21172-XXXX

865 Islington Street, Suite 100, Portsmouth, NH 03801

Phone: 800-448-6656, Website: www.momenta.com

Safety Data Sheet (SDS) Report SDS number: SHAH00936583

Sample Description:

The sample information was submitted and identified on client's behalf to be:

Product Name : Metallic Marker Ink

Physical State : Liquid

Data Received : Apr 13, 2018

Data Reviewed : Apr 18, 2018

Service Requested:

Based on the information provided by the applicant, the Safety Data Sheet (SDS) was generated according to requirements of Regulation (EC)

No 1907/2006 (REACH) with its amendment Commission Regulation (EU) 2015/830, Regulation (EC) No 1272/2008, for details please refer to

attached pages.

Safety Data Sheet

Metallic Marker Ink

Momenta Inc. SDS number:SHAH00936583

Version No:1.0 According to Regulation (EC) No 1907/2006(REACH) with its amendment Commission Regulation (EU) 2015/830

Issue Date:18/04/2018 REACH.GBR.EN

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

1.1. Product Identifier

Product name Metallic Marker Ink

Synonyms Not Available

Other means of identification Metallic Ink

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

Relevant identified uses Art,crafting and coloring

Uses advised against Not Applicable

1.3. Details of the supplier of the safety data sheet

Manufacturer company name Momenta Inc

Address 865 Islington Street, Suite 100, Portsmouth, NH 03801

Telephone 800-448-6656

Emergency telephone 800-448-6656

Email help@momenta.com

Importer name

Address

Telephone

Email

1.4. Emergency telephone number

Association / Organisation

Emergency telephone numbers

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Not considered a hazardous mixture according to Reg. (EC) No 1272/2008 and their amendments. Not classified as Dangerous Goods for transport purposes.

Classification according to regulation (EC) No 1272/2008 [CLP]

Not Classified

2.2. Label elements

Hazard pictogram(s)

Not Applicable

SIGNAL WORD NOT APPLICABLE

Hazard statement(s)

Not Applicable

Supplementary statement(s)

Not Applicable

Precautionary statement(s) General

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Continued...

Version No: 1.0

Precautionary statement(s) Disposal

2.3. Other hazards

REACh - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1.CAS No 2.EC No 3.Index No 4.REACH No

%[weight] Name Classification according to regulation (EC) No 1272/2008 [CLP]

1.7732-18-5 2.231-791-2 3.Not Available 4.Not Available

61.9-93.97 Not Classified

1.1333-86-4 2.215-609-9 3.Not Available 4.Not Available

0-38.1 Not Classified

1.5102-83-0 2.225-822-9 3.Not Available 4.Not Available

0-37 Not Classified

1.980-26-7 2.213-561-3 3.Not Available 4.Not Available

0-36.5 Not Classified

1.1345-16-0 2.310-193-6 3.Not Available 4.Not Available

0-30 Not Classified

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact

Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

5.1. Extinguishing media

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility None known.

5.3. Advice for firefighters

Fire Fighting

Not Applicable

If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact

If skin or hair contact occurs:

Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

Inhalation

If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.

Ingestion

water

carbon black

c.i. pigment yellow 13

C.I. Pigment Red 122

C.I. Pigment Blue 28

Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire.

Metallic Marker Ink

Issue Date:18/04/2018

Continued...

Version No: 1.0

The material is not readily combustible under normal conditions. However, it will break down under fire conditions and the organic component may burn.

Decomposes on heating and produces toxic fumes of: carbon dioxide (CO2) nitrogen oxides (NOx) other pyrolysis products typical of burning organic material.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

Minor Spills

Minor hazard.

Clear area of personnel.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling

Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs.

Fire and explosion protection See section 5

Other information

7.2. Conditions for safe storage, including any incompatibilities

Suitable container Plastic case,Cardboard box

Storage incompatibility Avoid contamination of water, foodstuffs, feed or seed.

7.3. Specific end use(s)

See section 1.2

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

DERIVED NO EFFECT LEVEL (DNEL)

Not Available

PREDICTED NO EFFECT LEVEL (PNEC)

Not Available

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source Ingredient Material name TWA STEL Peak Notes

UK Workplace Exposure Limits (WELs)

3.5 mg/m3

Not Available

Not Available

UK Workplace Exposure Limits (WELs)

carbon black Carbon black

7 mg/m3

Carc (cobalt dichloride andsulphate), Sen

8.2. Exposure controls

8.2.1. Appropriate engineering controls

C.I. Pigment Blue

Cobalt and Cobalt compounds (as

0.1

Not

Not 28

Co)

mg/m3

Available

Available

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

8.2.2. Personal protection

Fire/Explosion Hazard

Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes.

