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SAFETY DATA SHEET IMMERSION OIL

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

1.1. Product identifier

Product name IMMERSION OIL

Product No. M250

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

Identified uses A proprietary mixture of hydrocarbons and synthetic

rubber compounds for use with microscope immersion

lenses.

1.3. Details of the supplier of the safety data sheet

Supplier Gainland Chemical Co (GCC Diagnostics)

Factory Road Sandycroft Deeside Flintshire

CH5 2QJ, UK

+44 (0)1244 536326 (General Enquiries) +44 (0)1244 531254 (Fax)

Contact Person gccreagents@gmail.com

1.4. Emergency telephone number

+44 (0)1244 536326

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards

Ingestion - May possibly be harmful by ingestion - significant adverse health effects are not expected to develop if only small amounts (less than a mouthful) are ingested.

Inhalation - No real risk in normal usage. Possibly harmful at elevated temperatures. Vapours may be released at high temperatures (80 C+) and these may irritate the respiratory system. Significant adverse health effects are not expected to develop under normal conditions of exposure.

Skin contact - No irritation reported during tests. May be irritating particularly in cases where an individual has very sensitive skin. Repeated contact may cause sensitisation.

Eye contact - No irritation reported during tests. May irritate is especially sensitive individuals.

H413

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Signal Word Warning

Hazard Statements

May cause long lasting harmful effects to aquatic life.

Precautionary Statements

P273 Avoid release to the environment.
P262 Do not get into eyes/on skin/on clothing.
P281 Use personal protective equipment as required.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

No components need to be disclosed according to the applicable regulations.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

No real risk involved in normal use due to the low vapour pressure. However, if inhaled and feeling unwell, move the exposed person to clear air zone and seek medical attention if any discomfort continues.

Ingestion

If ingested, wash out mouth with running water and seek medical attention as to what treatment to give.

Skin contact

If in contact with any part of the body, remove contaminated clothing and wash skin thoroughly with plenty of soap and water. If irritation or other symptoms persist, seek medical attention.

Eye contact

Promptly wash eyes with eye bath, opening upper and lower lids. Seek medical attention for all eye injuries from chemicals.

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

The most important known symptoms and effects are described in the labelling (see section 2 and/or section 11)

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

No further information available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Any media can be used.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

None expected - however some components may undergo spontaneous de-polymerisation in fire conditions, releasing a flammable hydrocarbon vapour.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid breathing fire vapours. Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Keep run-off water out of sewers and water sources. Dike for water control.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing should be worn in case of fire.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet, impervious gloves, skin and eye protection etc. Avoid inhalation of vapours and contact with skin and eyes.

6.2. Environmental precautions

Do not allow release into drains, water courses and the aquatic environment. Contain spillages with sand, earth or any suitable adsorbent material.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Dam and absorb spillages with sand, earth or other absorbent material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Do not allow deliberate release into the environment without proper government permits.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep containers tightly sealed. Store in a cool, dry place in tightly closed containers, out of direct sunlight. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes. Provide good ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Product is combustible. Keep away from heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. **Store in dark**, away from sunlight.

Recommended storage temperature: room temperature, 12 - 18 °C

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

7.4 Information about storage in one common storage facility

None.

SECTION 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

General industrial hygiene practice.

General industrial hygiene practice - Personal protective equipment

Eye/face protection - use equipment for eye protection tested and approved under appropriate government standards such as EN 166 (EU).

Skin protection - handle with gloves, which must be inspected prior to use, under specifications of EU Directive 89/686/EEC standard E374. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practises. Wash and dry hands.

Body protection - protective work clothing.

Respiratory protection - respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges.

Control of environmental exposure

Do not allow product enter into the aquatic environment.

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Components with critical Values that require monitoring at the workplace:

Long Term Exposure Limit TWA 8Hr 5 mg/m3

Short Term Exposure Limit TWA 15 mins 10mg/m3

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Oily liquid

Colourless-straw coloured

Odour Slight odour

Melting point/Melting range N/A
Boiling point/Boiling range >200°C

Decompositon temperature Not determined

Danger of explosion Not determined/not expected

Vapour pressure(at 20°C) <0.1 hPa
Steam pressure(at 20°C) N/A
Density(at 20°C) 0.93

Solubility/Miscibility:

With water Not soluble With Xylene/Toluene Soluble

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

None known and none expected.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising agents and sources of ignition if the material is very hot. (> 80°C)

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

This product is a mixture - consideration of total toxicity and associated risk has been made assuming the worst known or assessed risk of each component in the pure(100%) form.

