01/EN Version No. Revision N. A. (according to Regulation EC 1907/2006) Printing date 28 Mar. 2018

### 1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier

Trade name THE BLACK 33

The ingredients of this ink have been registered according to Registration no.

1907/2006/EC (REACH)

1.2 Relevant identified uses of sustance or mixture and uses advised against

Identified uses Water-soluble stationary ink

1.3 Details of the supplier of the safety data sheet

Company UCHIDA OF AMERICA, CORP.

3535 Del Amo Blvd., Torrance, CA 90503

Telephone : +1-800-541-5877 : +1-800-229-7017 : +1-800-541-5877 1.4 Emergency telephone number

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

### Information concerning particular hazards for human and environment:

The product has not to be labelled due to the calculation procedure of Regulation 1272/2008/EC.

### Classification system:

The classification is according to the latest edition of EU Regulation 1272/2008/EC, and extended by company and literature data.

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Not applicable Hazard pictograms Not applicable. Signal word Not applicable. Hazard statements Not applicable. Precautionary statements Not applicable.

### 2.3. Other hazards

No further relevant information available Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

Page 1 of 6

Version No. 01/EN
Revision N. A.
Printing date 28 Mar. 2018

(according to Regulation EC 1907/2006)

### 3. COMPOSITION / INFORMATION ON INGREDIENS

### 3.1 Mixture

| Components  | %    | Classification   |
|---|------|--|
| Water<br>CAS No. Trade Secret<br>EINECS: Trade Secret     | 7.8  | The product does not require a hazard warning label in accordance with GHS criteria. |
| Poly ethylene glycol<br>CAS No. Trade Secret<br>EINECS: - | 1 () | The product does not require a hazard warning label in accordance with GHS criteria. |

| Components  | %    | Classification   |
|---|------|--|
| POLYACRYLIC ACID<br>CAS No. Trade Secret<br>EINECS: -                       | 0.5  | The product does not require a hazard warning label in accordance with GHS criteria. |
| TRIETHYLENE GLYCOL<br>CAS No. Trade Secret<br>EINECS: Trade Secret          | 3    | The product does not require a hazard warning label in accordance with GHS criteria. |
| C.I. PIGMENT BLACK 7<br>CAS No. Trade Secret<br>EINECS: Trade Secret        | 8    | The product does not require a hazard warning label in accordance with GHS criteria. |
| 2-Amino-2-methyl-1-propanol<br>CAS No. Trade Secret<br>EINECS: Trade Secret | 0. 5 | Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412                     |

# 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

Inhalation Supply fresh air; consult doctor in case of complaints.

Skin contant Immediately wash with water and soap and rinse thoroughly.

Eye contact Rince opened eye for several minutes under running water.

Ingestion If symptoms persist counsult doctor.

# **5. FIRE FIGHTING MEASURES**

# 5.1 Extinguishing media

A fire extinguisher water, form, CO2, NaHCO3

 $5.\,2$  Special hazards arising from the substance or mixture  $_{\rm None}$ 

# 5.3 Advice for firefighters

Wear fully protective suit. Mouth respiratory protective device. Do not inhale explosion gases or combustion gase

# 5.4 Special Information

No data available

# **6. ACCIDENTAL RELEASE MEASURES**

# 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

# 6.2 Environmental precautions

Do not allow product to reach sege system or any water course.

Inform respective authorities in case of see page into water course or sewage system.

Do not allow to enter to enter sewers/ surface or ground water.

# 6.3 Methods and material for containment and cleaning up

No data available

Version No. 01/EN
Revision N. A.
Printing date 28 Mar. 2018

(according to Regulation EC 1907/2006)

### 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Store in cool, dry place in tightly close receptacles.

Ensure good ventilation/exhaustion at the work place. Keep ignition sources away- Do not smoke.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool location. Store away from sunlight.

