



## SAFETY DATA SHEET

### Superclean Morendo DD

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

##### 1.1. Product identifier

Product name	Superclean Morendo DD
Product number	7042
Internal identification	GHS21454
UFI	UFI: K79H-56PX-FK5V-6VNQ

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

Identified uses	Fuel additive.
Uses advised against	Non specified unless otherwise stated within this MSDS

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

Supplier	Morris Lubricants Castle Foregate Shrewsbury Shropshire SY1 2EL +44 (0) 1743 232200 +44 (0) 1743 353584 sds@morris-lubricants.co.uk
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##### 1.4. Emergency telephone number

Emergency telephone	+44(0)1743 232200 (08.45 - 17.00 GMT)
National emergency telephone number	United Kingdom: National Poisons Information Service. 0844 892 0111 (UK only, 24/7, healthcare professionals only) Ireland: National Poisons Information Centre: 353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week). Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

#### SECTION 2: Hazards identification

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

###### Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC) -

##### 2.2. Label elements

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### Hazard pictograms



### Signal word

Danger

### Hazard statements

H304 May be fatal if swallowed and enters airways.  
H412 Harmful to aquatic life with long lasting effects.

### Precautionary statements

P261 Avoid breathing vapour/ spray.  
P273 Avoid release to the environment.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P331 Do NOT induce vomiting.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P501a Dispose of container/contents to a hazardous or special waste collection point.

### Contains

Hydrocarbons C10-13 N-Alkanes, Isoalkanes, Cyclics <2% Aromatics, Solvent naphtha (petroleum), heavy aromatic

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Hydrocarbons C10-13 N-Alkanes, Isoalkanes, Cyclics <2%			10-30%
Aromatics			
CAS number: —	EC number: 918-481-9	REACH registration number: 01-2119457273-39-0000	
Classification			
Asp. Tox. 1 - H304			
2-Ethylhexyl Nitrate			5-10%
CAS number: 27247-96-7	EC number: 248-363-6	REACH registration number: 01-2119539586-27	
Classification		Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H302		Xn;R20/21/22. N;R51/53. R44,R66.	
Acute Tox. 4 - H312			
Acute Tox. 4 - H332			
Aquatic Chronic 2 - H411			
2-Ethyl hexanol			1-5%
CAS number: 104-76-7	EC number: 203-234-3	REACH registration number: 01-2119487289-20-0000	
Classification		Classification (67/548/EEC or 1999/45/EC)	
Skin Irrit. 2 - H315		Xi;R36/38.	
Eye Irrit. 2 - H319			

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<b>Solvent naphtha (petroleum), heavy aromatic</b>			<b>1-5%</b>
CAS number: 64742-94-5	EC number: 265-198-5	REACH registration number: 01-2119510128-50-0000	
<b>Classification</b> Asp. Tox. 1 - H304		<b>Classification (67/548/EEC or 1999/45/EC)</b> Xn;R65. N;R51/53. R66,R67.	
<b>1,2,4-trimethylbenzene</b>			<b>&lt;1%</b>
CAS number: 95-63-6	EC number: 202-436-9	REACH registration number: 01-2119472135-42-0000	
<b>Classification</b> Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 Aquatic Chronic 2 - H411		<b>Classification (67/548/EEC or 1999/45/EC)</b> Xn;R20. Xi;R36/37/38. N;R51/53. R10.	
<b>naphthalene</b>			<b>&lt;1%</b>
CAS number: 91-20-3	EC number: 202-049-5	REACH registration number: 01-2119561346-37-0000	
M factor (Acute) = 1	M factor (Chronic) = 1		
<b>Classification</b> Carc. 2 - H351 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		<b>Classification (67/548/EEC or 1999/45/EC)</b> Carc. Cat. 3;R40 Xn;R22 N;R50/53	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Get medical attention if any discomfort continues.
<b>Inhalation</b>	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Get medical attention if any discomfort continues. Do not induce vomiting. Product contains petroleum based material, which, if aspirated into the lungs may result in chemical pneumonia.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

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

<b>General information</b>	If aspiration into the lungs is suspected, eg when vomiting, admit to hospital immediately.
<b>Inhalation</b>	Upper respiratory irritation.
<b>Skin contact</b>	Prolonged contact may cause redness, irritation and dry skin.

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**Eye contact** Irritation of eyes and mucous membranes.

