

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MITANOL M-Force 20W-50 Classic X

Revision date: 10.02.2021

Product code: MIT0194

Page 1 of 10

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

1.1. Product identifier

MITANOL M-Force 20W-50 Classic X

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

Use of the substance/mixture

Engine oil

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	MITAN Mineralöl GmbH	
Street:	Industriestraße 8	
Place:	D-49577 Ankum	
Telephone:	+49 (0)5462/7470-50	Telefax: +49 (0)5462/7470-33
e-mail:	info@mitan-oil.de	
e-mail (Contact person):	sicherheitsdatenblatt@mitan-oil.de	
Internet:	www.mitan-oil.de	

1.4. Emergency telephone number:

Giftinformationszentrum Nord (Göttingen)
+49 (0)551/19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements

Regulation (EC) No. 1272/2008

Special labelling of certain mixtures

EUH208	Contains Benzolsulfonsäure, methyl-mono-C20-26-verzweigte Alkylderivate, Calciumsalze, Benzensulfonsäure, Methyl-, mono-C20-24-verzweigte Alkylderivate, Calciumsalze. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. This mixture contains no substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MITANOL M-Force 20W-50 Classic X

Revision date: 10.02.2021

Product code: MIT0194

Page 2 of 10

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64742-55-8	Baseoil - unspecified, Distillates (petroleum), hydrotreated light paraffinic			3 - < 5 %
	265-158-7	649-468-00-3	01-2119487077-29	
	Asp. Tox. 1; H304			
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts			1 - < 2,5 %
	272-238-5		01-2119657973-23	
	Eye Dam. 1, Aquatic Chronic 2; H318 H411			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
64742-55-8	265-158-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated light paraffinic	3 - < 5 %
	inhalation: LC50 = >5 mg/l (vapours); dermal: LD50 = >5000 mg/kg; oral: LD50 = >5000 mg/kg		
68784-31-6	272-238-5	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	1 - < 2,5 %
	dermal: LD50 = >5000 mg/kg; oral: LD50 = >2000 mg/kg		

Further Information

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.
 Take off contaminated clothing and wash it before reuse.
 In case of skin irritation, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.
 When in doubt or if symptoms are observed, get medical advice.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water.
 Let water be drunk in little sips (dilution effect).
 When in doubt or if symptoms are observed, get medical advice.

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

No information available.

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

Treat symptomatically.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MITANOL M-Force 20W-50 Classic X

Revision date: 10.02.2021

Product code: MIT0194

Page 3 of 10

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.
Sand, Foam,
Carbon dioxide (CO₂), Extinguishing powder
Water spray jet, Water mist

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.
In case of fire may be liberated: Carbon dioxide (CO₂), Carbon monoxide, Sulphur dioxide (SO₂), Nitrogen oxides (NO_x)

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.
In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Use personal protection equipment. See section 8.
Ventilate affected area.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. See section 8.
Avoid formation of oil dust.

Advice on protection against fire and explosion

Usual measures for fire prevention.
Keep away from sources of ignition - No smoking.

Further information on handling

Do not breathe vapour/aerosol.
Avoid contact with skin, eyes and clothes.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MITANOL M-Force 20W-50 Classic X

Revision date: 10.02.2021

Product code: MIT0194

Page 4 of 10

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.
 Only use containers specifically approved for the substance/product.

Hints on joint storage

Do not store together with: Gas, Explosives, Infectious substances

7.3. Specific end use(s)

Engine oil

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64742-55-8	Baseoil - unspecified, Distillates (petroleum), hydrotreated light paraffinic			
Worker DNEL, long-term		inhalation	local	5,4 mg/m ³
Consumer DNEL, long-term		inhalation	local	1,2 mg/m ³
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts			
Worker DNEL, long-term		inhalation	systemic	2,93 mg/m ³
Worker DNEL, acute		inhalation	systemic	496,4 mg/m ³
Worker DNEL, long-term		dermal	systemic	10,42 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	100 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	11,75 mg/m ³
Consumer DNEL, acute		inhalation	systemic	198,6 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,1 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	50 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,21 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	29 mg/kg bw/day

PNEC values

CAS No	Substance	Value
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	
Freshwater		0,04 mg/l
Marine water		0,0046 mg/l
Freshwater sediment		0,07 mg/kg
Marine sediment		0,007 mg/kg
Secondary poisoning		8,33 mg/kg
Micro-organisms in sewage treatment plants (STP)		3,8 mg/l
Soil		0,055 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MITANOL M-Force 20W-50 Classic X

Revision date: 10.02.2021

Product code: MIT0194

Page 5 of 10



Appropriate engineering controls

Provide adequate ventilation.

Protective and hygiene measures

Thorough skin-cleansing after handling the product.

Do not put any product-impregnated cleaning rags into your trouser pockets.

Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash it before reuse.

Eye/face protection

Wear eye protection/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear fire resistant or flame retardant clothing.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	clear
Odour:	characteristic
Odour threshold:	not determined

Test method

pH-Value: not determined

Changes in the physical state

Melting point: not determined

Boiling point or initial boiling point and boiling range: not determined

Pour point: -33 °C

Flash point: 250 °C

Flammability

Solid/liquid: not applicable

Gas: not applicable

Explosive properties

The product is not: Explosive.

Lower explosion limits: not determined

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MITANOL M-Force 20W-50 Classic X

Revision date: 10.02.2021

Product code: MIT0194

Page 6 of 10

Upper explosion limits: not determined

Self-ignition temperature

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties

The product is not: oxidising.

Vapour pressure: not determined

Density (at 15 °C): 0,8866 g/cm³ DIN 51757

Water solubility: The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined

Viscosity / kinematic:
(at 40 °C) 153,5 mm²/s DIN EN ISO 3104

Relative vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Oxidising agent, strong

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MITANOL M-Force 20W-50 Classic X

Revision date: 10.02.2021

Product code: MIT0194

Page 7 of 10

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-55-8	Baseoil - unspecified, Distillates (petroleum), hydrotreated light paraffinic				
	oral	LD50 >5000 mg/kg	Rat	OECD 420	
	dermal	LD50 >5000 mg/kg	Rabbit	OECD 402	
	inhalation (4 h) vapour	LC50 >5 mg/l	Rat	OECD 403	
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts				
	oral	LD50 >2000 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 >5000 mg/kg	Rabbit	ECHA Dossier	

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Phosphordithiosäure, gemischte O, O-Bis (sec-Bu und 1,3-Dimethylbutyl) ester, Zinksalze:

Eye irritation, Category 2: Not an irritant. (By analogy.)

Additional information on tests

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information
12.1. Toxicity

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts			
	EU Method C.6	<5%	27	ECHA Dossier
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MITANOL M-Force 20W-50 Classic X

Revision date: 10.02.2021

Product code: MIT0194

Page 8 of 10

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].
Observe in addition any national regulations!

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MITANOL M-Force 20W-50 Classic X

Revision date: 10.02.2021

Product code: MIT0194

Page 9 of 10

Changes

This data sheet contains changes from the previous version in section(s): 2,3,4,5,6,7,8,9,10,11,12,13,15,16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (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
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Relevant H and EUH statements (number and full text)

H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
EUH208	Contains Benzolsulfonsäure, methyl-mono-C20-26-verzweigte Alkylderivate, Calciumsalze, Benzensulfonsäure, Methyl-, mono-C20-24-verzweigte Alkylderivate, Calciumsalze. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

MITANOL M-Force 20W-50 Classic X

Revision date: 10.02.2021

Product code: MIT0194

Page 10 of 10

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)