# 8. EXPOSURE CONTOLS / PERSONAL PROTECTION

### 8.1 Occupational exposure limits

DNELs; Not available PNECs; Not available

### 8.2 Appropriate engineering controls

No data available

### 8.3 Personal protection equipment

General protective and wash hands before breaks and at the end of work

hygienic measures

Eye and face protection Tightly sealed goggles.

Hand protection The gloves material has to be impermeable and

resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

### 9. PHYSICAL & CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| Properties                                   | Product<br>(THE BLACK 33) | Properties                             | Product<br>(THE BLACK 33)     |
|--|---------------------------|--|-------------------------------|
| Appearance                                   | Liquid (BLACK)            | Vapor pressure                         | No data available             |
| Odor   | Odorless                  | Vapor destiny                          | No data available             |
| Odor threshold                               | No data available         | Relative desiny                        | $1.1 \pm 0.05 \text{ g/cm}^3$ |
| PH   | 8.0 ± 1.0                 | Solubility                             | Fully miscible                |
| Melting<br>point/<br>Freezing<br>point       | No data available         | Partition coefficient: n-octanol/ wate | No data available             |
| Boiling point and range                      | >100°C                    | Auto-ignition temperature              | No self-igniting              |
| Flash point                                  | No data available         | Decomposition temperature              | No data available             |
| Evaporation ra                               | No data available         | Viscosty                               | $1100 \pm 150 \text{ cps}$    |
| Flammability (solid, gas)                    | No data available         | Explosive properties                   | not explosive                 |
| Upper/lower flammability or explosive limits | No data available         | Oxidizing properties                   | No data available             |

Version No. 01/EN
Revision N. A.
Printing date 28 Mar. 2018

(according to Regulation EC 1907/2006)

### **10. STABILITY AND REACTIVITY**

10.1 Reactivity No data available

10.2 Chemical stability Stable

10.3 Possibility of hazardous reaction: No dangerous reactions known.

10.4 Conditions to avoid No decomposition if used according to specifications.

10.5 Incompatiable metarials No data available

10.6 Hazardous decomposition products No dangerous decomposition product known.

### 11. TOXICOLOGICAL INFORMATION

11.1 Routes of exposure No data available

11.2 Information on toxicological effection

Acute toxicity

Skin corrosion/ irritation

Serious eye damage/ irritation

Respiratory or skin sensation

Germ cell mutagenicity

No data available

No data available

No data available

Carcinogenicity This product is or contains a component that is probably not carcin

based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity
STOT-single exposure
STOT-repeated exposure
Aspiration hazard
No data available
No data available
No data available

### 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity No data available

12.2 Persistence and degradability Heavily removable from water.

12.3 Bioccumulative potencial No data available

12.4 Mobility in soil May be accumulated in organism

12.5 Other adverse effects Do not allow undiluted product or large quantities of it to reach

greound water, water course or sewage system.

# 13. DISPOSAL CONSIDERATIONS

13.1 Disposal instructions

Must not be disposed together with household garbage. Do not allow

product to reach sewage system.

13.2 Waste from residues
/ unused products
3.3 Contaminated packaging
No data available

# 14. TRANSPORT INFORMATION

14. TRANSPORT INFORMATION

14.1 UN numberNot regulated14.2 UN proper shipping nameNot regulated

14.3 Transport hazard class(es) Not regulated as a hazardous for transportation.

14.4 Packing groupNot regulated14.5 Enviromental hazardsNo

14.6 Special precautions for user Not regulated

Version No. 01/EN
Revision N. A.
Printing date 28 Mar. 2018

(according to Regulation EC 1907/2006)

#### 15. REGULATORY INFORMATION

### 15.1 Regulatory information

This is safety datasheet complies with the requirments of Regulation (EC) No 1907/2006

