

Page 1 of 11

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

Revision date / version: 29.01.2018 / 0005

Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018 PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

# 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 4 L**

Art.: 8578

# 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

(B)

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)



Page 2 of 11

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

Revision date / version: 29.01.2018 / 0005

Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018 PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

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

#### 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 %	40-60
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

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

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 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

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

#### Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

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.



Page 3 of 11

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

Revision date / version: 29.01.2018 / 0005

Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018 PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

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

Inaestion:

Gastrointestinal disturbances

Nausea Vomiting

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

Symptomatic treatment.

# **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

# 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.



Œ

Page 4 of 11

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

Revision date / version: 29.01.2018 / 0005 Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018 PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

#### 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 eves.

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**

# 8.1 Control parameters

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:	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).

(8) = Inhalable fraction (2017/164/EU). (9) = Respirable fraction (2017/164/EU). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(8) = Inhalable fraction (2017/164/EU). (9) = Respirable fraction (2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | 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.

#### 8.2 Exposure controls

Distillates (petroleum), hydrotreated heavy paraffinic										
Area of application	Exposure route /	Exposure route / Effect on health Descriptor Val								
	Environmental									
	compartment									
Consumer	Human - inhalation	Long term, local effects	DNEL	1,2	mg/m3	24h				
Workers / employees	Human - inhalation	Long term, local effects	DNEL	5,4	mg/m3	8h				



(B)

Page 5 of 11

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

Revision date / version: 29.01.2018 / 0005

Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018 PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

#### 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.

These are specified by e.g. BS EN 14042.

BS 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



Page 6 of 11

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

Revision date / version: 29.01.2018 / 0005

Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018

PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

Green, Fluorescent Colour: Odour: Characteristic Odour threshold: Not determined

pH-value:

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):

Lower explosive limit: Not determined Upper explosive limit: Not determined Vapour pressure: Not determined Vapour density (air = 1): Not determined Density: 0,850 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 81,5 mm2/s (40°C) Viscosity:

Viscosity: 14 mm2/s (100°C) Explosive properties: Product is not explosive.

Oxidising properties:

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 4 L											
Art.: 8578											
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.					



Page 7 of 11

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 29.01.2018 / 0005

Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018 PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

Skin corrosion/irritation:		n.d.a.
Serious eye damage/irritation:		n.d.a.
Respiratory or skin		n.d.a.
sensitisation:		
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.
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	OECD 420 (Acute Oral toxicity - Fixe Dose Procedure)				
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)				
Acute toxicity, by inhalation:	LC50	5,53	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol			
Skin corrosion/irritation:					• ,	Not irritant			
Serious eye damage/irritation:						Slightly irritant			
Respiratory or skin						Not sensitizising			
sensitisation:									
Aspiration hazard:						Yes			

# **SECTION 12: Ecological information**

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

MOLYGEN NEW GENERATION 5W-40 4 L												
Art.: 8578												
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							n.d.a.					
degradability:												
12.3. Bioaccumulative							n.d.a.					
potential:												
12.4. Mobility in soil:							n.d.a.					
12.5. Results of PBT							n.d.a.					
and vPvB assessment												
12.6. Other adverse							n.d.a.					
effects:												

Distillates (petroleum), hydrotreated heavy paraffinic									
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
12.1. Toxicity to fish:	LL50	96h	>100	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)			
12.1. Toxicity to fish:	NOEC/NOEL	28d	>1000	mg/l	Oncorhynchus mykiss	QSAR			
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	10	mg/l	Daphnia magna	QSAR			
12.1. Toxicity to daphnia:	EL50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)			



Page 8 of 11

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

Revision date / version: 29.01.2018 / 0005

Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018 PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

12.1. Toxicity to algae:	EL50	48h	>100	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)
12.2. Persistence and degradability:		28d	6	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)
Other information:	AOX		0	%		

# **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.

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.

Uncontaminated 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: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):
14.4. Packing group:
n.a.
n.a.

14.5. Environmental hazards: Not applicable

#### 14.6. Special precautions for user



Page 9 of 11

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

Revision date / version: 29.01.2018 / 0005

Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018 PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

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:

3, 8, 9, 11, 12

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

Not applicable

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.

Asp. Tox. — Aspiration hazard

# Any abbreviations and acronyms used in this document:

**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

Article number Art., Art. no.

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM

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

body weight bw

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



Page 10 of 11

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

Revision date / version: 29.01.2018 / 0005

Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018 PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

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

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 E

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 applicablen.av. not availablen.c. not checkedn.d.a. no data available

NIOSH National Institute of Occupational Safety and Health (United States of America)

NOAECNo 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



Page 11 of 11

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

Revision date / version: 29.01.2018 / 0005

Replacing version dated / version: 13.12.2016 / 0004

Valid from: 29.01.2018 PDF print date: 30.01.2018

MOLYGEN NEW GENERATION 5W-40 4 L

Art.: 8578

PNEC Predicted No Effect Concentration POCP Photochemical ozone creation potential

ppm parts per million PROC Process category PTFE Polytetrafluorethylene

REACHRegistration, 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 = 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

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.