

GB

Page 1 of 14
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 13.12.2016 / 0004
Replacing version dated / version: 21.08.2015 / 0003
Valid from: 13.12.2016
PDF print date: 13.12.2016
MOLYGEN NEW GENERATION 5W-40 1 L
Art.: 8576

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

MOLYGEN NEW GENERATION 5W-40 1 L

Art.: 8576

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

Relevant identified uses of the substance or mixture:

Sector of use [SU]:

SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 - Consumer uses: Private households (=general public = consumers)

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC17 - Hydraulic fluids

PC24 - Lubricants, greases, release products

Process category [PROC]:

PROC 1 - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC 2 - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC 8a - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC 8b - Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC 9 - Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC20 - Use of functional fluids in small devices

Article Categories [AC]:

AC99 - Not required.

Environmental Release Category [ERC]:

ERC 4 - Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC 7 - Use of functional fluid at industrial site

ERC 9a - Widespread use of functional fluid (indoor)

ERC 9b - Widespread use of functional fluid (outdoor)

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

GB

LIQUI MOLY GmbH, Jerg-Wieland-Str. 4, 89081 Ulm-Lehr, Germany

Phone: (+49) 0731-1420-0, Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

GB

Page 2 of 14
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 13.12.2016 / 0004
 Replacing version dated / version: 21.08.2015 / 0003
 Valid from: 13.12.2016
 PDF print date: 13.12.2016
 MOLYGEN NEW GENERATION 5W-40 1 L
 Art.: 8576

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)

EUH210-Safety data sheet available on request.

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

Product can compose a film on the water surface, which can prevent oxygen exchange.

Hazardous to drinking water, on escape of even small quantities.

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a.

3.2 Mixture

Distillates (petroleum), hydrotreated heavy paraffinic	
Registration number (REACH)	01-2119484627-25-XXXX
Index	649-467-00-8
EINECS, ELINCS, NLP	265-157-1
CAS	64742-54-7
content %	30-<50
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

1-decene, trimers, hydrogenated	
Registration number (REACH)	01-2119493949-12-XXXX
Index	---
EINECS, ELINCS, NLP	500-393-3 (NLP)
CAS	157707-86-3
content %	1-10
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

Baseoil - unspecified *	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP	---
CAS	---
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

Bis(nonylphenyl)amine	
Registration number (REACH)	01-2119488911-28-XXXX
Index	---
EINECS, ELINCS, NLP	253-249-4
CAS	36878-20-3
content %	1-5
Classification according to Regulation (EC) 1272/2008 (CLP)	Aquatic Chronic 4, H413

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

* The contained mineral oil can be described by one or more of the following numbers:

EINECS, ELINCS, NLP	Registration number (REACH)	Chemical name
265-157-1	01-2119484627-25-XXXX	Distillates (petroleum), hydrotreated heavy paraffinic
265-169-7	01-2119471299-27-XXXX	Distillates (petroleum), solvent-dewaxed heavy paraffinic
265-158-7	01-2119487077-29-XXXX	Distillates (petroleum), hydrotreated light paraffinic

(GB)

Page 3 of 14
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 13.12.2016 / 0004
Replacing version dated / version: 21.08.2015 / 0003
Valid from: 13.12.2016
PDF print date: 13.12.2016
MOLYGEN NEW GENERATION 5W-40 1 L
Art.: 8576

265-159-2	01-2119480132-48-XXXX	Distillates (petroleum), solvent-dewaxed light paraffinic
-----------	-----------------------	---

The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Unsuitable cleaning product:

Solvent
Thinners

Eye contact

Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Rinse the mouth thoroughly with water.
Do not induce vomiting. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

The following may occur:

Irritation of the eyes
With long-term contact:
Drying of the skin.
Dermatitis (skin inflammation)
Oil acne
On vapour formation:
Irritation of the respiratory tract
Ingestion:
Gastrointestinal disturbances
Nausea
Vomiting

4.3 Indication of any immediate medical attention and special treatment needed

n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO2
Foam
Dry extinguisher

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon
Hydrogen sulphide
Oxides of nitrogen
Oxides of sulphur
Oxides of phosphorus
Toxic gases

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 13.12.2016 / 0004
Replacing version dated / version: 21.08.2015 / 0003
Valid from: 13.12.2016
PDF print date: 13.12.2016
MOLYGEN NEW GENERATION 5W-40 1 L
Art.: 8576