#### 15.2 Chemical Dafety Assessment:

No data available

### 15.3 Iventory status

SARA

Non of the ingredients is listed. - Section 335 (extremely hazardous substance): - Section 313 (Speciafic toxic chemical listings): Non of the ingredients is listed. - TSCA(Toxic Substance Control Act): Non of the ingredients is listed. Proposition 65 Non of the ingredients is listed. - known to cause cancer Non of the ingredients is listed. - known to cause reproductive toxicity for meals - known to cause developmental toxicity Non of the ingredients is listed. Carcinogenicity categories Non of the ingredients is listed. - EPA - IARC Non of the ingredients is listed. Non of the ingredients is listed. - NTP Non of the ingredients is listed. - TLV

#### **16. OTHER INFORMATION**

- NIOSH-Ca

- OSHA-Ca

#### 16. OTHER INFORMATION

The contents and format of this MSDS/SDS are in accordance with Regulation (EC) No 1907/2006.

Eu Commission Directive 1999/45/EC, 67/548/EEC.

### • Reference

KOSHA - Chemical information database system

Other MSDS (YOU&I Corporation, Sigma-aldrich, Science lab, Guidechem)

International uniform Chemical Safety Cards (ICSC).

 $Hazardous\ Substances\ Data\ Bank\ (HSDB)\ (http://toxnet.\,nlm.\,nih.\,gov/cgi-bin/sis/htmlgen?HSDB)$ 

Non of the ingredients is listed.

Non of the ingredients is listed.

Corporate Solution From ThomsonMicromedex (http://csi.micromedex.com)

ECB-ESIS (European chemical Substances Information System) (http://ecb.jrc.it/esis)

ECOTOX Database, EPA(http://cfpub.epa.gov/ecotox)

IUCLID Chemical Data Sheet, EC-ECB

International Chemical Safety Cards (ICSC) (http://www.nihs.go.jp/ICSC)

TOXNET, U.S. National Library of Medicine (http://toxnet.nlm.nih.gov)

# Abbreviation and acronyms

ACGIH - American Conference of Industrial Hygiensts

CAS - Chmical Abstracts Serviece

EC - European Community

EEC - The European Economic Community

EPA - Environmental Protection Agency

GHS- Global Harmonized System

IARC - International Agency for Research on Cancer

NIOSH - National Institute for Occupational Satety and Health

NTP - The National Toxicology Program

OSHA - Occupational Safety and Health Administration

 ${\ensuremath{\mathsf{TLV}}}$  -  ${\ensuremath{\mathsf{Thhreshold}}}$  Limit  ${\ensuremath{\mathsf{Value}}}$  established by ACGIH

TWA - 8-hour Time Weighted Averages

STOT - Specific Target Organ Toxicity

Version No. 01/EN
Revision N. A.
Printing date 28 Mar. 2018

# SAFETY DATA SHEET

(according to Regulation EC 1907/2006)

### • Disclaimer of Liability

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products Described or their suitability for a particular application. YOU&I Coporation assumes no responsibility for personal injury or property damage caused by the material. Users assume all reisks associated with the use of the material.

01/EN Version No. Revision N. A. (according to Regulation EC 1907/2006) Printing date 28 Mar. 2018

### 1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier

Trade name MGI- GOLD

The ingredients of this ink have been registered according to Registration no.

1907/2006/EC (REACH)

1.2 Relevant identified uses of sustance or mixture and uses advised against

Identified uses Water-soluble stationary ink

1.3 Details of the supplier of the safety data sheet

Company UCHIDA OF AMERICA, CORP.

3535 Del Amo Blvd., Torrance, CA 90503

Telephone : +1-800-541-5877 : +1-800-229-7017 : +1-800-541-5877 1.4 Emergency telephone number

### 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

# Information concerning particular hazards for human and environment:

The product has not to be labelled due to the calculation procedure of Regulation 1272/2008/EC.

### Classification system:

The classification is according to the latest edition of EU Regulation 1272/2008/EC, and extended by company and literature data.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Not applicable Hazard pictograms Not applicable. Signal word Not applicable.

Hazard statements Not applicable.

