

# FILDEX SYNTHETIC MF 5W20

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 11/02/2013

Revision date: 11/02/2013

Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Product name. : FILDEX SYNTHETIC MF20  
Product group : Blend

#### 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. : Non-dispersive use  
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

### SECTION 2: Hazards identification

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

##### Classification according to Directive 67/548/EEC or 1999/45/EC

R52/53

Full text of R-phrases: see section 16

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

No additional information available

#### 2.2. Label elements

##### Labeling according to Directive 67/548/EEC or 1999/45/EC

R-phrases : R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
S-phrases : S2 - Keep out of the reach of children.  
S35 - This material and its container must be disposed of in a safe way.  
S56 - Dispose of this material and its container to hazardous or special waste collection point.  
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

#### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	(EC no) 253-249-4 (REACH-no) 01-2119488911-28	1 - 2,5	R53
Phosphorodithioic acid, mixed 0,0-bis (1,3-dimethylbutyl and iso-Pr)esters, zi	(EC no) 283-392-8 (REACH-no) 01-2119493626-26	0,1 - 1	Xi; R41 Xi; R38 N; R51/53

# FILDEX SYNTHETIC MF 5W20

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

Name	Product identifier	%	Classification according to Directive 67/548/EEC
zinc (O,O,O',O'-tetrakis(1,3-dimethylbutyl)bis(phosphorodithioate)	(EC no) 218-679-9	0,1 - 1	Xi; R41 Xi; R38 N; R51/53
Diphenylamine	(CAS No.) 122-39-4 (EC no) 204-539-4 (EC index no) 612-026-00-5	0,05 - 0,15	T; R23/24/25 N; R50/53 R33
Dodecylphenol, mixed isomers (branched)	(EC no) 310-154-3 (REACH-no) 01-2119513207-49	0,05 - 0,15	Repr.Cat.3; R62 Xi; R36/38 N; R50/53
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	(EC no) 253-249-4 (REACH-no) 01-2119488911-28	1 - 2,5	Aquatic Chronic 4, H413
Phosphorodithioic acid, mixed 0,0-bis (1,3-dimethylbutyl and iso-Pr)esters, zi	(EC no) 283-392-8 (REACH-no) 01-2119493626-26	0,1 - 1	Eye Dam. 1, H318 Skin Irrit. 2, H315 Aquatic Chronic 2, H411
zinc (O,O,O',O'-tetrakis(1,3-dimethylbutyl)bis(phosphorodithioate)	(EC no) 218-679-9	0,1 - 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Diphenylamine	(CAS No.) 122-39-4 (EC no) 204-539-4 (EC index no) 612-026-00-5	0,05 - 0,15	Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Dodecylphenol, mixed isomers (branched)	(EC no) 310-154-3 (REACH-no) 01-2119513207-49	0,05 - 0,15	Repr. 2, H361f Eye Irrit. 2, H319 Skin Irrit. 2, H315 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of R-, H- and EUH-phrases: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation	: Not expected to require first aid measures.
First-aid measures after skin contact	: Wash skin with mild soap and water.
First-aid measures after eye contact	: In case of eye contact, immediately rinse with clean water for 10-15 minutes.
First-aid measures after ingestion	: Do not induce vomiting. Rinse mouth. Get immediate medical advice/attention.

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

Symptoms/injuries after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/injuries after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/injuries after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/injuries 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 fog. Foam. Powder. Dry chemical product.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

Reactivity	: None under normal conditions.
------------	---------------------------------

#### 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.

# FILDEX SYNTHETIC MF 5W20

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

### 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.

##### 6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

#### 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, sawdust, kieselguhr.  
Other information : Spill area may be slippery. Use suitable disposal containers.

#### 6.4. Reference to other sections

No additional information available

### 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 eat, drink or smoke and when leaving work.

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

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

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

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

: 5 mg/m<sup>3</sup> for oil mists (TWA, 8h-workday) recommended, based upon the ACGIH TLV (Analysis according to US NIOSH Method 5026, NIOSH Manual of Analytical Methods, 3rd Edition).

#### 8.2. Exposure controls

Personal protective equipment : Safety glasses. Gloves.



