

"Limited Slip" Automotive Gear Oil

AUTOGEAR POWER LS 80W-90 is an extra high performance extreme pressure type automotive gear lubricant specially developed for use in modern high performance passenger cars, sports utility vehicles, vans and light duty trucks with limited slip differentials.

AUTOGEAR POWER LS 80W-90 is based on a high quality mineral virgin base oil in combination with a special additive package to ensure the following properties:

- Exceptional thermo-oxidative stability.
- Exceptional load bearing characteristics.
- Effective rust and corrosion protection.
- Excellent limited slip performance to reduce chatter and improves traction.
- Outstanding low temperature fluidity provides smoother shifting at low ambient temperatures.
- Exceptional shear stable.
- Good frictional properties provide improved fuel economy and smoother shift ability

AUTOGEAR POWER LS 80W-90 meets the following performance criteria:

API GL-5 MAN 342 M1/M2 Volvo 1273.10 MIL-L-2105D

Arvin Meritor ZF TE-ML 05C, 07A, 08, 12E, 16E, 17B, 19B, 21C

Typical Analysis

Properties	Unit	Method	Typical Value
SAE Grade		SAE J306	80W-90
Density @15°C	kg/m³	ASTM 4052	887
Kinematic Viscosity @ 40°C	mm²/s	ASTM D7042	131
Kinematic Viscosity @ 100°C	mm²/s	ASTM D7042	14.4
Viscosity Index		ASTM D2270	109
Flash Point COC	°C	ASTM D92	>200
Pour Point	°C	ASTM D7346	-33
Date Issued: 26-1-2021	Supersedes: 25	5-01-2018	Revision Nr.: 02



















Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 2/18/2015 Revision date: 11/26/2020 Supersedes version of: 2/28/2019 Version: 1.4

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

1.1. Product identifier

Product form : Mixture

Product name : 73120 - AUTOGEAR POWER LS 80W-90

Product code : 73120

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use

Industrial/Professional use spec : Industrial

For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

North Sea Lubricants B.V. B.V.

Ampèrestraat 5

NL- 3846AN Harderwijk

The Netherlands

T+31 651345369

support@northsealubricants.com - www.northsealubricants.com

1.4. Emergency telephone number

Emergency number : +31 (0)786527652

Monday to Friday: 09:00 - 16:00 (CET)

H412

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment — Chronic Hazard, Category 3

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Signal word (CLP) : -

Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

EUH-statements : EUH208 - Contains Amines, C10-14-tert-alkyl. May produce an allergic reaction.

2.3. Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil substance with national workplace exposure limit(s) (BG, CZ, DK, HR, NL); substance with a Community workplace exposure limit	CAS-No.: 64742-65-0 EC-No.: 265-169-7 EC Index-No.: 649-474-00-6 REACH-no: 01-2119471299- 27	25 – 50	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil substance with national workplace exposure limit(s) (BE, BG, CZ, DK, HR, NL, NO); substance with a Community workplace exposure limit	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627- 25	0.5 – 2.5	Asp. Tox. 1, H304
C16-18-(even numbered, saturated and unsaturated)-alkylamines	EC-No.: 627-034-4 REACH-no: 01-2119473797- 19	0.1 – 1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)
Amines, C10-14-tert-alkyl	EC-No.: 701-175-2 REACH-no: 01-2119456798- 18	0.01 – 0.1	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation:vapour), H330 Skin Sens. 1A, H317 STOT SE 3, H335 Aquatic Chronic 1, H410

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water,

followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread. Do not use a heavy water

stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent

formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep

container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

11/26/2020 (Revision date) EU - en 3/11

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil (64742-65-0)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA 5 mg/m³		
IOEL STEL 10 mg/m³		
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA 5 mg/m³		

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

8.2.2.2. Skin protection

No additional information available

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : brown.
Odour : characteristic.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Odour threshold : Not available Melting point : Not available -27 °C Freezing point Boiling point Not available Flammability Non flammable. **Explosive limits** Not available Lower explosive limit (LEL) Not available Upper explosive limit (UEL) Not available : > 200 °C Flash point : Not available Auto-ignition temperature Decomposition temperature : Not available : Not available рΗ : 162 mm²/s @40°C Viscosity, kinematic Solubility : insoluble in water. Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available Density : 900.1 kg/m³ : Not available Relative density Relative vapour density at 20 °C : Not available Particle size : Not applicable Particle size distribution : Not applicable Particle shape : Not applicable Particle aspect ratio : Not applicable Particle aggregation state : Not applicable : Not applicable Particle agglomeration state : Not applicable Particle specific surface area

: Not applicable

9.2. Other information

Particle dustiness

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

Safety Data Sheet

LOAEL (oral, rat, 90 days)

NOAEL (dermal, rat/rabbit, 90 days)