Precautionary statements Not applicable.

# 2.3. Other hazards

No further relevant information available

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

Page 1 of 6

SAFETY DATA SHEET (according to Regulation EC 1907/2006)

O1/EN Version No. Revision N. A. Printing date 28 Mar. 2018

# 3. COMPOSITION / INFORMATION ON INGREDIENS

# 3.1 Mixture

| Components  | %    | Classification  |
|---|------|---|
| Water<br>CAS No. Trade Secret<br>EINECS: Trade Secret     | 60.8 | Not a hazardous substance or mixture according to Regulation (EC) No.1272/2008  |
| Glycerine<br>CAS No. Trade Secret<br>EINECS: Trade Secret | 29   | Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008 |

| Components   | % | Classification   |
|--|---|--|
| Poly ethylene glycol<br>CAS No. Trade Secret<br>EINECS: -        | h | Not a hazardous substance or mixture according to Regulation (EC)<br>No. 1272/2008 |
| Aluminium powder<br>CAS No. Trade Secret<br>EINECS: Trade Secret | 1 | Flam. Sol. 1, H228; Water-react. 2, H261   |

| C.I. PIGMENT YELLOW 83<br>CAS No. Trade Secret<br>EINECS: Trade Secret      |     | Not a hazardous substance or mixture according to Regulation (EC)<br>No.1272/2008 |
|---|-----|---|
| 2-Amino-2-methyl-1-propanol<br>CAS No. Trade Secret<br>EINECS: Trade Secret | 0.2 | Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412                  |

### 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

Inhalation Supply fresh air; consult doctor in case of complaints.

Skin contant Immediately wash with water and soap and rinse thoroughly.

Eye contact Rince opened eye for several minutes under running water.

Ingestion If symptoms persist counsult doctor.

# **5. FIRE FIGHTING MEASURES**

#### 5.1 Extinguishing media

A fire extinguisher water, form, CO2, NaHCO3

5.2 Special hazards arising from the substance or mixture

Non

### 5.3 Advice for firefighters

Wear fully protective suit. Mouth respiratory protective device. Do not inhale explosion gases or combustion gases.

### 5.4 Special Information

No data available

### **6. ACCIDENTAL RELEASE MEASURES**

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

### 6.2 Environmental precautions

Do not allow product to reach sege system or any water course.

Inform respective authorities in case of see page into water course or sewage system.

Do not allow to enter to enter sewers/ surface or ground water.

#### 6.3 Methods and material for containment and cleaning up

No data available

Version No.

Page 2 of 6

# SAFETY DATA SHEET

Revision N. A. (according to Regulation EC 1907/2006)
Printing date 28 Mar. 2018

# 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

01/EN

Store in cool, dry place in tightly close receptacles.

Ensure good ventilation/exhaustion at the work place. Keep ignition sources away- Do not smoke.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool location. Store away from sunlight.

# 8. EXPOSURE CONTOLS / PERSONAL PROTECTION

# 8.1 Occupational exposure limits

DNELs; Not available PNECs; Not available

# 8.2 Appropriate engineering controls

No data available

# 8.3 Personal protection equipment

General protective and wash hands before breaks and at the end of wor

hygienic measures

Eye and face protection Tightly sealed goggles.

Hand protection The gloves material has to be impermeable and

resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

# 9. PHYSICAL & CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| Properties  | Product<br>(MGI-GOLD) | Properties                            | Product<br>(MGI-GOLD)         |
|---|-----------------------|---------------------------------------|-------------------------------|
| Appearance  | Liquid (GOLD)         | Vapor pressure                        | No data available             |
| 0dor  | Odorless              | Vapor destiny                         | No data available             |
| Odor threshold  | No data available     | Relative desiny                       | $1.1 \pm 0.05 \text{ g/cm}^3$ |
| PH  | $9.5 \pm 1.0$         | Solubility                            | Fully miscible                |
| Melting<br>point/<br>Freezing<br>point                | No data available     | artition coefficient: n-octanol/ wate | No data available             |
| Boiling point and range                               | >100°C                | Auto-ignition temperature             | No self-igniting              |
| Flash point   | 300℃                  | Decomposition temperature             | No data available             |
| Evaporation ra  | No data available     | Viscosty                              | $750 \pm 150 \text{ cps}$     |
| Flammability (solid, gas)                             | No data available     | Explosive properties                  | not explosive                 |
| Upper/lower<br>flammability<br>or explosive<br>limits | No data available     | Oxidizing properties                  | No data available             |

