



# MILLMAX HFD(U) 68

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 8/28/2008 Revision date: 11/23/2023 Version: 1.1

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : MILLMAX HFD(U) 68  
Product code : 5649

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Hydraulic fluids and additives

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Manufacturer

Millers Oils Ltd  
Hillside Oilworks Rastrick Common  
HD6 3DP Brighouse – West Yorkshire  
United Kingdom  
T +44 (0)1484 713201 - F +44 (0)1484 721263  
[h.s@millersoils.co.uk](mailto:h.s@millersoils.co.uk)

#### 1.4. Emergency telephone number

Emergency number : +44 (0)1484 713201

| Country        | Organisation/Company      | Address | Emergency number | Comment          |
|----------------|---------------------------|---------|------------------|------------------|
| United Kingdom | NHS 111/NHS 24/NHS Direct |         | 111<br>0845 4647 | or call a doctor |

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

##### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

#### 2.2. Label elements

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

No labelling applicable

#### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name                       | Product identifier                                                     | %   | Classification according to Regulation (EC) No. 1272/2008 [CLP]                                                                                                                                                   |
|----------------------------|------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Amines, C10-C14-tert-alkyl | CAS-No.: 68955-53-3<br>EC-No.: 701-175-2<br>REACH-no: 01-2119456798-18 | < 1 | Acute Tox. 4 (Oral), H302<br>Acute Tox. 3 (Dermal), H311<br>Acute Tox. 1 (Inhalation), H330<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |

Full text of H- and EUH-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

|                                       |                                                                                            |
|---------------------------------------|--------------------------------------------------------------------------------------------|
| First-aid measures general            | : If you feel unwell, seek medical advice.                                                 |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing.                           |
| First-aid measures after skin contact | : Wash skin with plenty of water. Take off contaminated clothing and wash it before reuse. |
| First-aid measures after eye contact  | : Rinse eyes with water as a precaution.                                                   |
| First-aid measures after ingestion    | : Rinse mouth. Do not induce vomiting.                                                     |

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

No additional information available

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

|                                |                                     |
|--------------------------------|-------------------------------------|
| Suitable extinguishing media   | : Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Water.                            |

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

|                                                  |                                |
|--------------------------------------------------|--------------------------------|
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |
|--------------------------------------------------|--------------------------------|

#### 5.3. Advice for firefighters

|                                |                                                                                                                                          |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
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### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. See section 8 of the SDS for more information on personal protective equipment.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Stop leak if safe to do so.

#### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment : Absorb spilled material with sand or earth. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal.

Methods for cleaning up : Absorb spilled material with sand or earth. This material and its container must be disposed of in a safe way, and as per local legislation.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

No additional information available

##### 8.1.2. Recommended monitoring procedures

No additional information available

##### 8.1.3. Air contaminants formed

No additional information available

##### 8.1.4. DNEL and PNEC

#### Amines, C10-C14-tert-alkyl (68955-53-3)

##### DNEL/DMEL (Workers)

|                                          |                        |
|------------------------------------------|------------------------|
| Long-term - systemic effects, inhalation | 12.5 mg/m <sup>3</sup> |
|------------------------------------------|------------------------|

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| Amines, C10-C14-tert-alkyl (68955-53-3)  |                           |
|------------------------------------------|---------------------------|
| Long-term - local effects, inhalation    | 12.1 mg/m³                |
| DNEL/DMEL (General population)           |                           |
| Long-term - systemic effects, oral       | 0.35 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 2.5 mg/m³                 |
| Long-term - local effects, inhalation    | 1.2 mg/m³                 |
| PNEC (Water)                             |                           |
| PNEC aqua (freshwater)                   | 0.001 mg/l                |
| PNEC aqua (marine water)                 | 0.0001 mg/l               |
| PNEC aqua (intermittent, freshwater)     | 0.004 mg/l                |
| PNEC (Sediment)                          |                           |
| PNEC sediment (freshwater)               | 2.14 mg/kg dwt            |
| PNEC sediment (marine water)             | 0.214 mg/kg dwt           |
| PNEC (Soil)                              |                           |
| PNEC soil                                | 0.428 mg/kg dwt           |
| PNEC (Oral)                              |                           |
| PNEC oral (secondary poisoning)          | 4.71 mg/kg food           |
| PNEC (STP)                               |                           |
| PNEC sewage treatment plant              | 0.635 mg/l                |

