

Synthetic limited slip gear oil

AUTOGEAR POWER SYN LS 75W-90 is a synthetic extra high performance multi-functional gear lubricant designed to provide effective lubrication in modern high performance passenger cars, sports utility vehicles, vans and light duty trucks and "off highway" equipment equipped with both conventional and limited slip differentials. The special friction modifier used in this oil helps in reducing chatter and improving traction besides retaining the frictional properties for longer service life.

AUTOGEAR POWER SYN LS 75W-90 is formulated with high quality synthetic base oils in combination with a special additive package to reach the following properties:

- Unique additive technology allows the use of a single lubricant in rear axles, synchronised and non-synchronised manual transmissions and therefore helps in rationalisation of products.
- Exceptional thermo-oxidative stability and load bearing characteristics which helps in extending the life of the driveline components and the oil.
- Effective rust and corrosion protection, especially to copper and its alloys reduces wear, extends synchroniser life and improves shifting performance
- Outstanding low temperature fluidity reduces wear at start up and provides smoother shifting at low ambient temperatures
- Exceptional shear stability which helps in retaining viscosity and film strength to protect against wear, even under severe operating conditions
- Superior frictional properties provide improved fuel economy and smoother shift ability.
- Excellent limited slip performance reduces chatter and improves traction

AUTOGEAR POWER SYN LS 75W-90 meets the following performance criteria:

API GL-5 (LS) MIL-PRF-2105-E SAE J2360 MACK GO-J

Scania STO 1:0 ZF TE-ML 05D/21D Ford M2C192-A

Typical Analysis

Properties	Unit	Unit Method		Typical Value	
SAE Grade		SAE J306		75W-90	
Density @15°C	kg/m³	ASTM 4052		880	
Kinematic Viscosity @ 40°C	mm ² /s	ASTM D7042		96	
Kinematic Viscosity @ 100°C	mm ² /s	ASTM D7042		15.3	
Viscosity Index		ASTM D2270		1 <i>7</i> 0	
Brookfield Viscosity @-40°C	сР	ASTM D2983		150000	
Flash Point COC	°C	ASTM D92		>210	
Pour Point	°C	ASTM D7346		-36	
Date Issued: 16-6-2021	Supersedes: 20	0-10-2016	Revision 1	Nr.: 01	



















Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 5/29/2014 Revision date: 9/15/2021 Supersedes version of: 4/28/2019 Version: 2.0

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

1.1. Product identifier

Product form : Mixture

Product name 74410 - AUTOGEAR POWER SYNTH LS 75W-90

74410 Product code

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

1.2.1. Relevant identified uses

: Industrial use Main use category Industrial/Professional use spec

Industrial

For professional use only

Function or use category : Lubricants and additives

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

: +31 (0)786527652 Emergency number

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

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 H412

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

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

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 an approved waste disposal plant.

2.3. Other hazards

Other hazards which do not result in classification : Flammable liquids. Prolonged or repeated skin contact with the material will remove natural oils which leads to a dermatitis. Spills of this product present a serious slipping hazard.

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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

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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), 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	50 – 75	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated light paraffinic; Baseoil substance with national workplace exposure limit(s) (BE, NL)	CAS-No.: 64742-55-8 EC-No.: 265-158-7 EC Index-No.: 649-468-00-3 REACH-no: 01-2119487077-	1 – 5	Not classified
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)

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	: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. 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 cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Call a poison center or a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

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

: After adequate first aid, no further treatment is required unless symptoms reappear. Not expected to present a significant hazard under anticipated conditions of normal use.
: After adequate first aid, no further treatment is required unless symptoms reappear.
: After adequate first aid, no further treatment is required unless symptoms reappear. May cause an allergic skin reaction.
: Eye irritation.
: After adequate first aid, no further treatment is required unless symptoms reappear.

Obtain emergency medical attention.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

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 attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing. 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

Protective equipment : Eliminate all ignition sources if safe to do so.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust, fume, gas,

mist, spray, vapours. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Wear suitable

protective clothing, gloves and eye/face protection. For further information refer to section 8:

"Exposure controls/personal protection". 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 : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or

diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid breathing vapours, spray, mist, gas,

fume, dust. Avoid contact with skin and eyes. Wear personal protective equipment. 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.