Page 3 of 6

O1/EN Version No. Revision N. A.

SAFETY DATA SHEET (according to Regulation EC 1907/2006)

28 Mar. 2018 Printing date

# 10. STABILITY AND REACTIVITY

No data available 10.1 Reactivity

Stable 10.2 Chemical stability

10.3 Possibility of hazardous reactioNo dangerous reactions known.

10.4 Conditions to avoid No decomposition if used according to specifications.

10.5 Incompatiable metarials No data available

10.6 Hazardous decomposition products No dangerous decomposition product known.

# 11. TOXICOLOGICAL INFORMATION

11.1 Routes of exposure No data available

11.2 Information on toxicological eff

Acute toxicity No data available No data available Skin corrosion/ irritation Serious eye damage/ irritation No data available No data available Respiratory or skin sensation No data available Germ cell mutagenicity

Carcinogenicity This product is or contains a component that is probably not carci

based on its IARC, ACGIH, NTP, or EPA classification.

No data available Reproductive toxicity No data available STOT-single exposure No data available STOT-repeated exposure Aspiration hazard No data available

# 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity No data available

12.2 Persistence and degradability Heavily removable from water.

No data available 12.3 Bioccumulative potencial

12.4 Mobility in soil May be accumulated in organism

12.5 Other adverse effects Do not allow undiluted product or large quantities of it to reach

greound water, water course or sewage system.

# 13. DISPOSAL CONSIDERATIONS

13.1 Disposal instructions Must not be disposed together with household garbage. Do not allow

product to reach sewage system.

13.2 Waste from residues No data available / unused products 13.3 Contaminated packaging No data available

### 14. TRANSPORT INFORMATION

14. TRANSPORT INFORMATION

14.1 UN number Not regulated 14.2 UN proper shipping name Not regulated

14.3 Transport hazard class(es) Not regulated as a hazardous for transportation.

14.4 Packing group Not regulated

14.5 Environmental hazards

14.6 Special precautions for user Not regulated

Page 4 of 6

# SAFETY DATA SHEET

Revision N. A. (according to Regulation EC 1907/2006) Printing date 28 Mar. 2018

# 15. REGULATORY INFORMATION

01/EN

### 15.1 Regulatory information

This is safety datasheet complies with the requirments of Regulation (EC) No 1907/2006

### 15.2 Chemical Dafety Assessment:

No data available

### 15.3 Iventory status

SARA

Version No.

- Section 335 (extremely hazardous substance): Non of the ingredients is listed. Non of the ingredients is listed. - Section 313 (Speciafic toxic chemical listings): Non of the ingredients is listed. - TSCA(Toxic Substance Control Act):

Proposition 65

Non of the ingredients is listed. - known to cause cancer

Non of the ingredients is listed. - known to cause reproductive toxicity for meals - known to cause developmental toxicity Non of the ingredients is listed.

Carcinogenicity categories

- EPA Non of the ingredients is listed. - IARC Non of the ingredients is listed. Non of the ingredients is listed. - NTP - TLV Non of the ingredients is listed. Non of the ingredients is listed. - NIOSH-Ca - OSHA-Ca Non of the ingredients is listed.

# 16. OTHER INFORMATION

# 16. OTHER INFORMATION

1907/2006.

Eu Commission Directive 1999/45/EC, 67/548/EEC.

