

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

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

#### 1.1 Product identifier

Trade name **PANOLIN BIOGEAR RS 80W-90**  
Registration number (REACH) not relevant (mixture)  
Article number 25325

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

Relevant identified uses PC24 - Lubricants, greases, release products

#### 1.3 Details of the supplier of the safety data sheet

PANOLIN AG  
Bläsimühle 2-6  
8322 Madetswil  
Switzerland

Telephone: +41 44 956 65 65  
e-mail: info@panolin.com  
Website: www.panolin.com

e-mail (competent person) info@panolin.com

#### 1.4 Emergency telephone number

Emergency information service +41 44 956 65 65  
This number is only available during the following office hours: Mon-Fri 08:00 - 17:00

Poison centre			
Country	Name	Postal code/city	Telephone
Switzerland	Toxinfo Suisse		+41 (0) 44/251 51 51 (CH 145) 24h

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- Signal word not required

- Pictograms not required

- Supplemental hazard information

EUH208 Contains Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14-tert-alkyl. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

#### 2.3 Other hazards

of no significance

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not relevant (mixture)

#### 3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Distillates (petroleum), hydro-treated light paraffinic	CAS No 64742-55-8  EC No 265-158-7  Index No 649-468-00-3  REACH Reg. No 01-2119487077-29-xxxx	5 – < 10	Acute Tox. 4 / H332 Asp. Tox. 1 / H304		
Polysulfides, di-tert-Bu	CAS No 68937-96-2  EC No 273-103-3  REACH Reg. No 01-2119540515-43-xxxx	1 – < 5	Skin Sens. 1B / H317 Aquatic Acute 1 / H400 Aquatic Chronic 3 / H412		
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl	EC No 931-384-6  REACH Reg. No 01-2119493620-38-xxxx	< 1	Acute Tox. 4 / H302 Eye Dam. 1 / H318 Skin Sens. 1B / H317 Aquatic Chronic 2 / H411		

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
Distillates (petroleum), hydro-treated light paraffinic	-	-	11 mg <sub>i</sub> /4h 2.18 mg <sub>i</sub> /4h	inhalation: vapour inhalation: dust/mist
Polysulfides, di-tert-Bu	Skin Sens. 1B; H317: C ≥ 46 %	-	-	
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl	Eye Dam. 1; H318: C ≥ 50 %	-	500 mg/kg	oral

For full text of abbreviations: see SECTION 16.

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

##### Following skin contact

Wash with plenty of soap and water. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

##### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO<sub>2</sub>)

##### Unsuitable extinguishing media

Water jet

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

##### Hazardous combustion products

Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

##### For non-emergency personnel

Remove persons to safety. Special danger of slipping by leaking/spilling product.

##### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Equipment required for containment/clean-up

Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.)

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

- Handling of incompatible substances or mixtures

- Keep away from

Acids, Bases, Oxidisers

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

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

### 7.3 Specific end use(s)

See section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

This information is not available.

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Polysulfides, di-tert-Bu	68937-96-2	DNEL	3.29 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Polysulfides, di-tert-Bu	68937-96-2	DNEL	4.67 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

### Relevant DNELs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl		DNEL	8.56 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl		DNEL	12.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

### Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Polysulfides, di-tert-Bu	68937-96-2	PNEC	0.24 µg/l	aquatic organisms	freshwater	short-term (single instance)
Polysulfides, di-tert-Bu	68937-96-2	PNEC	0.024 µg/l	aquatic organisms	marine water	short-term (single instance)
Polysulfides, di-tert-Bu	68937-96-2	PNEC	4.51 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Polysulfides, di-tert-Bu	68937-96-2	PNEC	0.94 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Polysulfides, di-tert-Bu	68937-96-2	PNEC	0.094 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Polysulfides, di-tert-Bu	68937-96-2	PNEC	18.1 µg/kg	terrestrial organisms	soil	short-term (single instance)
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl		PNEC	0.001 mg/l	aquatic organisms	freshwater	short-term (single instance)
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl		PNEC	0.12 µg/l	aquatic organisms	marine water	short-term (single instance)
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl		PNEC	24.33 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

Relevant PNECs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl		PNEC	14.4 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl		PNEC	1.44 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl		PNEC	2.94 mg/kg	terrestrial organisms	soil	short-term (single instance)

### 8.2 Exposure controls

#### Appropriate engineering controls

General ventilation.