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air.
Avoid formation of oil mist.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent from entering drainage system.
Prevent surface and ground-water infiltration, as well as ground penetration.
If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.
Oil binder
Do not wash away with water or watery cleaning agents.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Avoid formation of oil mist.
Ensure good ventilation.
Keep away from sources of ignition - Do not smoke.
Do not heat to temperatures close to flash point.
Avoid contact with eyes.
Avoid long lasting or intensive contact with skin.
Do not carry cleaning cloths soaked in product in trouser pockets.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Under all circumstances prevent penetration into the soil.
Store at room temperature.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 13.12.2016 / 0004

Replacing version dated / version: 21.08.2015 / 0003

Valid from: 13.12.2016

PDF print date: 13.12.2016

MOLYGEN NEW GENERATION 5W-40 1 L

Art.: 8576

8.1 Control parameters

(GB) Chemical Name	Oil mist, mineral	Content %:
WEL-TWA: 5 mg/m3 (ACGIH)	WEL-STEL: 10 mg/m3 (ACGIH)	---
Monitoring procedures:	- Draeger - Oil 10/a-P (67 28 371) - Draeger - Oil Mist 1/a (67 33 031)	
BMGV: ---	Other information: ---	

(GB) WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

Distillates (petroleum), hydrotreated heavy paraffinic						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - oral (animal feed)		PNEC	9,33	mg/kg feed	
Consumer	Human - inhalation	Long term, local effects	DNEL	1,2	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	5,4	mg/m3	

Bis(nonylphenyl)amine						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,1	mg/l	
	Environment - marine		PNEC	0,01	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	1	mg/l	
	Environment - sewage treatment plant		PNEC	1	mg/l	
	Environment - sediment, freshwater		PNEC	132000	mg/kg dry weight	
	Environment - sediment, marine		PNEC	13200	mg/kg dry weight	
	Environment - soil		DNEL	263000	mg/kg dw	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,31	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,09	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,31	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,62	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	4,37	mg/m3	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

GB

Page 6 of 14
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 13.12.2016 / 0004
 Replacing version dated / version: 21.08.2015 / 0003
 Valid from: 13.12.2016
 PDF print date: 13.12.2016
 MOLYGEN NEW GENERATION 5W-40 1 L
 Art.: 8576

These are specified by e.g. EN 14042.
 EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
 Wash hands before breaks and at end of work.
 Keep away from food, drink and animal feedingstuffs.
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
 Tight fitting protective goggles (EN 166) with side protection, with danger of projections.

Skin protection - Hand protection:
 Protective gloves, oil resistant (EN 374)
 If applicable
 Protective nitrile gloves (EN 374)
 Protective PVC gloves (EN 374)
 Minimum layer thickness in mm:
 0,5
 Permeation time (penetration time) in minutes:
 240
 The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions.
 The recommended maximum wearing time is 50% of breakthrough time.
 Protective hand cream recommended.

Skin protection - Other:
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
 Normally not necessary.
 With oil mist formation:
 Filter A2 P2 (EN 14387), code colour brown, white
 Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
 Not applicable

Additional information on hand protection - No tests have been performed.
 In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
 Selection of materials derived from glove manufacturer's indications.
 Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
 Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
 In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
 The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Green, Fluorescent
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	n.a.
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	230 °C
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined

Page 7 of 14
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 13.12.2016 / 0004
 Replacing version dated / version: 21.08.2015 / 0003
 Valid from: 13.12.2016
 PDF print date: 13.12.2016
 MOLYGEN NEW GENERATION 5W-40 1 L
 Art.: 8576

Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	0,855 g/ml
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	84 mm ² /s (40°C)
Viscosity:	14,4 mm ² /s (100°C)
Explosive properties:	Product is not explosive.
Oxidising properties:	No

9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

See also section 7.

Heating, open flame, ignition sources

10.5 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

MOLYGEN NEW GENERATION 5W-40 1 L

Art.: 8576

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.