Hand protection : Wear suitable gloves resistant to chemical penetration.  
Skin and body protection : No special clothing/skin protection equipment is recommended under normal conditions of use.  
Respiratory protection : No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.

### SECTION 9: Physical and chemical properties

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

Physical state : Liquid  
Appearance : Oily liquid.  
Colour : Yellow-brown.  
Odour : Characteristic.  
Odour threshold : No data available  
pH : No data available  
Relative evaporation rate (butylacetate=1) : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : No data available  
Flash point : > 200 °C @ ASTM D92

# FILDEX SYNTHETIC MF 5W20

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
<tx:_VLL_TL_897>	: 851 kg/m <sup>3</sup> @15°C
Solubility	: Slightly soluble, the product remains on the water surface.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 42 mm <sup>2</sup> /s @ 40°C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

None under normal conditions.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None under normal conditions.

### 10.4. Conditions to avoid

No data available.

### 10.5. Incompatible materials

Strong oxidizers. acids. Bases.

### 10.6. Hazardous decomposition products

None under normal conditions.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
Irritation	: Not classified
Corrosivity	: Not classified
Sensitisation	: Not classified
Repeated dose toxicity	: Not classified
Carcinogenicity	: Not classified
Mutagenicity	: Not classified
Toxicity for reproduction	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Diphenylamine (122-39-4)

LC50 fishes 1	0,1 - 1 mg/l
---------------	--------------

### 12.2. Persistence and degradability

#### FILDEX SYNTHETIC MF 5W20

Persistence and degradability	Not soluble in water, so only minimally biodegradable.
-------------------------------	--

#### Diphenylamine (122-39-4)

Biodegradation	26 % Closed bottle @28d
----------------	-------------------------

# FILDEX SYNTHETIC MF 5W20

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

<b>Dodecylphenol, mixed isomers (branched)</b>	
Biodegradation	25 %
<b>Phosphorodithioic acid, mixed 0,0-bis (1,3-dimethylbutyl and iso-Pr)esters, zi</b>	
Biodegradation	1,5 % @28d
<b>Reaction products of Benzeneamine, N-phenyl- with nonene (branched)</b>	
Biodegradation	0 % Sturm-test @28d
<b>zinc (O,O,O',O'-tetrakis(1,3-dimethylbutyl)bis(phosphorodithioate)</b>	
Biodegradation	1,5 % Sturm (28d)
<b>12.3. Bioaccumulative potential</b>	
<b>Diphenylamine (122-39-4)</b>	
Log Kow	3,4 @0,1d
<b>Dodecylphenol, mixed isomers (branched)</b>	
Bioconcentration factor (BCF REACH)	2,9
Log Kow	7,1
<b>Phosphorodithioic acid, mixed 0,0-bis (1,3-dimethylbutyl and iso-Pr)esters, zi</b>	
Log Kow	0,6 @0,1d
<b>Reaction products of Benzeneamine, N-phenyl- with nonene (branched)</b>	
Bioconcentration factor (BCF REACH)	3,2 @42d
Log Kow	3,6 @0,1d
<b>zinc (O,O,O',O'-tetrakis(1,3-dimethylbutyl)bis(phosphorodithioate)</b>	
Bioconcentration factor (BCF REACH)	2,2 (0,1d)

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Additional information : Dispose in a safe manner in accordance with local/national regulations.

## SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

### 14.1. UN number

No dangerous good in sense of transport regulations.

### 14.2. UN proper shipping name

Not applicable

### 14.3. Transport hazard class(es)

Not applicable

### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

No additional information available

#### 14.6.2. Transport by sea

No additional information available

#### 14.6.3. Air transport

No additional information available

# FILDEX SYNTHETIC MF 5W20

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

### 14.7. 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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Other information : The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Full text of R-, H- and EUH-phrases::

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
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
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
H301	Toxic if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H361f	Suspected of damaging fertility
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
H413	May cause long lasting harmful effects to aquatic life
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R33	Danger of cumulative effects.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.
N	Dangerous for the environment
T	Toxic
Xi	Irritant

SDS EU (REACH Annex II)

*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.*