Handling temperature : ≤ 40 °C

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Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

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 : Heat sources.

Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 50 °C

Storage area : Store in a well-ventilated place. Store away from heat.
Special rules on packaging : Store in a closed container. Keep only in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

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

8.2.2.1. Eye and face protection

No additional information available

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

8.2.2.3. Respiratory protection

No additional information available

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

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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: LiquidColour: light brown.Odour: characteristic.Odour threshold: Not availableMelting point: Not applicable

Freezing point : -36

Boiling point : Not available Flammability : Non flammable. **Explosive limits** : Not available Lower explosive limit (LEL) : Not available : Not available Upper explosive limit (UEL) : > 201 °C Flash point : Not available Auto-ignition temperature : Not available Decomposition temperature : Not available рΗ

Viscosity, kinematic : 74.3 mm²/s @40°C 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 : 879 kg/m3 @15°C Relative density : Not available Relative vapour density at 20 °C : Not available Particle size : Not applicable Particle size distribution : Not applicable : Not applicable Particle shape Particle aspect ratio : Not applicable : Not applicable Particle aggregation state Particle agglomeration state : Not applicable Particle specific surface area : Not applicable Particle dustiness : Not applicable

9.2. Other information

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

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

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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.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)		
LD50 oral (rat) > 5000 mg/kg bodyweight		
LD50 dermal (rabbit) > 5000 mg/kg		
_C50 inhalation (rat) (Vapours - mg/l/4h) > 5.53 mg/l/4h		

Distillates (petroleum), hydrotreated light paraffinic; Baseoil (64742-55-8)		
LD50 oral (rat)	> 5000 mg/kg	
LD50 dermal (rabbit)	> 5000 mg/kg	
LC50 inhalation (rat) (Dust/Mist - 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

Skin corrosion/irritation : Not classified

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

Serious eye damage/irritation : 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

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

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.

STOT-repeated exposure : Not classified

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

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)

LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight

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Distillates (petroleum), hydrotreated light paraffinic; Baseoil (64742-55-8)			
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)		
C16-18-(even numbered, saturated and unsaturated)-alkylamines			
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.		
Aspiration hazard	: Not classified		
Additional information	: Based on available data, the classification criteria are not met		
74410 - AUTOGEAR POWER SYNTH LS 75W-90			
Viscosity, kinematic	74.3 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

SECTION 12: Ecological information

12.1. Toxicity

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

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

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

(chronic)			
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		
Distillates (petroleum), hydrotreated light p	araffinic; Baseoil (64742-55-8)		
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		

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12.2. Persistence and degradability

74410 - AUTOGEAR POWER SYNTH LS 75W-90			
Persistence and degradability May cause long-term adverse effects in the environment.			
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)			
Persistence and degradability Not readily biodegradable.			
Biodegradation	31 % 28 d OECD 301F		
Distillates (petroleum), hydrotreated light paraffinic; Baseoil (64742-55-8)			
Biodegradation 31 % 28 d, OECD TG 301 F			
C16-18-(even numbered, saturated and unsaturated)-alkylamines			
Biodegradation 66 % 28 d OECD 301B			

12.3. Bioaccumulative potential

74410 - AUTOGEAR POWER SYNTH LS 75W-90			
Bioaccumulative potential	Not established.		
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)			
Partition coefficient n-octanol/water (Log Kow) > 4			
Distillates (petroleum), hydrotreated light paraffinic; Baseoil (64742-55-8)			
Partition coefficient n-octanol/water (Log Pow) > 6			
C16-18-(even numbered, saturated and unsaturated)-alkylamines			
Bioconcentration factor (BCF REACH) 500			
Partition coefficient n-octanol/water (Log Kow) 4.33 @25 °C			

12.4. Mobility in soil

No additional information available

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

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils

SECTION 14: Transport information

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

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ADR	IMDG	IATA	ADN	RID	
I4.1. UN number or ID number					
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 hazards					
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				

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

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 ≥ 0,1 % / SCL

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

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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. 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
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
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
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.

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