

Version	Revision Date:	SDS Number:	Date of last issue: 04.03.2019
1.1	20.10.2020	000000007196	Date of first issue: 04.03.2019

---

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : ANDEROL 7320 FG

Synonyms: Synthetic Lubricant Formulation

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

Use of the Substance/Mixture : Lubricant

Recommended restrictions on use : Reserved for industrial and professional use.

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

Company: Manufacturer  
Anderol Specialty Lubricants  
Groot Egtenrayseweg 23  
5928 PA Venlo  
Netherlands

Telephone : +31-77 396 0340

LANXESS Pte. Ltd.  
#07-10/18 ICON@IBP Tower B, 3A  
Singapore  
Singapore  
609935  
Telephone : (65) 6725 5888

Prepared by Product Safety Department  
(US) +1 866-430-2775

Further information for the safety data sheet :  
MSDSRequest@lanxess.com

### Emergency telephone number

Emergency telephone number: +65 3158 1074

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Version	Revision Date:	SDS Number:	Date of last issue: 04.03.2019
1.1	20.10.2020	000000007196	Date of first issue: 04.03.2019

---

## 2. HAZARDS IDENTIFICATION

### GHS Classification

Long-term (chronic) aquatic hazard : Category 3

#### GHS label elements

Hazard pictograms : None

Signal word : None

Hazard statements : H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention :**  
P273 Avoid release to the environment.  
**Disposal :**  
P501 Dispose of contents/ container to an approved waste disposal plant

#### Other hazards which do not result in classification

None known.

---

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
N-1-naphthylaniline	90-30-2	>= 0.25 - < 1
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	110-25-8	>= 0.25 - < 1
2,6-di-tert-butyl-p-cresol	128-37-0	>= 0.25 - < 1

---

## 4. FIRST AID MEASURES

General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.  
If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.

Version	Revision Date:	SDS Number:	Date of last issue: 04.03.2019
1.1	20.10.2020	00000007196	Date of first issue: 04.03.2019

---

Wash off with soap and plenty of water.  
If symptoms persist, call a physician.

- In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
Obtain medical attention.
- Most important symptoms and effects, both acute and delayed : None known.
- Notes to physician : For specialist advice physicians should contact the Poisons Information Service.
- 

## 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during fire-fighting : Burning produces noxious and toxic fumes.
- Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment : In the event of fire, wear self-contained breathing apparatus. for firefighters
- 

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.
- Environmental precautions : Try to prevent the material from entering drains or water courses.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- 

## 7. HANDLING AND STORAGE

Version	Revision Date:	SDS Number:	Date of last issue: 04.03.2019
1.1	20.10.2020	000000007196	Date of first issue: 04.03.2019

---

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
- Further information on storage stability : No decomposition if stored and applied as directed.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

- Engineering measures** : Effective exhaust ventilation system  
Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protective equipment

- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Hand protection

- Remarks : Polyvinyl alcohol or nitrile- butyl-rubber gloves  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.  
Before removing gloves clean them with soap and water.

- Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles

- Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.  
When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Version	Revision Date:	SDS Number:	Date of last issue: 04.03.2019
1.1	20.10.2020	00000007196	Date of first issue: 04.03.2019

---

Appearance	: liquid	
Colour	: yellow	
Odour	: characteristic	
Odour Threshold	: No data	
pH	: No data	
Melting point/freezing point	: No data	
Initial boiling point/boiling range	: No data	
Flash point	: 271 °C	Method: Cleveland open cup ASTM D 92
Evaporation rate	: No data	
Flammability(solid,gas)	: No data	
Upper/lower flammability and explosive limit	: No data	
Vapour pressure	: No data	
Vapour density	: No data	
Density	: 0.999 g/cm <sup>3</sup>	
Solubility	: Not soluble in water	
Partition coefficient: n-octanol/water	: No data	
Auto-ignition temperature	: No data	
Decomposition temperature	: No data	
Viscosity, kinematic	: 335.3 mm <sup>2</sup> /s ( 40 °C)	

---

## 10. STABILITY AND REACTIVITY

Reactivity	: Stable under recommended storage conditions.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No decomposition if used as directed.
Conditions to avoid	: No data available
	Exposure to moisture Contamination
Incompatible materials	: Acids Bases Oxidizing agents
Hazardous decomposition products	: Carbon oxides Nitrogen oxides (NO <sub>x</sub> )

Version 1.1      Revision Date: 20.10.2020      SDS Number: 000000007196      Date of last issue: 04.03.2019  
Date of first issue: 04.03.2019

---

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Components:

##### **N-1-naphthylaniline:**

Acute oral toxicity : LD50 (Rat): 1,625 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 mg/kg

**2,6-di-tert-butyl-p-cresol:** LD50 (Rat, male and female): > 2,930 mg/kg  
Acute oral toxicity :

Method: OECD Test Guideline 401

GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

### Skin corrosion/irritation

#### Product:

Remarks : According to the classification criteria of the European Union, the product is not considered as being a skin irritant.