Slight tetraogenic effect on animals, not considered carcinogenic or mutagenic by NTP, IARC or OSHA.

Acute animal toxicity data:

LD50, rat > 10,000 mg/kg Practically non-toxic following oral administration. LD50, rabbit > 2,000 mg/kg. No more than slightly toxic. LC50, rat > 4.7mg/litre. The highest acheivable concentration in this study.

Skin irritation:

Inhalation:

Eye irritation: rabbit, practically non-irritating to eyes (rabbit 24 Hr). Skin irritation: rabbit, practically non-irritating to skin (rabbit 24 Hr).

Skin sensitization: Human experience. Predictive patch testing on human volunteers did not produce irritation or sensitisation (data obtained on

Human experience of significant period contact during manufacture and processing has not produced any

obvious or noticeable irritation or sensitisation.

Carcinogenicity: mouse, dermal, chronic. No treatment related effects were observed. Data obtained on a similar product.

Mutagenicity: No genetic effects were observed in standard tests using bacterial and animal cells.

No genetic effects were observed in standard tests using whole animals

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

This product is a mixture - consideration of total toxicity and associated risk has been made assuming the worst known or assessed risk of each component in the pure(100%) form.

12.2. Ecotoxicity effects

Toxicity to Daphnia - 96 Hr, LC 50 Daphnia magna > 1000 mg/ litre

- EC50 / LC 50 greater than water solubility

Toxicity to Fish

- 96 Hr, LC50 Rainbow trout > 1000 mg/ litre - EC50 / LC 50 greater than water solubility. - 96 Hr LC 50 Bluegill sunfish > 100 mg / litre - EC50 / LC 50 greater than water solubility. - 96 Hr LC 50 Fathead minnow > 1000 mg/ litre - EC50 / LC 50 greater than water solubility.

Toxicity to Algae

- 96 Hr, EC 50 Algae (Selenastrum capricornutum) 44 mg/litre

- EC50 / LC 50 greater than water solubility.

- 96 Hr, EC 50 Algae (Selenastrum capricornutum) 56 mg/ litre

- EC50 / LC 50 greater than water solubility.

Toxicity in other terrestrial non-mammals – Not determined.

Persistance/Degradability - T- Modified SCAS Primary degradation 55.5% 24 Hr (approximate figures given). This product is not expected to bioaccumulate through food chains and the environment. Its mobility in the environment will be very limited due to its very low solubility in water. It is also due to this low solubility in water that its biodegradability is likely to be slow. It is expected to biodegrade under aqueous aerobic conditions and ultimately by micro-organisms.

12.3. Bioaccumulative potential - No data available on bioaccumulation.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Contaminated packages must be completely emptied before sending away for laundering and re-use.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Confirm disposal procedures with environmental engineer and local regulations. Do not allow runoff to sewer, waterway or ground.

Waste Class

EWC NUMBER: Allocation of a waste code number in accordance with the European Waste Catalogue, should be carried out in agreement with an EA authorised waste disposal company.

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SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN) / UN No. (IMDG) / UN No. (ICAO) - NOT REGULATED

14.1. UN proper shipping name

14.3 Transport hazard class(es)

14.4 Packing classes

14.5 Environmental hazards

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

SECTION 15: REGULATORY INFORMATION

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

EU Legislation

Regulation (EC) No 1272/2008 CLP. Regulation (EC) No 1907/2006 REACH.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General information

Only trained personnel should use this material. Since empty containers retain product residue, follow label warnings, even after container is emptied. For further Health and Safety information contact: Health and Safety Officer. Labels should not be removed from containers until they have been cleaned and no product remains within.

Revision Comments

This is third issue.

Issued By Compliance Department

Safety Data Sheet Status Approved.

Date 05-Sep-15

Risk Phrases In Full

May be harmful in contact with eyes and with skin.

S24/25 Avoid contact with skin/eyes

S61 Avoid release to the environment. Refer to special instructions/safety data sheet

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

Hazard Statements In Full

H402 Harmful to aquatic life.

P273 Avoid release to the environment.
P262 Do not get into eyes/on skin/on clothing.
P281 Use personal protective equipment as required.