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

**Notes for the doctor** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with foam, carbon dioxide, dry powder or water fog.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** Heat from fire could result in drums bursting

**Hazardous combustion products** Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m<sup>3</sup>. Oxides of carbon. Oxides of nitrogen. Fire may also create other unidentified organic gases some of which may be toxic.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Control run-off water by containing and keeping it out of sewers and watercourses.

**Special protective equipment for firefighters** Wear self-contained breathing apparatus.

## SECTION 6: Accidental release measures

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

**Personal precautions** For personal protection, see Section 8. In case of spills, beware of slippery floors and surfaces.

### 6.2. Environmental precautions

**Environmental precautions** Contain spillage with sand or earth. Avoid the spillage or runoff entering drains, sewers or watercourses. The product is insoluble in water and will spread on the water surface.

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

**Methods for cleaning up** Contain spillage with sand or earth. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Avoid water contacting spilled material or leaking containers. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. In case of spillage on water prevent the spread by use of suitable barrier equipment

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid spilling. Always remove oil with soap and water or skin cleaning agent, never use organic solvents. Do not use oil-contaminated clothing or shoes, and do not put rags moistened with oil into pockets.

**Advice on general occupational hygiene** Do not eat, drink or smoke when using this product.

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

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place.

**Storage class** Miscellaneous hazardous material storage.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Hydrocarbons C10-13 N-Alkanes, Isoalkanes, Cyclics <2% Aromatics

1200 mg/m<sup>3</sup> (171ppm), 8h TWA, Manuf. data

##### 2-Ethylhexyl Nitrate

Long-term exposure limit (8-hour TWA): OEL 1 ppm

##### 2-Ethyl hexanol

Long-term exposure limit (8-hour TWA): WEL 1 ppm 5.4 mg/m<sup>3</sup>

##### 1,2,4-trimethylbenzene

Long-term exposure limit (8-hour TWA): WEL 25 ppm

OEL = Occupational Exposure Limit.

WEL = Workplace Exposure Limit

#### 2-Ethylhexyl Nitrate (CAS: 27247-96-7)

**DNEL**

Workers - Oral; : 0.06 mg/kg  
 Workers - Dermal; : 1.6 mg/kg  
 Workers - Inhalation; : 1.4 mg/m<sup>3</sup>  
 Consumer - Oral; : 0.03 mg/kg  
 Consumer - Dermal; : 0.83 mg/kg  
 Consumer - Inhalation; : 0.7 mg/m<sup>3</sup>

**PNEC**

Fresh water; 0.008 mg/l  
 marine water; 0.00008 mg/l

#### 2-Ethyl hexanol (CAS: 104-76-7)

**DNEL**

Workers - Dermal; : 23 mg/kg bw/day  
 Workers - Inhalation; : 23 mg/kg bw/day  
 Consumer - Oral; : 1.1 mg/kg  
 Consumer - Dermal; : 11.4 mg/person/day  
 Consumer - Inhalation; : 2.3 mg/m<sup>3</sup>

#### naphthalene (CAS: 91-20-3)

**DNEL**

Workers - Oral; : 1 mg/kg bw/day  
 Workers - Dermal; : 3 mg/kg bw/day  
 Workers - Inhalation; : 0.037 mg/m<sup>3</sup>  
 Consumer - Oral; : 0.5 mg/kg bw/day  
 Consumer - Dermal; : 1.5 mg/kg bw/day  
 Consumer - Inhalation; : 0.0183 mg/m<sup>3</sup>

**PNEC**

Fresh water; 0.0024 mg/l  
 marine water; 0.0024 mg/l

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### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

#### Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

#### Other skin and body protection

Use barrier creams to prevent skin contact.

#### Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Wash promptly with soap and water if skin becomes contaminated.

#### Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

#### Thermal hazards

Not anticipated under normal conditions of use. The product is combustible if heated excessively and an ignition source is applied.

#### Environmental exposure controls

Do not allow product to contaminate land.

### SECTION 9: Physical and chemical properties

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

Appearance	Liquid.
Colour	Yellow.
Odour	Characteristic. Oil-like.
Odour threshold	Not determined.
pH	Not applicable.
Melting point	Not applicable.
Initial boiling point and range	>320°C @ 101.3 kPa
Flash point	74°C Pensky-Martens closed cup.
Upper/lower flammability or explosive limits	Not known.
Other flammability	Product is not flammable but on excessive heating may become combustible.
Vapour density	Not determined.
Relative density	0.860 @ 15.6°C
Solubility(ies)	Insoluble in water. Soluble in the following materials: Organic solvents.
Partition coefficient	Not determined.

