Safety Data Sheet According to Regulation (EC) No 1907/2006

Metallic Gel Ink-MGI-GOLD M201

Version 1.0

Issue date: 26/07/2016

Revision date: 26/07/2016 SDS Record Number: CSSS-TCO-010-120420

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

1.1 Product identifier:

Metallic Gel Ink-MGI-GOLD M201 Identification on the label/Trade name:

Additional identification: Not available Identification of the product: See section 3 Index Number: Not available REACH registration No.: Not available

1.2 Relevant identified uses of the substance and uses advised against:

1.2.1 Identified uses:

Writing ink.

1.2.2 Uses advised against:

Not available

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative):

Supplier(Manufacturer):

Address:

Contact person(E-mail):

Telephone:

Fax:

1.4 Emergency telephone Number:

+86-13456169680

Available outside office hours? YES NO Χ

Section 2 Hazards Identification

2.1 Classification of the substance/mixture:

2.1.1 Classification:

The mixture is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard codes
N/A	N/A

For full text of H- phrases: see section 2.2.

2.2 label elements:

Hazard Pictograms: No hazard pictogram is used.

Signal Word(S): No signal word is used.

Not applicable. **Hazard Statement: Precautionary statement:** Not applicable.

2.3 Other hazards:

Not available.

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Section 3 Composition/information on ingredients

Substance/Mixture: Mixture

Ingredient(s):

Chemical Name	Registrati on No.	CAS No.	EC No.	Concentration	classifications
water	N/A	7732-18-5	231-791-2	60%	Not Classified
glycerol	N/A	56-81-5	200-289-5	20%	Not Classified
polyethylene glycol	N/A	25322-68-3	500-038-2	10%	H335
C.I.Pigment Yellow 83	N/A	5567-15-7	226-939-8	5%	Not Classified
Acrylic copolymer	N/A	37325-11-4	N/A	2%	Not available
Aluminum powder	N/A	7429-90-5	231-072-3	2%	H250 H261
Additive	N/A	124-68-5	204-709-8	1%	H315 H319 H412

² percent of the mixture consists of component (s) of unknown toxicity.

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Move person to fresh air; if effects occur, consult a physician.

4.1.2 In case of skin contact:

Wash skin with plenty of water.

4.1.3 In case of eyes contact:

Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

4.1.4 In case of ingestion:

If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

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

The product is not classified as harmful to human health effect.

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

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Use water fog, fine spray, dry chemical, carbon dioxide, alcohol resistant foams

(ATC type).

Unsuitable extinguishing media:Do not use direct water stream.

5.2 Special hazards arising from theHazardous decomposition products may be released: Carbon monoxide. Carbon

substance or mixture diox

5.3 Advice for firefighters: Fire-fighters should wear appropriate protective equipment and self-contained

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breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Keep unnecessary and unprotected personnel from entering the area. Use 6.1.1 For non-emergency personnel:

appropriate safety equipment.

Wear an appropriate NIOSH/MSHA approved respirator if vapor is generated. 6.1.2 For emergency responders:

Do not allow material to be released to the environment without proper 6.2 Environmental Precautions:

governmental permits.

6.3 Methods for Containment and Cleaning

Recover spilled material if possible. Contain spilled material if possible. Absorb with

materials such as: Sand. Collect in suitable and properly labeled containers.

6.4 Reference to other sections: See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace. Wash thoroughly after 7.1.1 Protective measures:

> handling. Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating

areas.

7.1.2 Advice on general occupational

hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

No special requirements. Store in a cool, dry place. Keep container tightly closed.

7.2 Conditions for safe storage, including

any incompatibilities:

7.3 Specific end use(s): Not applicable.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: Glycerol(CAS# 56-81-5): Occupational Exposure Limit Value (8-hour reference

period): 10mg/ m³(Ireland)

polyethylene glycol(CAS# 25322-68-3): the average: 1000 mg/ m³(Slovakia 2007) Aluminum powder(CAS#7429-90-5): Long-term exposure limit value: 5 mg /

Additive(CAS#124-68-5): tentative limit: 3ppm(Denmark)

8.1.2 Additional exposure limits under the

conditions of use:

Not available.

8.1.3 DNEL/DMEL and PNEC-Values:

Not available.

8.2 Exposure controls:

8.2.1Appropriate engineering controls: Use process enclosures, local exhaust ventilation or other engineering controls to

keep worker exposure to airborne contaminants below any recommended or

statutory limits.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety glasses with side shields. Chemical goggles.

Hand protection: Wear chemical protective gloves.

