



# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 14/02/2017 Revision date: 31/08/2020 Supersedes version of: 14/02/2017 Version: 1.1

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

#### 1.1. Product identifier

Product form : Mixture  
Name : Single Grade HD 40  
Product code : 50740  
Article number : 50700-40

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use, Consumer use  
Industrial/Professional use spec : Used in closed systems  
Function or use category : Lubricants and additives

##### 1.2.2. Uses advised against

No additional information available

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

BARDAHL NL - OCD NEDERLAND BV  
Maxwellstraat 41  
3316 GP Dordrecht  
Nederland  
T 0031 78 651 2322 - F 0031 78 617 4848  
[mjkooijman@bardahl.nl](mailto:mjkooijman@bardahl.nl) - [www.bardahl.nl](http://www.bardahl.nl)

#### 1.4. Emergency telephone number

Emergency number : +31 (0) 6 54924171  
During office hours: 8.30 t/m 17:00 h

Country	Official advisory body	Address	Emergency number	Comment
	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

### 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

No additional information available

# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 2.2. Label elements

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

EUH-statements : EUH208 - Contains Benzenesulfonic acid, mono-C16-24-alkyl derivs, calcium salts(70024-69-0). May produce an allergic reaction.  
EUH210 - Safety data sheet available on request.

### 2.3. Other hazards

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

Component	
Phenol, dodecyl-, branched (121158-58-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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

Component	
Phenol, dodecyl-, branched(121158-58-5)	The substance is included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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

## 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]
Mineral oil	CAS-No.: 8042-47-5 EC-No.: 232-455-8 REACH-no: 01-2119487078-27	1 – 4.99	Asp. Tox. 1, H304
Phenol, dodecyl-, branched substance listed as REACH Candidate (Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP))	CAS-No.: 121158-58-5 EC-No.: 310-154-3 REACH-no: 01-2119513207-49	0.1 – 0.99	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	CAS-No.: 70024-69-0 EC-No.: 274-263-7 REACH-no: 01-2119492616-28	0.1 – 0.99	Skin Sens. 1B, H317
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	CAS-No.: 84605-29-8 EC-No.: 283-392-8 REACH-no: 01-2119493626-26	0.1 – 0.99	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

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

# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation	: No special measures required.
First-aid measures after skin contact	: Wash skin thoroughly with mild soap and water.
First-aid measures after eye contact	: Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart.
First-aid measures after ingestion	: Do NOT induce vomiting. Rinse mouth. Obtain emergency medical attention.

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

Symptoms/effects after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

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

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Water haze. Foam. Powder. Dry chemical.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

No additional information available

#### 5.3. Advice for firefighters

Precautionary measures fire	: Exercise caution when fighting any chemical fire.
Firefighting instructions	: Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

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

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

Protective equipment	: Wear suitable protective clothing and gloves.
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##### 6.1.2. For emergency responders

Protective equipment	: Wear suitable protective clothing and gloves.
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#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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

For containment	: Impound and recover large spill by mixing it with inert granular solids.
Methods for cleaning up	: Detergent. Take up liquid spill into absorbent material sand, saw dust, kieselguhr.
Other information	: May be dangerously slippery if spilled. Use suitable disposal containers.

#### 6.4. Reference to other sections

No additional information available

# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required.
Handling temperature	: < 40 °C
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

Storage conditions	: Store in dry, cool, well-ventilated area.
Storage temperature	: < 40 °C

#### 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

No additional information available

##### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

No additional information available

##### 8.2.2. Personal protection equipment

**Personal protective equipment:**

Protective goggles. Gloves.

**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:**

No special clothing/skin protection equipment is recommended under normal conditions of use.

# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Safety gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.35		

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

No special protection required where adequate ventilation is maintained.

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

No additional information available

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Yellow-brown.
Appearance	: Oily liquid.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 220 °C (ASTM D92)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 196 mm <sup>2</sup> /s (40°C)
Solubility	: Slightly soluble, the product remains on the water surface.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 900 kg/m <sup>3</sup> (15°C)
Relative density	: Not available
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

None under normal conditions.

### 10.2. Chemical stability

Stable under normal conditions.

# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 10.3. Possibility of hazardous reactions

None under normal conditions.

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

Strong oxidizers. Acids. Bases.

