PERFORMANCE
BIOLUBRICANTS

MI240 HYDRAULIC ISO VG 32

Safety Data Sheet

REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758 and COMMISSION REGULATION (EU) 2020/878. Complies with Control of Substances Hazardous to Health Regulations 2002 (COSHH).

This version replaces all previous versions

SECTION 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Material Name: Mi240 HYDRAULIC ISO VG 32.

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

Product Use: Lubricating base fluid.
Uses advised against: None.

1.3 Details of the supplier of the substance or mixture

Company:
M&I Materials Ltd., Unit 2, Centenary Park, Coronet Way, Salford, M50 1RE, UK
Telephone: +44 (0)161 864 5429.
Email: MI240tech@mimaterials.com

1.4 Emergency telephone

Emergency telephone: +44 (0)161 864 5439.
Opening hours: 24/7.

1.5 Other comments

National Poisons Information Service: NPIS contact details

Country	Organisation/Company	Address	Web Address
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	www.npis.org

The NPIS does not provide poisons information to members of the public - you should contact your general practitioner or telephone NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales).

SECTION 2. Hazards Identification

This product is not classified as hazardous and this document has been compiled for information purposes, in accordance with regulation REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758, COMMISSION REGULATION (EU) 2020/878, COSHH and OSHA hazard communication guidelines.

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567): Not classified.
Regulation (EC) No 1272/2008 (CLP): Not classified.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567): No symbol or signal word.
Regulation (EC) No 1272/2008 (CLP): No symbol or signal word.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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SECTION 3. Composition/Information on Ingredients

3.1 Substance
Not applicable.

3.2 Mixture
Hazardous Ingredients: No hazardous ingredients.
All constituents are listed on the TSCA inventory.

SECTION 4. First Aid Measures

4.1 Description of first aid measures
General advice: Have the product container, label or Safety Data Sheet with you when calling the emergency number, or a physician.
Inhalation: None envisaged due to the low vapour pressure of the substance.
Skin: Wash with soap and water. Obtain medical attention if irritation develops.
Eyes: Irrigate with copious amounts of water. Obtain medical attention if irritation develops.
Ingestion: Do not induce vomiting, obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed
No adverse effects expected.

4.3 Indication of any immediate medical attention and special treatment needed
No special treatment required. Treat symptomatically. Do not induce vomiting.

SECTION 5. Fire Fighting Measures

5.1 Extinguishing media
Suitable extinguishing media: Carbon dioxide, dry powder, ABF foam or water fog.
Unsuitable extinguishing media: Do not use water jets.

5.2 Special hazards arising from the substance or mixture
Specific hazards during firefighting: None.

5.3 Advice for fire fighters
Special protective equipment for firefighters: Wear full protective clothing and self-contained breathing apparatus.
Further information: Cool closed containers exposed to fire with water spray.

SECTION 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions: Refer to protective measures listed in sections 7 and 8.
Spilt product constitutes a slip hazard. Avoid contact with skin and eyes.

6.2 Environmental precautions
Environmental precautions: Do not contaminate any lakes, streams, ponds, groundwater or soil. Avoid flushing into drains. In the event of a large spillage contain product as thoroughly as possible and dispose of in accordance with local regulations.

6.3 Methods and material for containment and cleaning up
Methods for cleaning up: Soak up spilt material with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in a container for disposal according to local / national regulations (see section 13). Clean contaminated

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surface thoroughly. Clean with detergents. Avoid solvents. Retain and dispose of contaminated water.

6.4 Reference to other sections

For disposal considerations see section 13.
Refer to protective measures listed in sections 7 and 8.

SECTION 7. Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling: Avoid eye and prolonged skin contact.
For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feed.

7.3 Specific end use(s)

Exposure to air should be minimised. Opened containers should be properly resealed. For proper and safe use of this product, please refer to the label.

SECTION 8. Exposure Controls/Personal Protection

8.1 Control parameters

No relevant control parameters.
Biological occupational exposure limits: N/A
Derived No Effect Level (DNEL): N/A
Predicted No Effect Concentration (PNEC): N/A

8.2 Exposure controls

Engineering measures: The extent of these protection measures depends on the actual risks in use.
Personal protective equipment:

Respiratory protection: Not required for normal use.
Skin protection: Wear coveralls.
Hand protection: Wash hands after use. For prolonged or repeated skin contact gloves are recommended.
Recommended gloves:
Material: Nitrile rubber.
Break through time: > 480 min.
Glove thickness: 0.5 mm.
Remarks: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection: If splashes are likely to occur wear safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Eye washes should be available for emergency use.

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SECTION 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Pale amber liquid.
Odour: Faintly sweet.
pH: Not applicable.
Pour point: <-42°C.
Initial boiling point and boiling range: >300°C.
Flash point: >240°C (open cup).
Flammability (solid, gas): Non-flammable.
Upper/lower flammability or explosive limits: Data not available.
Vapour pressure: <0.001Pa at 20°C.
Vapour density: Not applicable.
Relative density: 0.97 at 20°C.
Water solubility: <1mg/l.
Solubility: Not applicable.
Partition coefficient: log Pow: >10.
Auto-ignition temperature: >400°C.
Decomposition temperature: Data not available.
Kinematic Viscosity: 32mm^2/s @ 40°C.
Explosive properties: Non-explosive.
Oxidising properties: Non-oxidising.