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 11: Toxicological information		
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	Not classifiedNot classifiedNot classified	
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil (64742-65-0)		
LD50 oral (rat)	> 5000 mg/kg bodyweight	
LD50 dermal (rabbit)	> 5000 mg/kg	
LC50 inhalation (rat) (Vapours - mg/l/4h)	> 5.53 mg/l/4h	
C16-18-(even numbered, saturated and	unsaturated)-alkylamines	
LD50 oral (rat)	1689 mg/kg	
LD50 dermal (rat)	> 2000 mg/kg	
Amines, C10-14-tert-alkyl		
LD50 oral (rat)	612 mg/kg (OECD 401)	
LD50 dermal (rat)	251 mg/kg (OECD 402)	
LC50 inhalation (rat) (mg/l)	1.19 mg/l	
LC50 inhalation (rat) (Vapours - mg/l/4h)	1.19 mg/l/4h	
Distillates (petroleum), hydrotreated he	avy paraffinic; Baseoil (64742-54-7)	
LD50 oral (rat)	> 5000 mg/kg bodyweight	
LD50 dermal (rabbit)	> 5000 mg/kg	
LC50 inhalation (rat) (Vapours - mg/l/4h)	> 5.53 mg/l/4h	
Skin corrosion/irritation Additional information	: Not classified	
Serious eye damage/irritation	: Based on available data, the classification criteria are not met: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
Respiratory or skin sensitisation	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
Germ cell mutagenicity	: Not classified: Based on available data, the classification criteria are not met	
Additional information Carcinogenicity	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
Reproductive toxicity	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
STOT-single exposure	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
C16-18-(even numbered, saturated and	unsaturated)-alkylamines	
STOT-single exposure	May cause respiratory irritation.	
Amines, C10-14-tert-alkyl		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
Distillates (petroleum), solvent-dewaxe	d heavy paraffinic; Baseoil (64742-65-0)	
LOAEL (aral rat 00 days)	135 mg/kg hodywoight	

125 mg/kg bodyweight

≈ 1000 mg/kg bodyweight

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

C16-18-(even numbered, saturated and unsaturated)-alkylamines		
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Amines, C10-14-tert-alkyl		
LOAEL (dermal, rat/rabbit, 90 days)	60 mg/kg bodyweight/day	
NOAEL (dermal, rat/rabbit, 90 days)	20 mg/kg bodyweight/day	
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)		
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight	
Aspiration hazard :	Not classified	
Additional information :	Based on available data, the classification criteria are not met	
73120 - AUTOGEAR POWER LS 80W-90		
Viscosity, kinematic	162 mm²/s @40°C	

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms

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

o)...p.to....o

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term : Not classified

acute)

Hazardous to the aquatic environment, long-term : Harmful to aquatic life with long lasting effects.

(chronic)

(cnronic)		
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil (64742-65-0)		
LC50 - Fish [1]	> 100 mg/l Pimephales promelas	
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna	
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss	
NOEC chronic crustacea	10 mg/l Daphnia magna	
NOEC chronic algae	> 100 mg/l Pseudokirchneriella subcapitata	
C16-18-(even numbered, saturated and unsaturated)-alkylamines		
LC50 - Fish [1]	0.06 mg/l	
EC50 - Crustacea [1]	0.011 mg/l	
EC50 72h - Algae [1]	0.04 mg/l	
NOEC chronic crustacea	0.013 mg/l	
Amines, C10-14-tert-alkyl		
LC50 - Fish [1]	1.3 mg/l	
EC50 - Crustacea [1]	2.5 mg/l Daphnia magna	
EC50 72h - Algae [1]	0.44 mg/l Pseudokirchneriella subcapitata	
NOEC chronic fish	0.078 mg/l 96d	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Amines, C10-14-tert-alkyl		
NOEC chronic algae 0.05 mg/l 3d		
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)		
LC50 - Fish [1]	> 100 mg/l Pimephales promelas	
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna	
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss	
NOEC chronic crustacea	10 mg/l Daphnia magna	
NOEC chronic algae	> 100 mg/l Pseudokirchneriella subcapitata	

12.2. Persistence and degradability

73120 - AUTOGEAR POWER LS 80W-90		
Persistence and degradability	May cause long-term adverse effects in the environment.	
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil (64742-65-0)		
Persistence and degradability	Not readily biodegradable.	
Biodegradation	31 % 28 d OECD 301F	
C16-18-(even numbered, saturated and unsaturated)-alkylamines		
Biodegradation	66 % 28 d OECD 301B	
Amines, C10-14-tert-alkyl		
Persistence and degradability	Not readily biodegradable.	
Biochemical oxygen demand (BOD)	21.8	
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)		
Persistence and degradability	Not readily biodegradable.	
Biodegradation	31 % 28 d OECD 301F	

12.3. Bioaccumulative potential

73120 - AUTOGEAR POWER LS 80W-90			
Bioaccumulative potential	Not established.		
Distillates (petroleum), solvent-dewaxed heav	Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil (64742-65-0)		
Bioconcentration factor (BCF REACH)	260		
Partition coefficient n-octanol/water (Log Pow)	9.2		
C16-18-(even numbered, saturated and unsatu	C16-18-(even numbered, saturated and unsaturated)-alkylamines		
Bioconcentration factor (BCF REACH)	500		
Partition coefficient n-octanol/water (Log Kow)	4.33 @25 °C		
Amines, C10-14-tert-alkyl			
Partition coefficient n-octanol/water (Log Pow) 2.9			
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)			
Partition coefficient n-octanol/water (Log Kow) > 4			

12.4. Mobility in soil

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to hazardous or special waste collection point, in accordance with local,

regional, national and/or international regulation.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID n	umber			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippin	g name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard o	class(es)			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental haz	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary informatio	n available		ı	ı

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Inland waterway transport

No data available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE

COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and

amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:		
Acute Tox. 2 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 2	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1	
Asp. Tox. 1	Aspiration hazard, Category 1	
EUH208	Contains Amines, C10-14-tert-alkyl. May produce an allergic reaction.	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H311	Toxic in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	

11/26/2020 (Revision date) EU - en 10/11

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:		
H330	Fatal if inhaled.	
H335	May cause respiratory irritation.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Sens. 1A	Skin sensitisation, category 1A	
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.