

Industrial Gear Oil

INDUSTRIAL GEAR POWER 150 is a high performance extreme pressure gear oil which is developed for lubrication of heavy duty industrial gears working under severe operating conditions.

INDUSTRIAL GEAR POWER 150 is based on high quality virgin mineral base oil in combination with an unique additive package to ensure the following properties:

- Excellent load carrying capability protects gears against scuffing and wear and offers long equipment life and reduced maintenance costs.
- High thermo-oxidative stability which helps to resist deposit formation, provides enhanced system cleanliness and enables longer service intervals.
- Provides effective rust and corrosion protection to all gearbox components.
- Excellent demulsibility property enables trouble-free operation in conditions encountering water/ moisture.

INDUSTRIAL GEAR POWER 150 meets the following performance criteria:

DIN 51517-3 CLP ISO 1292501 CKC AGMA 9005 E-02 US Steel 224 David Brown \$1.53.101

Properties	Unit	Method	Т	ypical Value
Density @15°C	kg/m3	ASTM D4052		888
Kin. Viscosity @40°C	mm2/s	ASTM D7042		146
Kin. Viscosity @100°C	mm2/s	ASTM D7042		14.3
Viscosity Index		ASTM D2270		95
Flash Point COC, min	°C	ASTM D92		>201
Pour Point	°C	ASTM D7346		-15
FZG Fail Load Stage, min		DIN 51354-2		12
Demulsibility @82°C	max	DIN 51599		40
Date Issued: 10-6-2021	Supersedes: 03-	09-2015	Revision Nr.:	01

Typical Analysis



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 3/20/2012 Revision date: 2/28/2019 Supersedes version of: 8/9/2018 Version: 1.7

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

1.1. Product identifier

Product form	: Mixture
Product name	: 73720 - INDUSTRIAL GEAR POWER 150
Product code	: 73720

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

1.2.1. Relevant identified uses

Main use category Function or use category : Professional use: 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 <u>support@northsealubricants.com</u> - <u>www.northsealubricants.com</u>

1.4. Emergency telephone number

Emergency number

: +31 (0)786527652 Monday to Friday: 09:00 - 16:00 (CET)

SECTION 2: Hazards identification		
2.1. Classification of the substance or mix	xture	
Classification according to Regulation (EC) No. Hazardous to the aquatic environment — Chronic H Full text of H- and EUH-statements: see section 16	Hazard, Category 3 H412	
Adverse physicochemical, human health and en No additional information available	nvironmental effects	
2.2. Label elements		
Labelling according to Regulation (EC) No. 127	2/2008 [CLP]	
Signal word (CLP) Hazard statements (CLP) Precautionary statements (CLP)	 - H412 - Harmful to aquatic life with long lasting effects. P273 - Avoid release to the environment. P501 - Dispose of contents and container to an approved waste disposal plant. 	
EUH-statements	: EUH208 - Contains Amines, C10-14-tert-alkyl. May produce an allergic reaction.	
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 does not contain substance(a) include	d in the list established in accordance with Article 50(4) of DEACU for beying and aring discusting	

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

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments

: This product is not considered to be hazardous

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
C16-18-(even numbered, saturated and unsaturated)- alkylamines	EC-No.: 627-034-4 REACH-no: 01-2119473797- 19	0.01 – 0.05	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 – 0.05	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	: 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	 Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effects	s, both acute and delayed
Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	 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. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear.

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

Treat symptomatically.

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SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media Unsuitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.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 Protection during firefighting	 Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. 	

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equ	ipment 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. 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. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	: Ventilate area.	
6.2. Environmental precautions		

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

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		

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

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. 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.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, include	ding any incompatibilities
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat sources. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

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Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.
Storage temperature	: 45 °C
Storage area	: Store away from heat. Store in a well-ventilated place.
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

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

No additional information available

8.2.2.2. Skin protection

No additional information available

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.