9.2 Other information

Surface tension: No data available.
Particle size: No data available.

SECTION 10. Stability and Reactivity

10.1 Reactivity

Stable under normal conditions of use.

10.2 Chemical stability

Stable under normal conditions of use.

10.3 Possibility of hazardous reactions

Data not available.

10.4 Conditions to avoid

Temperatures >250°C.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

None.

SECTION 11. Toxicological Information

11.1 Information on toxicological effects

Likely routes of exposure: Skin and eyes are the most likely routes for exposure. Accidental ingestion may occur. Inhalation is not expected to be a relevant route of exposure.
Product:
Acute oral toxicity: Low toxicity: LD50 (Rat, female): >2000mg/kg, OECD 401.

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Acute dermal toxicity: Expected to be of low toxicity: LD50 (Rat, female): >2000mg/kg, OECD 402.
Acute inhalation toxicity: Low volatility makes inhalation unlikely. LD50 (Rat, female): > 5.1 mg/L air.
Skin corrosion/irritation: Not irritating, skin (Rabbit), OECD 404.
Eye corrosion/irritation: Not irritating, eye (Rabbit), OECD 405.
Respiratory or skin sensitisation: Not sensitising, skin (Guinea pig), OECD 406.
Aspiration hazard: Not considered an aspiration hazard.
Carcinogenicity/mutagenicity: Not considered a mutagenic hazard or carcinogen. This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.

SECTION 12. Ecological Information

When used and/or disposed of as indicated no adverse environmental effects are foreseen. Ecotoxicological effects based on knowledge of similar substances.

12.1 Toxicity

Product: Substances of this type do not pose a hazard to aquatic organisms.
Toxicity to fish: *Oncorhynchus mykiss* (rainbow trout) LC50(96h), OECD 203: low acute toxicity, expected to be >1000 mg/L.
Toxicity to aquatic invertebrates: *Daphnia magna* (Water flea) EC50: (48 h) >1000 mg/L.
Toxicity to aquatic plants: *Desmodesmus subspicatus* (green algae) EL50 >100 mg/L.

12.2 Persistence and degradability

Product: Readily biodegradable.

12.3 Bioaccumulative potential

No potential for bioaccumulation.

12.4 Mobility in soil

Product has low mobility in soil.

12.5 Results of PBT and vPvB assessment

The product does not meet criteria for toxicity which requires further assessment. It is not considered PBT or vPvB.

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No other adverse effects envisaged.

SECTION 13. Disposal Considerations

13.1 Waste treatment methods

Product: Do not contaminate any lakes, streams, ponds, groundwater or soil. Avoid flushing into drains.
Product and packaging must be disposed of in accordance with local and national regulations.
May be incinerated.

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Unused product may be returned for reclamation.
Contaminated packaging: Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Waste code: Uncleaned packaging code 15-01-02 - Empty packaging contaminated with residues of non-hazardous substances.

SECTION 14. Transport Information

Not classified as hazardous under air (ICAO/IATA), sea (IMDG), road (ADR) or rail (RID) regulations.

14.1 UN number
Not relevant.

14.2 UN proper shipping name
Not relevant.

14.3 Transport hazard class
Not relevant.

14.4 Packing group
Not relevant.

14.5 Environmental hazards
Not relevant.

14.6 Special precautions for user
Not relevant.

SECTION 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Product is not subject to Authorisation under REACH.
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII): Not applicable.
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59): Not applicable.
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable.
Regulation (EU) 2019/1021 on persistent organic pollutants (recast): Not applicable.
UK REACH List of substances subject to authorisation (Annex XIV): Not applicable.
GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation: Not applicable.
Substances Hazardous to Health Regulations 2002 (COSHH): Wear personal protective equipment (PPE).

All constituent substances in this product are listed in the TSCA inventory.

15.2 Chemical safety assessment
A chemical safety assessment has been performed for this substance.

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SECTION 16. Other Information

Compiled according to regulation REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758, COMMISSION REGULATION (EU) 2020/878, COSHH and OSHA hazard communication guidelines.

16.1 Changes from last issue

1.3 – M&I Materials Ltd change of address

16.2 Abbreviations and acronyms

TWA: Limit Value - eight hours

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International code for the construction and equipment of ships carrying dangerous chemicals in bulk : with standards and guidelines relevant to the code.

16.3 Key literature references and sources for data

Company data.

16.4 Classification and procedure used to derive the classification

Further information classification of the mixture: Not classified.

Classification procedure: Based on product data or assessment.

The information provided in this Safety Data Sheet is correct to our best knowledge, information and belief at the date of its publication. It is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.

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