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing

##### Hand protection:

Protective gloves

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

No respiratory protection needed under normal use conditions

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### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                                 |                               |
|-------------------------------------------------|-------------------------------|
| Physical state                                  | : Liquid                      |
| Colour                                          | : Pale yellow.                |
| Odour                                           | : Barely perceptible odour.   |
| Odour threshold                                 | : Not available               |
| Melting point                                   | : Not available               |
| Freezing point                                  | : Not available               |
| Boiling point                                   | : Not available               |
| Flammability                                    | : Non flammable.              |
| Explosive limits                                | : Not available               |
| Lower explosion limit                           | : Not available               |
| Upper explosion limit                           | : Not available               |
| Flash point                                     | : > 200 °C                    |
| Auto-ignition temperature                       | : Not available               |
| Decomposition temperature                       | : Not available               |
| pH                                              | : Not available               |
| Viscosity, kinematic                            | : 68 mm <sup>2</sup> /s @40oC |
| Solubility                                      | : Insoluble.                  |
| Partition coefficient n-octanol/water (Log Kow) | : Not available               |
| Vapour pressure                                 | : Not available               |
| Vapour pressure at 50°C                         | : Not available               |
| Density                                         | : Not available               |
| Relative density                                | : 0.92                        |
| Relative vapour density at 20°C                 | : Not available               |
| Particle characteristics                        | : Not applicable              |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

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### 10.5. Incompatible materials

Oxidizing agent. Strong acids.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Amines, C10-C14-tert-alkyl (68955-53-3)

|                                   |                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| LD50 dermal rat                   | 251 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 190 - 322 |
| Skin corrosion/irritation         | : Not classified                                                                                           |
| Serious eye damage/irritation     | : Not classified                                                                                           |
| Respiratory or skin sensitisation | : Not classified                                                                                           |
| Germ cell mutagenicity            | : Not classified                                                                                           |
| Carcinogenicity                   | : Not classified                                                                                           |
| Reproductive toxicity             | : Not classified                                                                                           |
| STOT-single exposure              | : Not classified                                                                                           |
| STOT-repeated exposure            | : Not classified                                                                                           |
| Aspiration hazard                 | : Not classified                                                                                           |

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|                      |                             |
|----------------------|-----------------------------|
| Viscosity, kinematic | 68 mm <sup>2</sup> /s @40oC |
|----------------------|-----------------------------|

#### Amines, C10-C14-tert-alkyl (68955-53-3)

|                      |                                                                                                  |
|----------------------|--------------------------------------------------------------------------------------------------|
| Viscosity, kinematic | ≈ 3.44 mm <sup>2</sup> /s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm <sup>2</sup> /s)' |
|----------------------|--------------------------------------------------------------------------------------------------|

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

#### 11.2.2. Other information

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified  
Not rapidly degradable

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### Amines, C10-C14-tert-alkyl (68955-53-3)

|                      |                                                                                                                                           |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| LC50 - Fish [1]      | 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)                                                   |
| EC50 - Crustacea [1] | 0.24 – 6 mg/l Test organisms (species): Daphnia magna                                                                                     |
| EC50 72h - Algae [1] | 0.44 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| NOEC chronic fish    | 0.078 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '96 d'                                |

### 12.2. Persistence and degradability

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|                               |                  |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |
|-------------------------------|------------------|

### 12.3. Bioaccumulative potential

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|                           |                                    |
|---------------------------|------------------------------------|
| Bioaccumulative potential | No bioaccumulation data available. |
|---------------------------|------------------------------------|

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR                                  | IMDG          | IATA          | ADN           | RID           |
|--------------------------------------|---------------|---------------|---------------|---------------|
| <b>14.1. UN number or ID number</b>  |               |               |               |               |
| Not regulated                        | Not regulated | Not regulated | Not regulated | Not regulated |
| <b>14.2. UN proper shipping name</b> |               |               |               |               |
| Not regulated                        | Not regulated | Not regulated | Not regulated | Not regulated |