#### Individual protection measures (personal protective equipment)



#### Eye/face protection

Use safety goggles with side protection.

#### Skin protection

##### - Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

##### - Type of material

Nitrile

##### - Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

### SECTION 9: Physical and chemical properties

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

Physical state	liquid
Colour	yellow
Odour	characteristic
Melting point/freezing point	-33 °C at 1,013 hPa
Boiling point or initial boiling point and boiling range	186 °C at 101.3 kPa
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined
Flash point	173 °C at 1,013 hPa
Auto-ignition temperature	225 °C
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	92.8 mm <sup>2</sup> /s at 40 °C
Solubility(ies)	not determined

#### Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available
---	-----------------------------------

Vapour pressure	15.6 Pa at 20 °C
-----------------	------------------

#### Density and/or relative density

Density	0.92 g/cm <sup>3</sup> at 15 °C
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)
--------------------------	-----------------------

#### 9.2 Other information

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

#### 10.5 Incompatible materials

Acids, Bases, Oxidisers

#### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

##### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### Classification according to GHS (1272/2008/EC, CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

##### Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful if swallowed or if inhaled.

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	inhalation: vapour	11 mg <sub>i</sub> /4h
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	inhalation: dust/mist	2.18 mg <sub>i</sub> /4h
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14-tert-alkyl		oral	500 mg <sub>kg</sub>

##### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.



# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

### Respiratory or skin sensitisation

Contains Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl. May produce an allergic reaction.

### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

### Carcinogenicity

Shall not be classified as carcinogenic.

### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## 11.2 Information on other hazards

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

Acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.  
Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AWSV): 2 (Germany)

### 12.2 Persistence and degradability

The relevant substances of the mixture are readily biodegradable.

### 12.3 Bioaccumulative potential

not relevant

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6 Endocrine disrupting properties

None of the ingredients are listed.

### 12.7 Other adverse effects

Data are not available.

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

##### Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Relevant provisions relating to waste

##### List of wastes

13 02 07\* Readily biodegradable engine, gear and lubricating oils

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

14.1	UN number or ID number	not subject to transport regulations
14.2	UN proper shipping name	not relevant
14.3	Transport hazard class(es)	none
14.4	Packing group	not assigned
14.5	Environmental hazards	non-environmentally hazardous acc. to the dangerous goods regulations
14.6	Special precautions for user	There is no additional information.
14.7	Maritime transport in bulk according to IMO instruments	The cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

Not subject to ADR, RID and ADN.

##### International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

##### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
Relevant provisions of the European Union (EU)

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

### Restrictions according to REACH, Annex XVII

Dangerous substances with restrictions (REACH, Annex XVII)			
Name of substance	Name acc. to inventory	CAS No	No
Polysulfides, di-tert-Bu	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3
Polysulfides, di-tert-Bu	substances in tattoo inks and permanent make-up		75
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14-tert-alkyl	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3
Distillates (petroleum), hydrotreated light paraffinic	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3

### List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

### Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

### Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

### Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

### National regulations (Germany)

#### Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)

Wassergefährdungsklasse, WGK (water hazard class) 2 obviously hazardous to water

### Technical instructions on air quality control (Germany)

Number	Group of substances	Class	Conc.	Mass flow	Mass concentration	Notation
5.2.5	organic substances		≥ 25 wt%	0.5 kg/h	50 mg/m <sup>3</sup>	3)

#### Notation

3) a total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m<sup>3</sup>, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)

### Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK) 10 (combustible liquids)

## 15.2 Chemical Safety Assessment

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

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

### SECTION 16: Other information

#### Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.2		- Precautionary statements: change in the listing (table)	yes

#### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LGK	Lagerklasse (storage class according to TRGS 510, Germany)
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



## PANOLIN BIOGEAR RS 80W-90

Version number: GHS 4.0  
Replaces version of: 2022-03-01 (GHS 3)

Revision: 2022-03-01

Abbr.	Descriptions of used abbreviations
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Sens.	Skin sensitisation
SVHC	Substance of Very High Concern
TRGS	Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany)
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.