

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version	Revision Date:	SDS Number:	Date of last issue: 12.09.2017
1.5	05.10.2020	000000009430	Date of first issue: 06.01.2012

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

1.1 Product identifier

Trade name : Anderol 3100

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

Use of the Sub-
stance/Mixture : Lubricant

Recommended restrictions
on use : Restricted to professional users.

1.3 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

Supplier
LANXESS Solutions UK Ltd.
Tenax Road, Trafford Park
Manchester
United Kingdom
M17 1WT

Customer Service:

+44 161 875 3800

Prepared by

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

Further information for the safety data sheet : MSDSRe-
quest@lanxess.com

1.4 Emergency telephone number

Emergency telephone
number:

+44 (0) 1235 239 670 (NCEC)

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version 1.5 Revision Date: 05.10.2020 SDS Number: 000000009430 Date of last issue: 12.09.2017
Date of first issue: 06.01.2012

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Long-term (chronic) aquatic hazard, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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.

Additional Labelling

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 25 %

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 25 %

2.3 Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
triphenyl phosphate	115-86-6 204-112-2	Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 1	>= 0.25 - < 1

For explanation of abbreviations see section 16.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version 1.5 Revision Date: 05.10.2020 SDS Number: 000000009430 Date of last issue: 12.09.2017
Date of first issue: 06.01.2012

SECTION 4: First aid measures

4.1 Description of 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.
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.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : None known.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : For specialist advice physicians should contact the Poisons Information Service.
-

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : Burning produces noxious and toxic fumes.

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version	Revision Date:	SDS Number:	Date of last issue: 12.09.2017
1.5	05.10.2020	000000009430	Date of first issue: 06.01.2012

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.

6.2 Environmental precautions

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.

6.3 Methods and material for containment and cleaning up

Methods for 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.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

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.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place.

Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Raw material for industry

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version 1.5 Revision Date: 05.10.2020 SDS Number: 000000009430 Date of last issue: 12.09.2017
Date of first issue: 06.01.2012

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
triphenyl phosphate	115-86-6	GV	3 mg/m ³	DK OEL

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Workers	Dermal	Long-term systemic effects	0.62 mg/kg
	Workers	Inhalation	Long-term systemic effects, Systemic effects	4.37 mg/m ³
	General exposures	Skin contact	Chronic effects, Systemic effects	0.31 mg/kg
	General exposures	Inhalation	Chronic effects, Systemic effects	1.09 mg/m ³
	General exposures	Ingestion	Chronic effects, Systemic effects	0.31 mg/kg
	General exposures	Inhalation	Chronic effects, Systemic effects	1.09 mg/m ³

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Fresh water	0.051 mg/l
	Marine water	0.0051 mg/l
	Fresh water sediment	9320 mg/kg
	Marine sediment	932 mg/kg
	Soil	1860 mg/kg
	STP	1 mg/l

8.2 Exposure controls

Engineering measures

Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

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

Hand protection

Remarks

: Polyvinyl alcohol or nitrile- butyl-rubber gloves The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Before removing gloves clean them with soap and water.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version	Revision Date:	SDS Number:	Date of last issue: 12.09.2017
1.5	05.10.2020	000000009430	Date of first issue: 06.01.2012

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

Respiratory protection : No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : yellow

Pour point : -45 °C

Flash point : 274 °C
Method: ASTM D 92

Density : 0.875 g/cm³ (15 °C)
Method: ASTM D 1298

Viscosity
Viscosity, kinematic : 102.8 mm²/s (40 °C)
Method: ASTM D 445

12.9 mm²/s (100 °C)
Method: ASTM D 445

9.2 Other information

Flammability (liquids) : No data available

Oxidizing potential : No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions., No decomposition if used as directed.

10.4 Conditions to avoid

Conditions to avoid : Contamination

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version	Revision Date:	SDS Number:	Date of last issue: 12.09.2017
1.5	05.10.2020	000000009430	Date of first issue: 06.01.2012

10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon oxides
Nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Remarks: Not classified due to lack of data.

Acute inhalation toxicity : Remarks: Not classified due to lack of data.

Acute dermal toxicity : Remarks: Not classified due to lack of data.

