice for materials and articles intended to come into contact with food.
- Council of Europe Resolution AP 89/1 on the use of Colorants in Plastic Materials coming into contact with food.
- US FDA 21 CFR 177.1520 (Olefin polymers) with colorants and additives cleared for use through listing in 178.3297 (Colorants for polymers), 178.2010 (antioxidants and/or stabilisers for polymers, or other respective parts of the FDA regulations.

Migration test data obtained under short-term repeat use test conditions (6dm2/kg food) has demonstrated that levels of overall migration and specific migration of additives from these products will not exceed the legal limits with all food types.

Test Simulants	Food Types	Testing Condition
A-C, D1, D2 of Regulation No. 10/2011 for Plastic Materials and Articles in contact with	All dry, aqueous, acidic, alcoholic and fatty foods.	2 hours at 70c, Repeat use. Test OM3 of regulation 10/2011

food.		

Dual-use food additives may be present but any migration into food will be minimal. This compliance statement is based on information supplied by the polymer and pigment manufacturers, migration testing according to Regulation 10/2011, migration modelling and quality control systems in place at Detectamet.

General Information:
Maximum use Temperature: 100 °c
Maximum wash Temperature: 121 °c
Maximum use Temperature: Do not store at deep freeze temperatures prior to use.

Ink Information

- For use on absorbent, porous materials
- Washable, not permanent ink
- Meets EU Regulation 231/2012 additive for decoration

Colour Ref. NO:	CYANO 2623	MAGENTA 2623	YELLOW 2623	BLACK 2623
Viscosity (Rheometer HAAKE RheoStress1 PK60/1° @264 s-1, mpas at 25°C)	<10	<10	<10	<10
pH:	6 +/- 1	6 +/- 1	6 +/- 1	6 +/- 1
Specific Gravity	1,045 +/- 0.07	1,045 +/- 0.07	1,045 +/- 0.07	1,045 +/- 0.07

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Material Safety Data Sheet

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148
Food Marker Blue Ink

Technical Data Sheet Applicable To:

148-T040-P01	Retractable Food Markers Blue Ink

Section 1 – Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Code: JETFDC2623AA
Product Name: Ink Cyan 2623

1.2 Relevant identified uses of the substance or mixture and uses advised against

Intended use: Jet Ink
Identified uses: Industrial/Professional

Do not use for uses other than those indicated

Section 2 – Hazards identification

2.1 Classification of the substance or mixture

The product is not classified as hazaradous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP)(And subsequent amendments and supplements)

Hazard classification and indication: -

2.2 Label elements

Hazard pictograms: -

Signal words: -

Hazard statements: -

Precautionary statements: -

2.3 Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0.1%

Section 3 – Composition/information on ingredients

3.1 Mixtures

This product does not contain any substances classified as being hazardous to human health or the environment pursuant to the provisions Regulation (EC) 1272/2008 (CLP)(And subsequent amendments and supplements) in such quantities as to require the statement.

Section 4 – First aid measures

4.1 Description of first aid measures

Not specifically necessary. Observance of good industrial hygiene is recommended.

4.2 Most important symptoms and effects, both acute and delayed.

Specific information on symptoms and effects cause by the product are unknown.

4.3 Indication of any immediate medical attention and special treatment needed

Information not available

Section 5 – Firefighting measures

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2 Special hazards arising from the substance or mixture

HAZARDS CASUED BY EXPOSURE IN THE EVENT OF FIRE

Do not breath combustion products

5.3 Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collecting extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

Section 6 – Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use breathing equipment if fumes or powders are released into the air. These indications apply for both processing staff and those involved in emergency procedures.

6.2 Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up

Confine using earth or inert material. Collect as much material as possible and eliminate the rest using jets of water. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

7.2 Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details.

7.3 Specific end use(s)

Information not available

Section 8 – Exposure controls/personal protection

8.1 Control Parameters

Information not available

8.2 Exposure controls

Comply with the safety measures usually applied when handling chemical substances.