# Reference

KOSHA - Chemical information database system

Other MSDS (YOU&I Corporation, Sigma-aldrich, Science lab, Guidechem)

International uniform Chemical Safety Cards (ICSC).

Hazardous Substances Data Bank (HSDB) (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB)

Corporate Solution From ThomsonMicromedex(http://csi.micromedex.com)

ECB-ESIS (European chemical Substances Information System) (http://ecb.jrc.it/esis)

ECOTOX Database, EPA(http://cfpub.epa.gov/ecotox)

IUCLID Chemical Data Sheet, EC-ECB

International Chemical Safety Cards (ICSC) (http://www.nihs.go.jp/ICSC)

TOXNET, U.S. National Library of Medicine (http://toxnet.nlm.nih.gov)

# Abbreviation and acronyms

ACGIH - American Conference of Industrial Hygiensts

CAS - Chmical Abstracts Serviece

EC - European Community

EEC - The European Economic Community

EPA - Environmental Protection Agency

GHS- Global Harmonized System

IARC - International Agency for Research on Cancer

NIOSH - National Institute for Occupational Satety and Health

NTP - The National Toxicology Program

OSHA - Occupational Safety and Health Administration

TLV - Thhreshold Limit Value established by ACGIH

TWA - 8-hour Time Weighted Averages

Page 5 of 6

Version No. 01/EN
Revision N. A.
Printing date 28 Mar. 2018

# SAFETY DATA SHEET

(according to Regulation EC 1907/2006)

# • Disclaimer of Liability

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products Described or their suitability for a particular application. YOU&I Coporation assumes no responsibility for personal injury or property damage caused by the material. Users assume all reisks associated with the use of the material.

01/EN Version No. Revision N. A. (according to Regulation EC 1907/2006) Printing date 28 Mar. 2018

### 1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier

MGI- SILVER Trade name

The ingredients of this ink have been registered according to Registration no.

1907/2006/EC (REACH)

1.2 Relevant identified uses of sustance or mixture and uses advised against

Identified uses Water-soluble stationary ink

1.3 Details of the supplier of the safety data sheet

Company

UCHIDA OF AMERICA, CORP.

3535 Del Amo Blvd., Torrance, CA 90503

Telephone :+1-800-541-5877 Fax :+1-800-229-7017 1.4 Emergency telephone number :+1-800-541-5877

### 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

# Information concerning particular hazards for human and environment:

The product has not to be labelled due to the calculation procedure of Regulation 1272/2008/EC.

### Classification system:

The classification is according to the latest edition of EU Regulation 1272/2008/EC, and extended by company and literature data.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Not applicable Hazard pictograms Not applicable. Signal word Not applicable. Hazard statements Not applicable. Precautionary statements Not applicable.

# 2.3. Other hazards

No further relevant information available

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

Page 1 of 6

# SAFETY DATA SHEET

Revision N. A. (according to Regulation EC 1907/2006)

Printing date 28 Mar. 2018

01/EN

# 3. COMPOSITION / INFORMATION ON INGREDIENS

# 3.1 Mixture

Version No.

| Components   | %   | Classification   |
|--|---|--|
| Water<br>CAS No. Trade Secret<br>EINECS: Trade Secret      | $h \rightarrow h \rightarrow h \rightarrow h$ | Not a hazardous substance or mixture according to Regulation (EC)<br>No.1272/2008  |
| Glycerine<br>CAS No.: Trade Secret<br>EINECS: Trade Secret | - 74  | Not a hazardous substance or mixture according to Regulation (EC)<br>No. 1272/2008 |

| Components   | % | Classification  |  |
|--|---|---|--|
| Poly ethylene glycol<br>CAS No. Trade Secret<br>EINECS: -        | h | Not a hazardous substance or mixture according to Regulation (EC)<br>No.1272/2008 |  |
| Aluminium powder<br>CAS No. Trade Secret<br>EINECS: Trade Secret | 1 | Flam. Sol. 1, H228; Water-react. 2, H261  |  |

0.2



### 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

Inhalation Supply fresh air; consult doctor in case of complaints. Skin contant Immediately wash with water and soap and rinse thoroughly. Eye contact Rince opened eye for several minutes under running water.