Components:

triphenyl phosphate:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 200 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit, male and female): > 7,900 mg/kg

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:

triphenyl phosphate:

Species : Rabbit
Exposure time : 4 h
Method : OECD Test Guideline 404
Result : No skin irritation
GLP : yes

Serious eye damage/eye irritation

Product:

Remarks : According to the classification criteria of the European Union,

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version 1.5 Revision Date: 05.10.2020 SDS Number: 000000009430 Date of last issue: 12.09.2017
Date of first issue: 06.01.2012

the product is not considered as being an eye irritant.

Components:

triphenyl phosphate:

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

Respiratory or skin sensitisation

Product:

Remarks : Not classified due to lack of data.

Components:

triphenyl phosphate:

Test Type : Maximisation Test
Species : Guinea pig
Assessment : Did not cause sensitisation on laboratory animals.
Method : OECD Test Guideline 406
GLP : yes

Germ cell mutagenicity

Product:

Germ cell mutagenicity- Assessment : Not classified due to lack of data.

Components:

triphenyl phosphate:

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

Test Type: in vitro assay
Metabolic activation: with and without metabolic activation
Result: negative

Test Type: unscheduled DNA synthesis assay
Result: negative

Germ cell mutagenicity- Assessment : In vitro tests did not show mutagenic effects

Carcinogenicity

Product:

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version 1.5 Revision Date: 05.10.2020 SDS Number: 000000009430 Date of last issue: 12.09.2017
Date of first issue: 06.01.2012

Carcinogenicity - Assessment : Not classified due to lack of data.

Components:

triphenyl phosphate:

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : Not classified due to lack of data.

Components:

triphenyl phosphate:

Reproductive toxicity - Assessment : No toxicity to reproduction

STOT - single exposure

Product:

Assessment : Not classified due to lack of data.

STOT - repeated exposure

Product:

Assessment : Not classified due to lack of data.

Components:

triphenyl phosphate:

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version 1.5 Revision Date: 05.10.2020 SDS Number: 000000009430 Date of last issue: 12.09.2017
Date of first issue: 06.01.2012

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: No data available

Components:

triphenyl phosphate:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.78 mg/l
Exposure time: 96 h
Test Type: static test

LC50 (Oryzias latipes (Orange-red killifish)): 1.2 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1 mg/l
Exposure time: 48 h

EC50 : 0.36 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : NOEC (Green algae (Scenedesmus subspicatus)): 0.25 - 2.5 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC: 0.037 mg/l
Exposure time: 30 d
Species: Oncorhynchus mykiss (rainbow trout)

12.2 Persistence and degradability

Product:

Biodegradability : Result: No data available

Components:

triphenyl phosphate:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Concentration: 100 mg/l
Result: Readily biodegradable.
Biodegradation: 83 - 94 %

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version 1.5 Revision Date: 05.10.2020 SDS Number: 000000009430 Date of last issue: 12.09.2017
Date of first issue: 06.01.2012

Exposure time: 28 d
Method: OECD Test Guideline 301

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

triphenyl phosphate:

Bioaccumulation : Species: *Oryzias latipes* (Orange-red killifish)
Exposure time: 18 d
Temperature: 25 °C
Concentration: 0.01 mg/l
Bioconcentration factor (BCF): 144

Partition coefficient: n-octanol/water : log Pow: 4.59 - 4.76

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT)..
: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemi-

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version	Revision Date:	SDS Number:	Date of last issue: 12.09.2017
1.5	05.10.2020	000000009430	Date of first issue: 06.01.2012

cal 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.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Not applicable

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version	Revision Date:	SDS Number:	Date of last issue: 12.09.2017
1.5	05.10.2020	000000009430	Date of first issue: 06.01.2012

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

DSL	:	All components of this product are on the Canadian DSL
AICS	:	On the inventory, or in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
ENCS	:	On the inventory, or 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	:	On the inventory, or in compliance with the inventory
US.TSCA	:	All substances listed as active on the TSCA inventory

15.2 Chemical safety assessment

No information available.

SECTION 16: Other information

Full text of H-Statements

H400	:	Very toxic to aquatic life.
H411	:	Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
DK OEL	:	Denmark. Occupational Exposure Limits
DK OEL / GV	:	Long term exposure limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; 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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

LANXESS

Energizing Chemistry

Anderol 3100

Version	Revision Date:	SDS Number:	Date of last issue: 12.09.2017
1.5	05.10.2020	000000009430	Date of first issue: 06.01.2012

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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:

Aquatic Chronic 3

H412

Classification procedure:

Calculation method

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.

DK / EN