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<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	19.5 cSt @ 40°C
<b>Explosive properties</b>	Not considered to be explosive.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

### 9.2. Other information

<b>Volatile organic compound</b>	The product is a complex mixture, the majority of which would not be classed as a VOC. However it cannot be discounted that trace or low levels of VOCs may be present.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, no hazardous reactions will occur.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
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### 10.5. Incompatible materials

<b>Materials to avoid</b>	Strong oxidising agents.
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### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Oxides of carbon. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m <sup>3</sup> .
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

<b>ATE oral (mg/kg)</b>	6,815.7
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#### Acute toxicity - dermal

<b>Notes (dermal LD<sub>50</sub>)</b>	Not expected to be highly toxic based on information of ingredients.
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<b>ATE dermal (mg/kg)</b>	7,857.14
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#### Acute toxicity - inhalation

<b>Notes (inhalation LC<sub>50</sub>)</b>	The product is unlikely to present any significant inhalation hazard at ambient temperatures and under normal conditions of use.
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<b>ATE inhalation (gases ppm)</b>	61,341.33
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<b>ATE inhalation (vapours mg/l)</b>	149.95
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**ATE inhalation (dusts/mists mg/l)** 20.45

### Serious eye damage/irritation

**Serious eye damage/irritation** May cause mild, short lasting discomfort to eyes.

### Respiratory sensitisation

**Respiratory sensitisation** No information available.

### Skin sensitisation

**Skin sensitisation** No specific test data are available.

### Reproductive toxicity

**Reproductive toxicity - fertility** No data available to suggest the product will cause reproductive toxicity.

### Aspiration hazard

**Aspiration hazard** Kinematic viscosity <= 20.5 cSt @ 40 C Poses an aspiration hazard.

### General information

This product has low toxicity. Only large quantities are likely to have adverse effects on human health.

### Ingestion

Swallowing significant quantities may cause discomfort, nausea, diarrhoea and irritation of the digestive tract. Aspiration into the lungs (e.g. through vomiting) after ingestion can be hazardous with possible resultant chemically induced pneumonia.

### Skin contact

Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.

### Eye contact

May cause temporary eye irritation.

### Acute and chronic health hazards

Prolonged or repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.

## SECTION 12: Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

### 12.1. Toxicity

### 12.2. Persistence and degradability

**Persistence and degradability** The product is not classed as being readily biodegradable by OECD test methods but is considered inherently biodegradable.

**Biological oxygen demand** Not determined.

**Chemical oxygen demand** Not determined.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

**Partition coefficient** Not determined.

### 12.4. Mobility in soil

**Mobility** The product is non-volatile. The product is insoluble in water and will spread on the water surface.

**Henry's law constant** Not determined.

### 12.5. Results of PBT and vPvB assessment



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### Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

Other adverse effects                      None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information**                      Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**Disposal methods**                      Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**Waste class**                                  EWC 13 02 XX

## SECTION 14: Transport information

**General**                                      The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**  
No.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**    Not applicable.

## SECTION 15: Regulatory information

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

**National regulations**                      Health and Safety at Work etc. Act 1974 (as amended).  
The Pollution Prevention and Control Act 1999.  
Special Waste regulations 1996.  
Control of Pollution (Oil Storage) (England) Regulations 2001  
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

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<b>EU legislation</b>	Dangerous Preparations Directive 1999/45/EC. Dangerous Substances Directive 67/548/EEC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
<b>Guidance</b>	Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### Inventories

##### **EU - EINECS/ELINCS**

All the ingredients are listed or exempt.

##### **Canada - DSL/NDSL**

All the ingredients are listed or exempt.

##### **US - TSCA**

All the ingredients are listed or exempt.

##### **Korea - KECI**

All the ingredients are listed or exempt.

##### **China - IECSC**

All the ingredients are listed or exempt.

##### **Philippines – PICCS**

All the ingredients are listed or exempt.

##### **New Zealand - NZIOC**

All the ingredients are listed or exempt.

### **SECTION 16: Other information**

<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	02/11/2020
<b>Revision</b>	6
<b>Supersedes date</b>	02/11/2020
<b>SDS number</b>	21454
<b>Risk phrases in full</b>	Not classified.

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### Hazard statements in full

H226 Flammable liquid and vapour.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H351 Suspected of causing cancer.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.