KUSURI PRODUCTS LIMITED

MATERIALS SAFETY DATA SHEET

28.03.2014

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

1.1 Product identifiers

Product name: Powder Gold

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

Identified uses: 0.75% w/w Monolinuron (CAS: 1746-81-2) in a Calcium Carbonate (CAS: 1317-65-3) base for the treatment of String Algae and Blanketweed suitable for ponds containing fish and plants.
HSE 9777

1.3 Details of the supplier of the safety data sheet

Company: Kusuri Products Limited
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Heathfield Industrial Estate
Newton Abbot
Devon
United Kingdom
TQ12 6TL

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Fax: +44 (0)1626 836700
E-mail address: sales@kusuri.co.uk

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Monolinuron CAS#1746-81-2
Acute toxicity, Oral (Category 4)
Specific target organ toxicity - repeated exposure (Category 2)
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)

Calcium Carbonate CAS#1317-65-3 CAS#16389-88-1
No classified hazard

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Monolinuron CAS#1746-81-2
Harmful if swallowed. Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word Warning

Hazard statement(s)

H373	May cause damage to organs through prolonged or repeated exposure.
H302	Harmful if swallowed.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273	Avoid release to the environment.
P501	Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements none

According to European Directive 67/548/EEC as amended.

Hazard symbol(s) ^

R-phrase(s)

R22	Harmful if swallowed.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S60	This material and its container must be disposed of as hazardous waste.
S61	Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Calcium Carbonate
No classified hazard

2.3 Other hazards – none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula: 0.75% w/w monolinuron in Calcium Carbonate base.

Component

Monolinuron CAS#1746-81-2 EC#217-129-5
3-(4-Chlorophenyl)-1-methoxy-1-methylurea
CAS-No. 1746-81-2
EC-No. 217-129-5
Index-No. 006-032-00-1

Calcium Carbonate
Limestone: **CAS#1317-65-3 EINECS#215-65-3** Calcium Carbonate $CaCO_3$ > 98%. Product is obtained from minerals; purity level may vary according to their origins.

Dolomite: **CAS#16389-88-1 EINECS#240-440-2** Calcium Magnesium Carbonate $CaMg(CO_3)_2$ > 98%. Product is obtained from minerals; purity level may vary according to their origins.

Both materials may contain trace quantities of other minerals, metal salts, halides.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.
Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Do not rub eyes. Remove any contact lenses and open the eyelid(s) widely to flush eyes with clean water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.
Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media

N/A

5.2 Special hazards arising from the substance or mixture

N/A

5.3 Advice for firefighters

N/A

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation.
Evacuate personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains or watercourses.
Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes.

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7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

No data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good hygiene and safety practice.
Wash hands before and after use.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	Form: powder
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	8.5 – 9.5

e) Melting point/freezing point	Melting point/range: 0 - 99 °C
f) Initial boiling point and boiling range	N/A
g) Flash point	N/A
h) Evaporation rate	no data available
i) Flammability (solid, gas)	none flammable
j) Upper/lower flammability or explosive limits	not auto flammable
k) Vapour pressure	3 hPa at 22 °C
l) Vapour density	no data available
m) Relative density	2.6 – 2.8 g/cm$_3$
n) Water solubility	0.014 g/l (20°C) 0.018 g/l (75°C)
o) Partition coefficient: noctanol/ water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	stable under normal conditions

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

Stable under normal conditions

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Acids, Bases, Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 1,800 mg/kg

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Reproductive toxicity - mouse – Oral

Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).
Specific Developmental Abnormalities: Musculoskeletal system.

Reproductive toxicity - mouse - Oral

Effects on Fertility: Litter size (e.g.; # foetuses per litter; measured before birth).

Effects on Fertility: Postimplantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Effects on Embryo or Foetus: Foetal death.

Developmental Toxicity - mouse – Oral

Specific Developmental Abnormalities: Craniofacial (including nose and tongue).

Developmental Toxicity - mouse – Oral

Specific Developmental Abnormalities: Other developmental abnormalities.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Potential health effects

Ingestion Harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: YS6425000

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - Cyprinus carpio (Carp) - 12.9 mg/l - 96.0 h

12.2 Persistence and degradability

12.3 Bioaccumulative potential

Bioaccumulation Leuciscus idus (Golden orfe) - 3 d -45 µg/l
Bioconcentration factor (BCF): < 20

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 3077 IMDG: 3077 IATA: 3077

14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (3-(4-Chlorophenyl)-1- methoxy-1-methylurea)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (3-(4-Chlorophenyl)-1- methoxy-1-methylurea)
IATA: Environmentally hazardous substance, solid, n.o.s. (3-(4-Chlorophenyl)-1-methoxy-1-methylurea)

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: yes IMDG Marine Pollutant: yes IATA: yes

14.6 Special precautions for user

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No data available

15.2 Chemical Safety Assessment

No data available