Ingestion If symptoms persist counsult doctor.

### 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

A fire extinguisher water, form, CO2, NaHCO3

### 5.2 Special hazards arising from the substance or mixture

### 5.3 Advice for firefighters

Wear fully protective suit. Mouth respiratory protective device. Do not inhale explosion gases or combustion gases.

### 5.4 Special Information

No data available

### **6. ACCIDENTAL RELEASE MEASURES**

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

#### 6.2 Environmental precautions

Do not allow product to reach sege system or any water course.

Inform respective authorities in case of see page into water course or sewage system.

Do not allow to enter to enter sewers/ surface or ground water.

### 6.3 Methods and material for containment and cleaning up

No data available

Page 2 of 6

# SAFETY DATA SHEET

N. A. Revision

Version No.

Printing date 28 Mar. 2018

(according to Regulation EC 1907/2006)

# 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

01/EN

Store in cool, dry place in tightly close receptacles.

Ensure good ventilation/exhaustion at the work place. Keep ignition sources away- Do not smoke.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool location. Store away from sunlight.

# 8. EXPOSURE CONTOLS / PERSONAL PROTECTION

# 8.1 Occupational exposure limits

DNELs; Not available PNECs; Not available

# 8.2 Appropriate engineering controls

No data available

# 8.3 Personal protection equipment

General protective and wash hands before breaks and at the end of work

hygienic measures

Tightly sealed goggles. Eye and face protection

Repiratory protection Use suitable respiratory protective device in case of insufficient v

Hand protection The gloves material has to be impermeable and

resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

# 9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| Properties  | Product<br>(MGI-SILVER) | Properties                             | Product<br>(MGI-SILVER)       |
|---|-------------------------|--|-------------------------------|
| Appearance  | Liquid (SILVER)         | Vapor pressure                         | No data available             |
| 0dor  | 0dorless                | Vapor destiny                          | No data available             |
| Odor threshold  | No data available       | Relative desiny                        | $1.1 \pm 0.05 \text{ g/cm}^3$ |
| PH  | 9.5 ± 1.0               | Solubility                             | Fully miscible                |
| Melting<br>point/<br>Freezing<br>point                | No data available       | Partition coefficient: n-octanol/ wate | No data available             |
| Boiling point and range                               | >100 <b>°</b> C         | Auto-ignition temperature              | No self-igniting              |
| Flash point   | 300℃                    | Decomposition temperature              | No data available             |
| Evaporation ra  | No data available       | Viscosty                               | $750 \pm 150 \text{ cps}$     |
| Flammability (solid, gas)                             | No data available       | Explosive properties                   | not explosive                 |
| Upper/lower<br>flammability<br>or explosive<br>limits | No data available       | Oxidizing properties                   | No data available             |

Page 3 of 6

Version No. 01/EN
Revision N. A.
Printing date 28 Mar. 2018

# SAFETY DATA SHEET

(according to Regulation EC 1907/2006)

# **10. STABILITY AND REACTIVITY**

10.1 Reactivity No data available

10.2 Chemical stability Stable

10.3 Possibility of hazardous reaction: No dangerous reactions known.

10.4 Conditions to avoid No decomposition if used according to specifications.

10.5 Incompatiable metarials No data available

10.6 Hazardous decomposition products No dangerous decomposition product known.

# 11. TOXICOLOGICAL INFORMATION

11.1 Routes of exposure No data available

11.2 Information on toxicological effection

Acute toxicity

No data available
Skin corrosion/irritation

Serious eye damage/irritation

Respiratory or skin sensation

Germ cell mutagenicity

No data available
No data available

Carcinogenicity This product is or contains a component that is probably not carci

based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity
STOT-single exposure
No data available
STOT-repeated exposure
No data available
Aspiration hazard
No data available

# 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity No data available

12.2 Persistence and degradability Heavily removable from water.

12.3 Bioccumulative potencial No data available

12.4 Mobility in soil May be accumulated in organism

12.5 Other adverse effects Do not allow undiluted product or large quantities of it to reach

greound water, water course or sewage system.