GB

Page 8 of 14
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 13.12.2016 / 0004
 Replacing version dated / version: 21.08.2015 / 0003
 Valid from: 13.12.2016
 PDF print date: 13.12.2016
 MOLYGEN NEW GENERATION 5W-40 1 L
 Art.: 8576

Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Distillates (petroleum), hydrotreated heavy paraffinic						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat		
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	Analogous conclusion
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	Analogous conclusion
Acute toxicity, by inhalation:	LC50	>5,53	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol, Analogous conclusion
Skin corrosion/irritation:						Mild irritant, Analogous conclusion
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Not irritant
Respiratory or skin sensitisation:						Not sensitising
Aspiration hazard:						Yes, Analogous conclusion
Aspiration hazard:						Yes
Symptoms:						coughing, respiratory distress, nausea and vomiting., diarrhoea

1-decene, trimers, hydrogenated						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat		
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5,2	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising

Baseoil - unspecified						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Respiratory or skin sensitisation:						Not sensitising
Aspiration hazard:						Yes

Bis(nonylphenyl)amine						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Mild irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising

Page 9 of 14
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 13.12.2016 / 0004
 Replacing version dated / version: 21.08.2015 / 0003
 Valid from: 13.12.2016
 PDF print date: 13.12.2016
 MOLYGEN NEW GENERATION 5W-40 1 L
 Art.: 8576

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

MOLYGEN NEW GENERATION 5W-40 1 L

Art.: 8576

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Other adverse effects:							n.d.a.

Distillates (petroleum), hydrotreated heavy paraffinic

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOEC/NOEL	96h	>100	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	LL50	96h	>10000	mg/l		OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	10	mg/l	Daphnia magna		
12.1. Toxicity to algae:	NOEC/NOEL	72h	>=100	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Not readily biodegradable
Water solubility:							Insoluble

1-decene, trimers, hydrogenated

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l			
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	NOELR	21d	125	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Mysidopsis bahia	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l			
12.1. Toxicity to daphnia:	NOELR	21d	125	mg/l			
12.1. Toxicity to algae:	NOELR	72h	1000	mg/l			
12.1. Toxicity to algae:	NOELR	72h	1000	mg/l	Selenastrum capricornutum	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Not readily biodegradable
12.3. Bioaccumulative potential:	BCF		>10				

GB

Page 10 of 14
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 13.12.2016 / 0004
 Replacing version dated / version: 21.08.2015 / 0003
 Valid from: 13.12.2016
 PDF print date: 13.12.2016
 MOLYGEN NEW GENERATION 5W-40 1 L
 Art.: 8576

12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	1000	mg/l	activated sludge		

Baseoil - unspecified							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Pimephales promelas		
12.1. Toxicity to daphnia:	EC50	48h	>10000	mg/l	Daphnia magna		
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	>10	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Scenedesmus quadricauda		
12.2. Persistence and degradability:		28d	31	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Not readily biodegradable

Bis(nonylphenyl)amine							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	LC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	600	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	0-1	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Not readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		7,7				Concentration in organisms possible.
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of.
 EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. dispose at suitable refuse site.

(GB)

Page 11 of 14
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 13.12.2016 / 0004
 Replacing version dated / version: 21.08.2015 / 0003
 Valid from: 13.12.2016
 PDF print date: 13.12.2016
 MOLYGEN NEW GENERATION 5W-40 1 L
 Art.: 8576

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

15 01 04 metallic packaging

Empty container completely.

Untampered packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

14.1. UN number: n.a.

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Classification code: n.a.

LQ (ADR 2015): n.a.

14.5. Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Marine Pollutant: n.a.

14.5. Environmental hazards: Not applicable

Transport by air (IATA)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

14.5. Environmental hazards: Not applicable

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

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

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

Observe restrictions:

General hygiene measures for the handling of chemicals are applicable.

Directive 2010/75/EU (VOC): < 0,1 %

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 9

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Not applicable

Page 12 of 14
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 13.12.2016 / 0004
 Replacing version dated / version: 21.08.2015 / 0003
 Valid from: 13.12.2016
 PDF print date: 13.12.2016
 MOLYGEN NEW GENERATION 5W-40 1 L
 Art.: 8576

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H304 May be fatal if swallowed and enters airways.
 H413 May cause long lasting harmful effects to aquatic life.