HAND PROTECTION
None required.

SKIN PROTECTION
None required.

EYE PROTECTION
None required.

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or it olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing process, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Section 9 – Physical and chemical properties

9.1 Information on basic physical and chemical properties

Properties	Value
Appearance	Liquid
Colour	Cyan
Odour	imperceptible
Odour Threshold	Not determined
pH	Not determined
Melting point/Freezing point	Not determined
Initial boiling point	Not determined
Boiling range	Not determined
Flash point	> 100°c (212°f)
Evaporation rate	Not determined
Flammability	Not available
Lower inflammability limit	Not determined
Upper inflammability limit	Not determined

Lower explosive limit	Not determined
Upper explosive limit	Not determined
Vapour pressure	Not determined
Relative vapour density	Not determined
Relative density	1050 +/- 0.050 kg/l
Solubility	Water-miscible
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Explosive properties	Not explosive
Oxidising properties	Not available

9.2 Other information
VOC (Directive 2010/75/EC): 20.00%
VOC (volatile carbon): 9.46%

Section 10 – Stability and reactivity

10.1 Reactivity
These are no particular risks of reaction with other substances in normal conditions of use

10.2 Chemical stability
The product is stable in normal conditions of use and storage

10.3 Possibility of hazardous reactions
No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4 Conditions to avoid
None in particular. However the usual precautions used for chemical products should be respected.

10.5 Incompatible materials
Information not available

10.6 Hazardous decomposition products
Information not available

Section 11 – Toxicological information

According to currently available data, this product has not yet produced health damages. Anyway, it must be handled according to good industrial practices.

11.1 Information on toxicological effects
Metabolism toxicokinetics, mechanism of action and other information
Information not available

Information on likely routes of exposure
Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Information not available

Interactive effects
Information not available

ACUTE TOXICITY
ATE (Inhalation) of the mixture: Not classified (no significant component)
ATE (Oral) of the mixture: Not classified (no significant component)
ATE (Dermal) of the mixture: Not classified (no significant component)

Skin Corrosion / Irritation
Does not meet the classification criteria for this hazard class

Serious Eye Damage/Irritation
Does not meet the classification criteria for this hazard class

Respiratory or Skin Sensitisation
Does not meet the classification criteria for this hazard class

Germ Cell Mutagenicity
Does not meet the classification criteria for this hazard class

Carcinogenicity
Does not meet the classification criteria for this hazard class

Reproductive Toxicity
Does not meet the classification criteria for this hazard class

STOT – Single Exposure
Does not meet the classification criteria for this hazard class

STOT – Repeated Exposure
Does not meet the classification criteria for this hazard class

Aspiration Hazard
Does not meet the classification criteria for this hazard class

Section 12 - Ecological Information
Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1 Toxicity
Information not available

12.2 Persistence and degradability
Information not available

12.3 Bioaccumulative potential
Information not available

12.4 Mobility in soil
Information not available

12.5 Results of PBT and vPvB assessment
On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0.1%

12.6 Other adverse effects
Information not available

Section 13 – Disposal Considerations
12.1 Waste treatment methods
Reuse, when possible. Neat product residues should be considered special non-hazardous waste. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Section 14 – Transport Information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the Internation Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1 UN Number

Not applicable

14.2 UN Proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing Group

Not applicable

14.5 Environmental Hazards

Not applicable

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category – Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to annex XVII to EC Regulation 1907/2006 - None

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0.1%

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
information not available

15.2 Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3

Section 16 – Other information

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonised System of classification and labelling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and Very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRPAHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (AII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
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16. Regulation (EU) 2019/521 (XII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Regulation (EU) 2020/217 (XIV Atp. CLP)

- The Merck Index. – 10th Edition
- Handling Chemical Safety
- INRS – Fiche Toxicologique (toxicological sheet)
- Patty – Industrial Hygiene and Toxicology
- N.I. Sax – Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals – Ministry of Health and ISS (Istituto Superiore di Sanita) – Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHORDS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria establishes by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

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