# 13. DISPOSAL CONSIDERATIONS

13.1 Disposal instructions Must not be disposed together with household garbage. Do not allow

product to reach sewage system.

13.2 Waste from residues
/ unused products13.3 Contaminated packagingNo data available

### 14. TRANSPORT INFORMATION

14. TRANSPORT INFORMATION

14.1 UN numberNot regulated14.2 UN proper shipping nameNot regulated

14.3 Transport hazard class(es) Not regulated as a hazardous for transportation.

14.4 Packing group Not regulated

14.5 Environmental hazards

14.6 Special precautions for user Not regulated

### Page 4 of 6

Version No. 01/EN
Revision N. A.
Printing date 28 Mar. 2018

# SAFETY DATA SHEET

(according to Regulation EC 1907/2006)

### 15. REGULATORY INFORMATION

### 15.1 Regulatory information

This is safety datasheet complies with the requirments of Regulation (EC) No 1907/2006

### 15.2 Chemical Dafety Assessment:

No data available

### 15.3 Iventory status

SARA

Section 335 (extremely hazardous substance):
 Section 313 (Speciafic toxic chemical listings):
 TSCA(Toxic Substance Control Act):
 Non of the ingredients is listed.
 Non of the ingredients is listed.

Proposition 65

- known to cause cancer Non of the ingredients is listed.

known to cause reproductive toxicity for meals
 known to cause developmental toxicity
 Non of the ingredients is listed.
 Non of the ingredients is listed.

Carcinogenicity categories

Non of the ingredients is listed.

- IARC

- NTP

Non of the ingredients is listed.

# **16. OTHER INFORMATION**

# 16. OTHER INFORMATION

The contents and format of this MSDS/SDS are in accordance with Regulation (EC) No 1907/2006.

Eu Commission Directive 1999/45/EC, 67/548/EEC.

# ·Reference

KOSHA - Chemical information database system

Other MSDS (YOU&I Corporation, Sigma-aldrich, Science lab, Guidechem)

International uniform Chemical Safety Cards (ICSC).

Hazardous Substances Data Bank (HSDB) (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB)

Corporate Solution From ThomsonMicromedex (http://csi.micromedex.com)

ECB-ESIS (European chemical Substances Information System) (http://ecb.jrc.it/esis)

ECOTOX Database, EPA(http://cfpub.epa.gov/ecotox)

IUCLID Chemical Data Sheet, EC-ECB

International Chemical Safety Cards (ICSC) (http://www.nihs.go.jp/ICSC)

TOXNET, U.S. National Library of Medicine (http://toxnet.nlm.nih.gov)

# • Abbreviation and acronyms

ACGIH - American Conference of Industrial Hygiensts

CAS - Chmical Abstracts Serviece

EC - European Community

EEC - The European Economic Community

EPA - Environmental Protection Agency

GHS- Global Harmonized System

IARC - International Agency for Research on Cancer

NIOSH - National Institute for Occupational Satety and Health

NTP - The National Toxicology Program

OSHA - Occupational Safety and Health Administration

TLV - Thhreshold Limit Value established by ACGIH

Page 5 of 6

Version No. 01/EN
Revision N. A.
Printing date 28 Mar. 2018

# SAFETY DATA SHEET

(according to Regulation EC 1907/2006)

### • Disclaimer of Liability

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products Described or their suitability for a particular application. YOU&I Coporation assumes no responsibility for personal injury or property damage caused by the material. Users assume all reisks associated with the use of the material.