#### Components:

##### **N-1-naphthylaniline:**

Species : Rabbit  
Method : Draize Test  
Result : No skin irritation

##### **2,6-di-tert-butyl-p-cresol:**

Species : Rabbit  
Result : No skin irritation

### Serious eye damage/eye irritation

#### Product:

Remarks : According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

#### Components:

##### **N-1-naphthylaniline:**

Species : Rabbit  
Method : OECD Test Guideline 405  
Result : No eye irritation

Version	Revision Date:	SDS Number:	Date of last issue: 04.03.2019
1.1	20.10.2020	000000007196	Date of first issue: 04.03.2019

---

**2,6-di-tert-butyl-p-cresol:**

Species : Rabbit  
 Result : No eye irritation

**Respiratory or skin sensitisation****Components:****N-1-naphthylaniline:**

Test Type : Maximisation Test  
 Species : Guinea pig  
 Result : Probability or evidence of low to moderate skin sensitisation rate in humans

Test Type : Patch Test

Species : Humans  
 Result : Probability or evidence of low to moderate skin sensitisation rate in humans

Test Type : Maximisation Test  
 Species : Guinea pig  
 Result : Probability or evidence of low to moderate skin sensitisation rate in humans

**2,6-di-tert-butyl-p-cresol:**

Species : Guinea pig  
 Assessment : Did not cause sensitisation on laboratory animals.

**Germ cell mutagenicity****Components:****N-1-naphthylaniline:**

Genotoxicity in vitro : Test Type: Ames test  
 Metabolic activation: with and without metabolic activation  
 Result: negative

Test Type: Chinese Hamster Ovary (CHO)  
 Metabolic activation: with and without metabolic activation  
 Result: negative

Genotoxicity in vivo : Test Type: in vivo assay  
 Species: Mouse (male)  
 Result: negative

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects., Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**2,6-di-tert-butyl-p-cresol:**

Genotoxicity in vitro : Test Type: Ames test  
 Metabolic activation: with and without metabolic activation

Version	Revision Date:	SDS Number:	Date of last issue: 04.03.2019
1.1	20.10.2020	000000007196	Date of first issue: 04.03.2019

---

Result: negative

Test Type: Chromosome aberration test in vitro  
Result: Conflicting results have been seen in different studies.

Test Type: unscheduled DNA synthesis assay  
Result: negative

Test Type: In vitro mammalian cell gene mutation test  
Result: negative

Genotoxicity in vivo

: Test Type: In vivo micronucleus test  
Species: Mouse (male and female)  
Cell type: Bone marrow  
Method: Mutagenicity (micronucleus test)  
Result: negative

Test Type: in vivo assay  
Species: Rat (male)  
Cell type: Bone marrow  
Application Route: Oral  
Method: Mutagenicity (in vivo mammalian bone-marrow cyto-genetic test, chromosomal analysis)  
Result: negative

Germ cell mutagenicity -  
Assessment

: Animal testing did not show any mutagenic effects.

### Carcinogenicity

#### Components:

#### **N-1-naphthylaniline:**

Carcinogenicity - Assessment

: Animal testing did not show any carcinogenic effects.

### Reproductive toxicity

#### Components:

#### **2,6-di-tert-butyl-p-cresol:**

Reproductive toxicity - Assessment

: No toxicity to reproduction  
No effects on or via lactation

### STOT - repeated exposure

#### Components:

#### **N-1-naphthylaniline:**

Exposure routes

: Oral

Target Organs

: Liver, Kidney

Assessment

: May cause damage to organs through prolonged or repeated exposure.

**2,6-di-tert-butyl-p-cresol:**



Version	Revision Date:	SDS Number:	Date of last issue: 04.03.2019
1.1	20.10.2020	000000007196	Date of first issue: 04.03.2019

---

Exposure routes : Oral  
 Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### Aspiration toxicity

##### Product:

No aspiration toxicity classification

#### Further information

##### Product:

Remarks : No data available

---

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

##### Product:

Toxicity to fish :  
 Remarks: No data available

#### Components:

##### **N-1-naphthylaniline:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.44 mg/l  
 Exposure time: 96 h  
 Test Type: semi-static test  
 Analytical monitoring: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.68 mg/l  
 Exposure time: 48 h  
 Test Type: semi-static test  
 Analytical monitoring: yes

Toxicity to microorganisms : EC50 (Protozoa): 2 mg/l  
 Exposure time: 48 h  
 EC50 (Bacteria): > 10,000 mg/l  
 Exposure time: 3 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.02 mg/l  
 Exposure time: 21 d  
 Species: Daphnia magna (Water flea)  
 Analytical monitoring: yes