Wear protective clothing. **Body protection:**

Organic vapor cartridge with a particulate pre-filter, type AP2. Respiratory protection:

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Thermal hazards: Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls: Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance: Liquid
Colour: Gold

Odour: Not available
Odour threshold: Not available

pH: 7-10

 Melting point/range (°C):
 18.17 °C(101.3 kPa) (CAS#56-81-5)

 Boiling point/range (°C):
 290 °C (760 mm Hg)(CAS#56-81-5)

 Flash point (°C):
 closed cup:199 °C (CAS#56-81-5)

open cup: 177 °C (CAS#56-81-5)

Evaporation rate:

Not available

Flammability limit - lower (%):

Flammability limit - upper (%):

Flammability (solid, gas):

Not available

Ignition temperature (°C):

Not available

Ignition temperature (°C):

Upper/lower flammability/explosive limits:

Not available

Vapour pressure (50°C): 0.0025 mm Hg (CAS#56-81-5)

Vapour density: Not available

Density: 1.26g/ml (20 °C) (CAS#56-81-5)

Bulk density (kg/m³): Not available

Water solubility (g/l): 1000000 mg/L (25 °C) (CAS#56-81-5) n-Octanol/Water (log Po/w): log Pow = -1.75(25°C) (CAS#56-81-5)

Auto-ignition temperature: 370 °C (CAS#56-81-5)

Decomposition temperature: Not available

Viscosity, dynamic: 500

Explosive properties: Not available
Oxidising properties: Not available
Molecular Formula: Not available
Molecular Weight: Not available

9.2. Other information:

Fat solubility(solvent- oil to be specified) Not available

etc:

Surface tension: 24.9

Dissociation constant in water(pKa):Not availableOxidation-reduction Potential:Not availableSpecific gravity:Not available

Section 10 Stability and reactivity

10.1 Reactivity:The substance is stable under normal storage and handling conditions.

10.2 Chemical stability: Stable at room temperature in closed containers under normal storage and handling

 conditions.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: Incompatible materials. Exposure to elevated temperatures can cause product to

decompose.

10.5 Incompatible materials: Strong oxidizers.

10.6 Hazardous decomposition products: Carbon monoxide. Carbon dioxide.

Section 11 Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:

glycerol (CAS#56-81-5)

LD50(Oral, Mouse): ca. 23000 mg/kg bw

LC50(Inhalation, Rat): 56750 mg/kg

>2.75 mg/L 4h

polyethylene glycol (CAS#25322-68-3)

LD50(Oral, Mouse): Not available

LD50(Dermal, Rabbit): > 20000 mg/kg bw

Not available LC50(Inhalation, Rat): Skin corrosion/Irritation: Not classified Serious eye damage/irritation: Not classified Respiratory or skin sensitization: Not classified Germ cell mutagenicity: Not classified Not classified Carcinogenicity: Reproductive toxicity: Not classified Not classified STOT- single exposure: STOT-repeated exposure: Not classified

Section 12 Ecological information

12.1 Toxicity:

Aspiration hazard:

glycerol (CAS#56-81-5)

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	54000 mg/L	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

Not classified

12.2 Persistence and degradability:Not available.12.3 Bioaccumulative potential:Not available.12.4 Mobility in soil:Not available.12.5 Results of PBT&vPvB assessment:Not available.12.6 Other adverse effects:Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods: The material should be disposed of by incineration in a chemical incinerator in

compliance with national and regional requirements.

Section 14 Transport information								
	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)					
UN-Number	Not regulated	Not regulated	Not regulated					
UN Proper shipping name	Not regulated	Not regulated	Not regulated					
Transport hazard Class	Not regulated	Not regulated	Not regulated					
Packaging group	Not regulated	Not regulated	Not regulated					
Environmental hazards	No	No	No					
Special precautions for user	See section 2.2	See section 2.2	See section 2.2					
Transport in bulk according to Annex II of Marpol and the IBC Code	Not regulated	Not regulated	Not regulated					

Section 15 Regulation information

15.1	Safety	. health	and	environme	ental rec	ulations/	legislation	specific fo	r the	substance	or mixture:

Relevant information regarding authorization: Not applicable. Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For

use only by technically qualified individuals.

Not applicable Other National regulations:

15.2 Chemical Safety Assessment has been

carried out?

NO	Х

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by (EU) 2015/830

16.2 Training instructions:

Not applicable.

16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.4 Notice to reader:

Employers should use this information only as a supplement to other information gathered by the judgment of suitability of this information to ensure proper use and protect the health and safety of furnished without warranty, and any use of the product not in conformance with this Safety Data Sa other product or process, is the responsibility of the user.

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