Major Spills

Store in original container in approved flame-proof area

Version No: 1.0

Safety glasses with side shields Eye and face protection

Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

Skin protection See Hand protection below

Hands/feet protection

Wear general protective gloves, eg. light weight rubber gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Body protection See Other protection below

Other protection

No special equipment needed when handling small quantities. OTHERWISE:

Overalls.

Thermal hazards Not Available

Respiratory protection

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

8.2.3. Environmental exposure controls

See section 12

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance

Ruby Red, Rouge, Citrus Burst, Mountain Mist, Lagoon, Emerald, Persian Blue, Jet Black, Espresso, Metallic Silver, Midnight Violet, Rubellite, Autumn Blaze, Warm Sunshine, Limeade, Moss, Volcano Lake, Sea Breeze, Dusk, Silverstone, Purple Wine, Crimson, Sunkissed, Fresh Lemon, TBD, Lime, Turquoise, Dessert Night, Paper Bag, Lava Rock liquid ink

Physical state Liquid Relative density (Water = 1) Not Available

Odour Not Available

Partition coefficient n-octanol / water

Not Available

Odour threshold Not Available Auto-ignition temperature (°C) Not Available

pH (as supplied) Not Available Decomposition temperature Not Available

Melting point / freezing point (°C)

Not Available Viscosity (cSt) >1000000

Initial boiling point and boiling range (°C)

Not Available Molecular weight (g/mol) Not Available

Flash point (°C) Not Available Taste Not Available

Evaporation rate Not Available Explosive properties Not Available

Flammability Not Flammable Oxidising properties Not Available

Upper Explosive Limit (%) Not Available

Surface Tension (dyn/cm or mN/m)

Not Available

Lower Explosive Limit (%) Not Available Volatile Component (%vol) Not Available

Vapour pressure (kPa) Not Available Gas group Not Available

Solubility in water (g/L) Not Available pH as a solution (1%) Not Available

Vapour density (Air = 1) Not Available VOC g/L Not Available

9.2. Other information

Not Available

SECTION 10 STABILITY AND REACTIVITY

10.1.Reactivity See section 7.2

10.2. Chemical stability Product is considered stable and hazardous polymerisation will not occur.

10.3. Possibility of hazardous reactions

See section 7.2

10.4. Conditions to avoid See section 7.2

10.5. Incompatible materials See section 7.2

10.6. Hazardous decomposition products

See section 5.3

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

carbon black

Version No: 1.0

[2] Dermal (rabbit) LD50: >3000 mg/kg

Oral (rat) LD50: >10000 mg/kg

[1]

Acute Toxicity

c.i. pigment yellow 13

Oral (rat) LD50: >1230 mg/kg

Metallic Marker Ink

[1]

C.I. Pigment Red 122

dermal (rat) LD50: >2000 mg/kg

[1]

Oral (rat) LD50: >2000 mg/kg

[1]

Skin Irritation/Corrosion No skin irritation or corrosion

Serious Eye Damage/Irritation No serious eye damage or irritation

Respiratory or Skin sensitisation

No skin sensitisation

Mutagenicity No data available

Carcinogenicity

carbon black

IARC Group 2B

Reproductivity No data available

STOT - Single Exposure No data available

STOT - Repeated Exposure No data available

Aspiration Hazard No data available

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified*

data extracted from RTECS - Register of Toxic Effect of chemical Substances

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

carbon black

ENDPOINT TEST DURATION (HR) SPECIES VALUE SOURCE

Not available Not available Not available Not available Not available

ENDPOINT TEST DURATION (HR) SPECIES VALUE SOURCE

LC50 96 Fish =1000mg/L 1

NOEC 96 Fish =1000mg/L 1

c.i. pigment yellow 13

ENDPOINT LC50 TEST DURATION (HR) 96 SPECIES VALUE SOURCE

Fish 124mg/L 2

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

For Organic Pigments: Environmental Fate: Organic pigments are highly persistent in natural environments. Atmospheric Fate: The chemical processes underlying breakdown of organic pigments through light or atmospheric conditions are difficult to clarify.