##### **2,6-di-tert-butyl-p-cresol:**

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.07 mg/l  
 Exposure time: 21 d  
 Species: Daphnia magna (Water flea)  
 Analytical monitoring: yes  
 GLP: yes

Version 1.1      Revision Date: 20.10.2020      SDS Number: 000000007196      Date of last issue: 04.03.2019  
Date of first issue: 04.03.2019

---

**Persistence and degradability****Product:**

Biodegradability : Result: No data available

**Components:****N-1-naphthylaniline:**

Biodegradability : aerobic  
Inoculum: activated sludge  
Concentration: 100 mg/l

Result: According to the results of tests of biodegradability this product is not readily biodegradable. Biodegradation: 0 %

Exposure time: 28 d  
Method: OECD Test Guideline 301  
GLP: yes

**2,6-di-tert-butyl-p-cresol:**

Biodegradability : aerobic  
Inoculum: activated sludge  
Concentration: 50 mg/l  
Result: According to the results of tests of biodegradability this product is not readily biodegradable.  
Biodegradation: 4.5 %  
Exposure time: 28 d

**Bioaccumulative potential****Product:**

Bioaccumulation : Remarks: No data available

**Components:****N-1-naphthylaniline:**

Bioaccumulation : Species: Cyprinus carpio (Carp)  
Exposure time: 56 d  
Temperature: 25 °C  
Concentration: 0.1 mg/l  
Bioconcentration factor (BCF): 427 - 2,730

Partition coefficient: n-octanol/water : log Pow: 4.28

**2,6-di-tert-butyl-p-cresol:**

Bioaccumulation : Species: Cyprinus carpio (Carp)  
Exposure time: 56 d  
Temperature: 25 °C  
Concentration: 0.05 mg/l  
Bioconcentration factor (BCF): 230 - 2,500

Partition coefficient: n-octanol/water : log Pow: 5.1  
GLP: yes

Version	Revision Date:	SDS Number:	Date of last issue: 04.03.2019
1.1	20.10.2020	000000007196	Date of first issue: 04.03.2019

---

**Mobility in soil****Product:****Mobility** : Remarks: No information available**Other adverse effects****Product:**

Results of PBT and vPvB assessment : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

---

**13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

---

**14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

---

**15. REGULATORY INFORMATION**

Please note that Section 3 of this document lists only the hazardous components required by the specific country or region hazard communication regulations. The chemical identifiers listed in Section 3 are used globally for hazard communication purposes and may not reflect those used for chemical inventory coverage in a particular country or region. The chemical inventory information given in Section 15 of this document applies to the product as a whole and should be used when evaluating inventory compliance.

**The components of this product are reported in the following inventories:**

DSL : All components of this product are on the Canadian DSL

Version	Revision Date:	SDS Number:	Date of last issue:
1.1	20.10.2020	000000007196	04.03.2019
			Date of first issue: 04.03.2019

AICS	: Not in compliance with the inventory
NZIoC	: Not in compliance with the inventory
ENCS	: Not in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TCSI	: Not in compliance with the inventory
US.TSCA	: Not On TSCA Inventory

## 16. OTHER INFORMATION

### Emergency Phone Number

<u>Europe:</u>	All European Countries	+44 (0) 1235 239 670 (NCEC)
<u>Asia Pacific:</u>	East / South East Asia – Regional Number	+65 3158 1074 (NCEC)
	Australia	+61 2 8014 4558
	New Zealand	+64 9929 1483 (NCEC)
	China	+86 512 8090 3042 (NCEC)
	Taiwan	+886 2 8793 3212 (NCEC)
	Japan	+81 3 4578 9341 (NCEC)
	Indonesia	007 803 011 0293 (NCEC)
	Malaysia	+60 3 6207 4347 (NCEC)
	Thailand	001 800 120 666 751 (NCEC)
	Korea	+65 3158 1285 (NCEC)
	Vietnam	+84 8 4458 2388 (NCEC)
	India	+65 3158 1198 (NCEC)
	Pakistan	+65 3158 1329 (NCEC)
	Philippines	+65 3158 1203 (NCEC)
	Sri Lanka	+65 3158 1195 (NCEC)
	Bangladesh	+65 3158 1200 (NCEC)
<u>Middle East / Africa:</u>		+44 (0) 1235 239 671 (NCEC)
<u>North America</u>	United States of America (USA)	(800) 424-9300 (CHEMTREC)
	Canada	(800) 424-9300 (CHEMTREC)

Version	Revision Date:	SDS Number:	Date of last issue: 04.03.2019
1.1	20.10.2020	000000007196	Date of first issue: 04.03.2019

Latin America	Mexico	+52 555 004 8763 (NCEC)
	Brazil	+55 11 3197 5891 (NCEC)
	Chile	+56 2 2582 9336 (NCEC)
	All other countries	+44 (0) 1235 239 670 (NCEC)

### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SDS\_AP / EN