

**MITANOL S-Force 20W-50 Classic S**

Revision date: 16.02.2022

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

**1.1. Product identifier**

MITANOL S-Force 20W-50 Classic S

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

**Use of the substance/mixture**

Motor oil multigrade

**Uses advised against**

No information available.

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

Company name: MITANOL GmbH  
 Street: Industriestraße 8  
 Place: D-49577 Ankum  
 Telephone: +49 (0)5462/7470-50  
 e-mail: info@mitanol.de  
 Internet: www.mitanol.de  
 Responsible Department: Produktsicherheit / Product Safety  
 sicherheitsdatenblatt@mitanol.de

Telefax: +49 (0)5462/7470-33

**1.4. Emergency telephone**

**number:** Gifftinformationszentrum 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**

**Additional advice on labelling**

According to EC directives or the corresponding national regulations the product does not have to be labelled.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

**Hazardous components**

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	GHS Classification	
68649-42-3	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	0 - < = 1,36 %
	272-028-3	
	01-2120742271-64	
	Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 2; H315 H319 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	
68649-42-3	272-028-3	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	0 - < = 1,36 %
		dermal: LD50 = > 3160 mg/kg; oral: LD50 = 3100 mg/kg	

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**Further Information**

This mixture contains no substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

Remove affected person from the danger area and lay down.  
Do not leave affected person unattended.  
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**After inhalation**

Remove person to fresh air and keep comfortable for breathing.  
In all cases of doubt, or when symptoms persist, seek 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**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

**After ingestion**

Rinse mouth thoroughly with water.  
Let water be drunk in little sips (dilution effect).  
Do NOT induce vomiting.  
In all cases of doubt, or when symptoms persist, seek 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.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Use water spray jet to protect personnel and to cool endangered containers.  
Co-ordinate fire-fighting measures to the fire surroundings.  
- alcohol resistant foam  
- Carbon dioxide (CO<sub>2</sub>).  
- Extinguishing powder  
- Water spray jet

**Unsuitable extinguishing media**

Full water jet

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

Formation of toxic gases is possible during heating or in case of fire.  
In case of fire may be liberated:  
- Carbon monoxide (CO)  
- Carbon dioxide (CO<sub>2</sub>).  
- Nitrogen oxides (NO<sub>x</sub>)  
- Pyrolysis products, toxic

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**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Use of protective clothing  
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**

Keep people at a distance and stay on the windward side.  
Special danger of slipping by leaking/spilling product.

**For non-emergency personnel**

Wear protective gloves/protective clothing and eye/face protection.

**6.2. Environmental precautions**

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

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

**For containment**

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

**For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.  
Remove from the water surface (e.g. skimming, sucking).

**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**

Avoid formation of oil dust.  
Use personal protection equipment.  
Do not put any product-impregnated cleaning rags into your trouser pockets.  
Clear spills immediately.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.  
Take precautionary measures against static discharges.  
Keep away from sources of ignition - No smoking.

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

**Requirements for storage rooms and vessels**

Keep container tightly closed and in a well-ventilated place.  
Keep only in the original container. Store in a cool dry place. (Protect from moisture.)  
Floors should be impervious, resistant to liquids and easy to clean.

**Hints on joint storage**

Do not store together with:  
- Materials capable of ignition under almost all normal temperature conditions  
- Explosives

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

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Motor oil multigrade

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Additional advice on limit values**

To date, no national critical limit values exist.

**8.2. Exposure controls**



**Appropriate engineering controls**

Provide adequate ventilation as well as local exhaust at critical locations.

**Protective and hygiene measures**

Take off contaminated clothing and wash it before reuse.

Wash hands before breaks and after work.

When using do not eat, drink, smoke, sniff.

**Eye/face protection**

During filling, metering, mixing and sampling must be used:

Wear eye/face protection. DIN EN 166

**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.

Recommended glove articles: EN ISO 374

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,4 mm

Breakthrough times and swelling properties of the material must be taken into consideration. Breakthrough time: > 8h

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 suitable protective clothing.

**Respiratory protection**

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:	yellow - brown	
Odour:	characteristic	
Odour threshold:	not determined	
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:		-30 °C

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Flash point: 244 °C

**Flammability**

Solid/liquid: not applicable

Gas: not applicable

**Explosive properties**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Lower explosion limits: not determined

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): 0,879 g/cm<sup>3</sup>

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 / dynamic: not determined

Viscosity / kinematic: 168 mm<sup>2</sup>/s  
(at 40 °C)

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 stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

The formation of combustible vapours is possible at temperatures above: Flash point

**10.4. Conditions to avoid**

Conditions to avoid: Thermal decomposition

**10.5. Incompatible materials**

Materials to avoid:

- Acids
- Oxidising agent
- Reducing agent

**10.6. Hazardous decomposition products**

Hazardous combustion products:

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- Carbon monoxide (CO)
- Carbon dioxide (CO<sub>2</sub>).
- Nitrogen oxides (NO<sub>x</sub>)
- Pyrolysis products, toxic

**SECTION 11: Toxicological information**

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

**Acute toxicity**

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
68649-42-3	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts				
	oral	LD50 mg/kg 3100	Rat	Hazardous Substance DataBank [HSDB], U S	
	dermal	LD50 mg/kg > 3160	Rabbit	United States Environmental Protection A	

**Irritation and corrosivity**

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

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

The product contains less than 3% DMSO extract (method IP346). A classification as a carcinogen with R45 is deleted. (Note L)

**STOT-single exposure**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

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

**Additional information on tests**

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

**11.2. Information on other hazards**

**Endocrine disrupting properties**

No information available.

**SECTION 12: Ecological information**

**12.1. Toxicity**

No information available.

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
68649-42-3	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	14,876

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**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

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

**12.6. Endocrine disrupting properties**

No information available.

**12.7. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal recommendations**

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

**Contaminated packaging**

Non-contaminated packages may be recycled. 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.

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**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)

**National regulatory information**

Water hazard class (D): 2 - obviously hazardous to water

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,8,9,10,11,12,13,15,16.

**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  
VOC: Volatile Organic Compounds  
SVHC: Substance of Very High Concern



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For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

**Relevant H and EUH statements (number and full text)**

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

**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.

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