12.2. Persistence and degradability

Ingredient Persistence: Water/Soil Persistence: Air

water LOW LOW

c.i. pigment yellow 13 HIGH HIGH

12.3. Bioaccumulative potential

Ingredient Bioaccumulation

water LOW (LogKOW = -1.38)

c.i. pigment yellow 13 LOW (LogKOW = 8.1146)

12.4. Mobility in soil

Ingredient Mobility

water LOW (KOC = 14.3)

c.i. pigment yellow 13 LOW (KOC = 571400)

Version No: 1.0

12.5.Results of PBT and vPvB assessment

12.6. Other adverse effects

No data available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product / Packaging disposal

P B T

Relevant available data Not Available Not Available Not Available

PBT Criteria fulfilled? Not Available Not Available Not Available

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.

Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

Waste treatment options Not Available

Sewage disposal options Not Available

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant NO

HAZCHEM Not Applicable

Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1.UN number Not Applicable

14.2.UN proper shipping name Not Applicable

14.3. Transport hazard class(es)

Class Not Applicable

Subrisk Not Applicable

14.4.Packing group Not Applicable

14.5.Environmental hazard Not Applicable

14.6. Special precautions for user

Hazard identification (Kemler) Not Applicable

Classification code Not Applicable

Hazard Label Not Applicable

Special provisions Not Applicable

Limited quantity Not Applicable

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number Not Applicable

14.2. UN proper shipping name Not Applicable

14.3. Transport hazard class(es)

ICAO/IATA Class Not Applicable

ICAO / IATA Subrisk Not Applicable

ERG Code Not Applicable

14.4. Packing group Not Applicable

14.5. Environmental hazard Not Applicable

14.6. Special precautions for user

Special provisions Not Applicable

Cargo Only Packing Instructions Not Applicable

Cargo Only Maximum Qty / Pack Not Applicable

Passenger and Cargo Packing Instructions Not Applicable

Passenger and Cargo Maximum Qty / Pack Not Applicable

Passenger and Cargo Limited Quantity Packing Instructions Not Applicable

Passenger and Cargo Limited Maximum Qty / Pack Not Applicable

DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal.

Continued...

Version No: 1.0

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number Not Applicable

14.2. UN proper shipping name Not Applicable

14.3. Transport hazard class(es)

IMDG Class Not Applicable

IMDG Subrisk Not Applicable

14.4. Packing group Not Applicable

14.5. Environmental hazard Not Applicable

14.6. Special precautions for user

EMS Number Not Applicable

Special provisions Not Applicable

Limited Quantities Not Applicable

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number Not Applicable

14.2. UN proper shipping name Not Applicable

14.3. Transport hazard class(es) Not Applicable Not Applicable

14.4. Packing group Not Applicable

14.5. Environmental hazard Not Applicable

14.6. Special precautions for user

Classification code Not Applicable

Special provisions Not Applicable

Limited quantity Not Applicable

Equipment required Not Applicable

Fire cones number Not Applicable

14.7. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex IV - Exemptions from the Obligation to Register in Accordance with Article 2(7)(a) (English) European Customs Inventory of Chemical Substances ECICS (English)

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

CARBON BLACK(1333-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List of Substances European Customs Inventory of Chemical Substances ECICS (English) European List of Notified Chemical Substances (ELINCS) European Trade Union Confederation (ETUC) Priority List for REACH Authorisation

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English) International

Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs UK Workplace Exposure Limits (WELs)

C.I. PIGMENT YELLOW 13(5102-83-0) IS FOUNG ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles EU REACH Regulation (EC) No 1907/2006 - Annex XVII (Appendix 2) Carcinogens: category 1B (Table 3.1)/category 2 (Table 3.2) European Customs Inventory of Chemical Substances ECICS (English) European Trade Union Confederation (ETUC) Priority List for REACH Authorisation

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English) European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31 European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

C.I. PIGMENT RED 122(980-26-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English) European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

(English)

C.I. PIGMENT BLUE 28(1345-16-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English) European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs UK Workplace Exposure Limits (WELs)

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : 98/24/EC, 92/85/EC, 94/33/EC, 91/689/EEC, 1999/13/EC, Commission Regulation (EU) 2015/830, Regulation (EC) No 1272/2008 and their amendments

Continued...

Version No: 1.0

15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

SECTION 16 OTHER INFORMATION

Full text Risk and Hazard codes

None Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards: EN 166 Personal eye-protection EN 340 Protective clothing EN 374 Protective gloves against chemicals and micro-organisms EN 13832 Footwear protecting against chemicals EN 133 Respiratory protective devices

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit。 IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index