Asp. Tox. — Aspiration hazard
 Aquatic Chronic — Hazardous to the aquatic environment - chronic

Any abbreviations and acronyms used in this document:

- AC Article Categories
- acc., acc. to according, according to
- ACGIH American Conference of Governmental Industrial Hygienists
- ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
- AOEL Acceptable Operator Exposure Level
- AOX Adsorbable organic halogen compounds
- approx. approximately
- Art., Art. no. Article number
- ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
- BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
- BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
- BCF Bioconcentration factor
- BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)
- BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)
- BMGV Biological monitoring guidance value (EH40, UK)
- BOD Biochemical oxygen demand
- BSEF Bromine Science and Environmental Forum
- bw body weight
- CAS Chemical Abstracts Service
- CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids
- CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques
- CIPAC Collaborative International Pesticides Analytical Council
- CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
- CMR carcinogenic, mutagenic, reproductive toxic
- COD Chemical oxygen demand
- CTFA Cosmetic, Toiletry, and Fragrance Association
- DMEL Derived Minimum Effect Level
- DNEL Derived No Effect Level
- DOC Dissolved organic carbon
- DT50 Dwell Time - 50% reduction of start concentration
- DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)
- dw dry weight
- e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
- EC European Community
- ECHA European Chemicals Agency
- EEA European Economic Area
- EEC European Economic Community
- EINECS European Inventory of Existing Commercial Chemical Substances
- ELINCS European List of Notified Chemical Substances
- EN European Norms
- EPA United States Environmental Protection Agency (United States of America)
- ERC Environmental Release Categories
- ES Exposure scenario
- etc. et cetera
- EU European Union
- EWC European Waste Catalogue
- Fax. Fax number
- gen. general
- GHS Globally Harmonized System of Classification and Labelling of Chemicals
- GWP Global warming potential

Page 13 of 14
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 13.12.2016 / 0004
 Replacing version dated / version: 21.08.2015 / 0003
 Valid from: 13.12.2016
 PDF print date: 13.12.2016
 MOLYGEN NEW GENERATION 5W-40 1 L
 Art.: 8576

HET-CAM Hen's Egg Test - Chorionallantoic Membrane
 HGWP Halocarbon Global Warming Potential
 IARC International Agency for Research on Cancer
 IATA International Air Transport Association
 IBC Intermediate Bulk Container
 IBC (Code) International Bulk Chemical (Code)
 IC Inhibitory concentration
 IMDG-code International Maritime Code for Dangerous Goods
 incl. including, inclusive
 IUCLID International Uniform Chemical Information Database
 LC lethal concentration
 LC50 lethal concentration 50 percent kill
 LCLo lowest published lethal concentration
 LD Lethal Dose of a chemical
 LD50 Lethal Dose, 50% kill
 LDLo Lethal Dose Low
 LOAEL Lowest Observed Adverse Effect Level
 LOEC Lowest Observed Effect Concentration
 LOEL Lowest Observed Effect Level
 LQ Limited Quantities
 MARPOL International Convention for the Prevention of Marine Pollution from Ships
 n.a. not applicable
 n.av. not available
 n.c. not checked
 n.d.a. no data available
 NIOSH National Institute of Occupational Safety and Health (United States of America)
 NOAEC No Observed Adverse Effective Concentration
 NOAEL No Observed Adverse Effect Level
 NOEC No Observed Effect Concentration
 NOEL No Observed Effect Level
 ODP Ozone Depletion Potential
 OECD Organisation for Economic Co-operation and Development
 org. organic
 PAH polycyclic aromatic hydrocarbon
 PBT persistent, bioaccumulative and toxic
 PC Chemical product category
 PE Polyethylene
 PNEC Predicted No Effect Concentration
 POCP Photochemical ozone creation potential
 ppm parts per million
 PROC Process category
 PTFE Polytetrafluorethylene
 REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
 REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
 RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
 SADT Self-Accelerating Decomposition Temperature
 SAR Structure Activity Relationship
 SU Sector of use
 SVHC Substances of Very High Concern
 Tel. Telephone
 ThOD Theoretical oxygen demand
 TOC Total organic carbon
 TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)
 UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
 VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))
 VOC Volatile organic compounds
 vPvB very persistent and very bioaccumulative
 WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).
 WHO World Health Organization
 wwt wet weight

GB

Page 14 of 14
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 13.12.2016 / 0004
Replacing version dated / version: 21.08.2015 / 0003
Valid from: 13.12.2016
PDF print date: 13.12.2016
MOLYGEN NEW GENERATION 5W-40 1 L
Art.: 8576

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.