Other information: Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties	
nemical properties	
 Liquid light yellow. Not available Not available 	
 Not applicable -27 °C Not available 	
 Non flammable. Not available Not available Not available Not available 	
 210 °C Not available Not available Not available 	
 150 mm²/s @40°C insoluble in water. Not available Not available 	
 Not available 891.3 kg/m³ @15°C Not available Not available 	
 Not applicable Not applicable Not applicable Not applicable 	
 Not applicable Not applicable Not applicable Not applicable 	

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.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

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10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information	on
11.1. Information on hazard classes as de	fined in Regulation (EC) No 1272/2008
Acute toxicity (oral): Not classifiedAcute toxicity (dermal): Not classifiedAcute toxicity (inhalation): Not classified	
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
C16-18-(even numbered, saturated and un	
LD50 oral (rat)	1689 mg/kg
LD50 dermal (rat)	> 2000 mg/kg
Distillates (petroleum), hydrotreated heav	
	> 5000 mg/kg bodyweight
LD50 oral (rat)	
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 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
Amines, C10-14-tert-alkyl	
STOT-single exposure	May cause respiratory irritation.
C16-18-(even numbered, saturated and un	nsaturated)-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
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

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C16-18-(even numbered, saturated and unsaturated)-alkylamines			
STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.			
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)			
125 mg/kg bodyweight			
Not classified			
: Based on available data, the classification criteria are not met			
150 mm²/s @40°C			

11.2.2. Other information

Potential adverse human health effects and : Based on available data, the classification criteria are not met symptoms

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general :	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term : (acute)	Not classified
Hazardous to the aquatic environment, long-term : (chronic)	Harmful to aquatic life with long lasting effects.
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
NOEC chronic algae	0.05 mg/l 3d
C16-18-(even numbered, saturated and unsat	urated)-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
Distillates (petroleum), hydrotreated heavy pa	araffinic; 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

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12.2. Persistence and degradability		
73720 - INDUSTRIAL GEAR POWER 150		
Persistence and degradability	Not established.	
Amines, C10-14-tert-alkyl		
Persistence and degradability	Not readily biodegradable.	
Biochemical oxygen demand (BOD)	21.8	
C16-18-(even numbered, saturated and unsatu	urated)-alkylamines	
Biodegradation	66 % 28 d OECD 301B	
Distillates (petroleum), hydrotreated heavy pa	araffinic; Baseoil (64742-54-7)	
Persistence and degradability	Not readily biodegradable.	
Biodegradation	31 % 28 d OECD 301F	
12.3. Bioaccumulative potential		
73720 - INDUSTRIAL GEAR POWER 150		
Bioaccumulative potential	Not established.	
Amines, C10-14-tert-alkyl		
Partition coefficient n-octanol/water (Log Pow)	2.9	
C16-18-(even numbered, saturated and unsatu	urated)-alkylamines	
Bioconcentration factor (BCF REACH)	500	
Partition coefficient n-octanol/water (Log Kow)	4.33 @25 °C	
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		
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 Product/Packaging disposal recommendations Ecology - waste materials	 Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.

SECTION 14: Transport information	
In accordance with ADR / IMDG / IATA / ADN / RID	

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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID n	umber	•	<u>'</u>	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping	g name	-	-	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard c	lass(es)		<u>.</u>	
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	1	1	1

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

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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Supersedes	Added	
2.1	Adverse physicochemical, human health and environmental effects	Added	
2.2	EUH-statements	Added	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures after ingestion	Modified	
4.1	First-aid measures after inhalation	Modified	
4.1	First-aid measures after skin contact	Modified	
4.3	Other medical advice or treatment	Added	
5.2	Hazardous decomposition products in case of fire	Added	
5.3	Protection during firefighting	Modified	
6.1	Protective equipment	Modified	
6.1	Emergency procedures	Modified	
6.2	Environmental precautions	Modified	
6.3	Other information	Added	
7.1	Hygiene measures	Added	
7.1	Precautions for safe handling	Modified	
7.2	Storage conditions	Modified	
8.2	Environmental exposure controls	Added	
8.2	Appropriate engineering controls	Added	
8.2	Eye protection	Modified	
8.2	Hand protection	Modified	
9.1	Melting point	Added	
10.1	Reactivity	Added	
12.1	Ecology - general	Added	
13.1	Waste treatment methods	Added	
16	Abbreviations and acronyms	Added	

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.
 None.

Other information

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Full text of H- and EU	IH-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.
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

The classification complies with

: ATP 8

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.