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| ADR                                     | IMDG          | IATA          | ADN           | RID           |
|-----------------------------------------|---------------|---------------|---------------|---------------|
| <b>14.3. Transport hazard class(es)</b> |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| <b>14.4. Packing group</b>              |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| <b>14.5. Environmental hazards</b>      |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| No supplementary information available  |               |               |               |               |

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

#### Rail transport

Not regulated

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms:

|        |                                                                                                 |
|--------|-------------------------------------------------------------------------------------------------|
| 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             |
| ATE    | Acute Toxicity Estimate                                                                         |
| BCF    | Bioconcentration factor                                                                         |
| BLV    | Biological limit value                                                                          |
| BOD    | Biochemical oxygen demand (BOD)                                                                 |
| COD    | Chemical oxygen demand (COD)                                                                    |
| DMEL   | Derived Minimal Effect level                                                                    |
| DNEL   | Derived-No Effect Level                                                                         |
| EC-No. | European Community number                                                                       |
| EC50   | Median effective concentration                                                                  |
| EN     | European Standard                                                                               |
| IARC   | International Agency for Research on Cancer                                                     |
| IATA   | International Air Transport Association                                                         |
| IMDG   | International Maritime Dangerous Goods                                                          |
| LC50   | Median lethal concentration                                                                     |
| LD50   | Median lethal dose                                                                              |
| LOAEL  | Lowest Observed Adverse Effect Level                                                            |
| NOAEC  | No-Observed Adverse Effect Concentration                                                        |
| NOAEL  | No-Observed Adverse Effect Level                                                                |
| NOEC   | No-Observed Effect Concentration                                                                |
| OECD   | Organisation for Economic Co-operation and Development                                          |
| OEL    | Occupational Exposure Limit                                                                     |
| PBT    | Persistent Bioaccumulative Toxic                                                                |
| PNEC   | Predicted No-Effect Concentration                                                               |
| RID    | Regulations concerning the International Carriage of Dangerous Goods by Rail                    |
| SDS    | Safety Data Sheet                                                                               |
| STP    | Sewage treatment plant                                                                          |
| ThOD   | Theoretical oxygen demand (ThOD)                                                                |
| TLM    | Median Tolerance Limit                                                                          |

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### Abbreviations and acronyms:

|         |                                          |
|---------|------------------------------------------|
| VOC     | Volatile Organic Compounds               |
| CAS-No. | Chemical Abstract Service number         |
| N.O.S.  | Not Otherwise Specified                  |
| vPvB    | Very Persistent and Very Bioaccumulative |
| ED      | Endocrine disrupting properties          |

### Full text of H- and EUH-statements:

|                           |                                                                   |
|---------------------------|-------------------------------------------------------------------|
| Acute Tox. 1 (Inhalation) | Acute toxicity (inhal.), Category 1                               |
| Acute Tox. 3 (Dermal)     | Acute toxicity (dermal), Category 3                               |
| Acute Tox. 4 (Oral)       | Acute toxicity (oral), Category 4                                 |
| Aquatic Acute 1           | Hazardous to the aquatic environment – Acute Hazard, Category 1   |
| Aquatic Chronic 1         | Hazardous to the aquatic environment – Chronic Hazard, Category 1 |
| Eye Dam. 1                | Serious eye damage/eye irritation, Category 1                     |
| H302                      | Harmful if swallowed.                                             |
| H311                      | Toxic in contact with skin.                                       |
| H314                      | Causes severe skin burns and eye damage.                          |
| H317                      | May cause an allergic skin reaction.                              |
| H318                      | Causes serious eye damage.                                        |
| H330                      | Fatal if inhaled.                                                 |
| H400                      | Very toxic to aquatic life.                                       |
| H410                      | Very toxic to aquatic life with long lasting effects.             |
| Skin Corr. 1B             | Skin corrosion/irritation, Category 1, Sub-Category 1B            |
| Skin Sens. 1A             | Skin sensitisation, category 1A                                   |

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.