### 10.6. Hazardous decomposition products

No additional information available

## 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

#### Mineral oil (8042-47-5)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg

#### Phenol, dodecyl-, branched (121158-58-5)

LD50 oral rat	2100 mg/kg
LD50 dermal rat	15000 mg/kg

#### Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts (70024-69-0)

LD50 oral rat	> 5000 mg/kg OECD 401
LD50 dermal rabbit	> 5000 mg/kg OECD 402
LC50 Inhalation - Rat	> 1.7 mg/l/4h EPA OPP 81-3

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

#### Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts (70024-69-0)

NOAEL (chronic, oral, animal/male, 2 years)	> 500 mg/kg bodyweight OECD 407
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Reproductive toxicity : Not classified  
STOT-single exposure : Not classified  
STOT-repeated exposure : Not classified  
Aspiration hazard : Not classified

#### Single Grade HD 40

Viscosity, kinematic	196 mm <sup>2</sup> /s (40°C)
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### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

##### Component

Phenol, dodecyl-, branched(121158-58-5)	The substance is identified for having endocrine disrupting properties but there is no additional data available
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# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 11.2.2. Other information

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Mineral oil (8042-47-5)	
LC50 - Fish [1]	> 100 mg/l 4d - Pimephales promelas
EC50 - Crustacea [1]	> 10000 mg/l
EC50 - Crustacea [2]	> 10 mg/l 21d
EC50 72h - Algae [1]	> 100 mg/l 3d - Chlorophyta
NOEC (chronic)	> 10 mg/l

Phenol, dodecyl-, branched (121158-58-5)	
LC50 - Fish [1]	24 mg/l (Pimephales promelas)
EC50 - Crustacea [1]	0.0347 mg/l
EC50 72h - Algae [1]	0.15 mg/l (Scenedesmus subspicatus)

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts (70024-69-0)	
LC50 - Fish [1]	> 1000 mg/l pimephales promelas
LC50 - Fish [2]	> 10000 cyprinodon variegatus
EC50 - Crustacea [1]	> 1000 mg/l
EC50 - Other aquatic organisms [2]	> 10000 mg/l 0.1d - slib
EC50 96h - Algae [1]	> 1000 mg/l chloropyta

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
LC50 - Fish [1]	4.5 mg/l oncorhynchus mykiss
LC50 - Fish [2]	46 mg/l cyprinodon varietagus
EC50 - Crustacea [1]	23 mg/l
EC50 - Crustacea [2]	0.8 mg/l 21d
EC50 - Other aquatic organisms [2]	10000 mg/l 0.1d - chlorophyta
EC50 72h - Algae [1]	21 mg/l 3d - chlorophyta
NOEC (acute)	1.8 mg/l 4d - oncorhynchus mykiss
NOEC (chronic)	10 mg/l 2d - daphnia
NOEC chronic fish	0.4 mg/l 21d - daphnia
NOEC chronic algae	10 mg/l 3d - chlorophyta

### 12.2. Persistence and degradability

Single Grade HD 40	
Persistence and degradability	Not soluble in water, so only minimally biodegradable.

# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Mineral oil (8042-47-5)

Biodegradation 31 % 28d - OECD TG 301 B

### Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts (70024-69-0)

BOD (% of ThOD) 8 % ThOD 28d - OECD TG 301 D

### Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)

Biodegradation 1.5 % 28d - OECD TG 301 B

## 12.3. Bioaccumulative potential

### Phenol, dodecyl-, branched (121158-58-5)

Bioconcentration factor (BCF REACH) 2.9

Partition coefficient n-octanol/water (Log Kow) 7.1

### Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts (70024-69-0)

Partition coefficient n-octanol/water (Log Kow) 4.46 – 10.88 OECD 107/117

### Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)

Partition coefficient n-octanol/water (Log Kow) 0.56 measurements

## 12.4. Mobility in soil

No additional information available

## 12.5. Results of PBT and vPvB assessment

### Component

Phenol, dodecyl-, branched (121158-58-5) This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII  
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

## 12.6. Endocrine disrupting properties

### Component

Phenol, dodecyl-, branched(121158-58-5) The substance is identified for having endocrine disrupting properties but there is no additional data available

## 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

## 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 applicable	Not applicable	Not applicable	Not applicable	Not applicable

# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

#### Inland waterway transport

Not applicable

#### Rail transport

Not applicable

### 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 substance(s) listed on the REACH Candidate List in concentrations  $\geq 0.1\%$  or SCL: Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP) (EC 310-154-3, CAS 121158-58-5)

##### 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)

# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 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)

### 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

## SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Issue date	Modified	
	Revision date	Modified	
	Supersedes	Removed	
1.1	Article number	Removed	
1.1	Other means of identification	Added	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Removed	
3	Composition/information on ingredients	Modified	

### Abbreviations and acronyms:

Abbreviations and acronyms:

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

ICAO: International Civil Aviation Organization

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains Benzenesulfonic acid, mono-C16-24-alkyl derivs, calcium salts(70024-69-0). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

# Single Grade HD 40

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
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.
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B

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.