SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

ANDEROL 555

Version 1.16 Revision Date 29.08.2017 Print Date 06.10.2017

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

1.1 Product identifier

Trade name : ANDEROL 555

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

Use of the

Substance/Mixture

: Lubricant

Recommended restrictions

on use

: Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company: <u>Manufacturer</u>

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:

msdsrequest@chemtura.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.

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, 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:

EUH208 Contains: N-1-naphthylaniline. May produce an allergic reaction.

2.3 Other hazards

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

Hazardous components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.	(REGULATION (EC) No	(%)
	Registration number	1272/2008)	
N-1-naphthylaniline	90-30-2	Acute Tox.4; H302	>= 0.25 - < 1
	201-983-0	Skin Sens.1; H317	
	01-2119488704-27-xxxx	STOT RE2; H373	
		Aquatic Acute1; H400	
		Aquatic Chronic1; H410	
diphenylamine	122-39-4	Acute Tox.3; H301	>= 0.1 - < 0.25
	204-539-4	Acute Tox.3; H331	
	01-2119488966-13-0004	Acute Tox.3; H311	
		Eye Irrit.2; H319	
		STOT RE2; H373	
		Aquatic Acute1; H400	
		Aquatic Chronic1; H410	

For explanation of abbreviations see section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

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.

In case of eye contact : Flush eyes with water as a precaution.

> Remove contact lenses. Protect unharmed eve.

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.

If symptoms persist, call a physician.

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

firefighting

: Burning produces noxious and toxic fumes.

5.3 Advice for firefighters

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

Further information : Collect contaminated fire extinguishing water separately. This

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must not be discharged into drains.

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.

6.2 Environmental precautions

Environmental precautions : 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 : Wipe up with absorbent material (e.g. cloth, fleece).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.

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. 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.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Raw material for industry

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
diphenylamine	122-39-4	TWA	10 mg/m3	GB EH40
diphenylamine	122-39-4	STEL	20 mg/m3	GB EH40

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

			• •	
Component	End Use	Exposure	Potential health effects	Value:
		routes		
N-1-naphthylaniline	Workers	Dermal	Long-term systemic effects	0.12 mg/kg
	Workers	Inhalation	Long-term systemic effects	0.41 mg/m3
	General exposures	Ingestion	Long-term systemic effects	0.06 mg/kg
	General exposures	Dermal	Long-term systemic effects	0.06 mg/kg
	General exposures	Inhalation	Long-term systemic effects	0.1 mg/m3

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

Component	Environmental Compartment	Value
N-1-naphthylaniline	Fresh water	Value: 0.0002 mg/l
	Marine water	Value: 0.00002 mg/l
	Fresh water sediment	Value: 0.0344 mg/kg
	Marine sediment	Value: 0.00344 mg/kg
	Soil	Value: 0.0068 mg/kg
	STP	Value: 100 mg/l

8.2 Exposure controls

Engineering measures

Effective exhaust ventilation system

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

: Polyvinyl alcohol or nitrile- butyl-rubber gloves The selected protective gloves have to satisfy the

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specifications of EU Directive 89/686/EEC and the standard

EN 374 derived from it.

Before removing gloves clean them with soap and water.

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 : Breathing apparatus needed only when aerosol or mist is

formed.

Respirator with filter for organic vapour

Environmental exposure controls

General advice : If the product contaminates rivers and lakes or drains inform

respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : yellow

Odour : characteristic

Odour Threshold : No data available

: Not applicable

: No data available

Flash point : 250 °C

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Density : 0.957 g/cm3 (15 °C)

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Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature

No data available

Viscosity

Viscosity, dynamic : 93.5 mPa.s (40 °C)

9.2 Other information

Self-Accelerating

decomposition temperature

(SADT)

: Method: No information 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 : No decomposition if used as directed.

10.4 Conditions to avoid

Conditions to avoid : Exposure to moisture

Contamination

10.5 Incompatible materials

Materials to avoid : Acids

Bases

Oxidizing agents

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10.6 Hazardous decomposition products

Hazardous decomposition : Carbon oxides

products Nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

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

Components:

N-1-naphthylaniline:

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

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

diphenylamine:

Acute oral toxicity : Acute toxicity estimate : 100 mg/kg

Method: Converted acute toxicity point estimate

LD50 (Rat): 2,720 mg/kg

Acute dermal toxicity : Acute toxicity estimate : 300 mg/kg

Method: Converted acute toxicity point estimate

LD50 (Rabbit): > 2,000 mg/kg

Skin corrosion/irritation

Components:

N-1-naphthylaniline:

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

diphenylamine: Species: Rabbit

Result: Mild skin irritation

Serious eye damage/eye irritation

Components:

N-1-naphthylaniline:

Species: Rabbit

Method: OECD Test Guideline 405

Result: No eye irritation

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diphenylamine: Species: Rabbit

Result: Eye irritation

Respiratory or skin sensitisation

Components:

N-1-naphthylaniline:

Test Type: Maximisation Test

Species: Guinea pig

Assessment: May cause sensitisation by skin contact. Result: May cause sensitisation by skin contact.

Test Type: Patch Test Species: Human

Assessment: May cause sensitisation by skin contact. Result: May cause sensitisation by skin contact.

diphenylamine:Species: Guinea pig

Result: Does not cause skin sensitisation.

Germ cell mutagenicity

Product:

Germ cell mutagenicity

Assessment : Not classified due to lack of data.

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

Test 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.

diphenylamine:

Germ cell mutagenicity

Assessment : Animal testing did not show any mutagenic effects.

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Carcinogenicity

Product:

Carcinogenicity

Assessment : Not classified due to lack of data.

Components:

N-1-naphthylaniline:

Carcinogenicity

Assessment : Animal testing did not show any carcinogenic effects.

diphenylamine: Carcinogenicity

Assessment : Not classifiable as a human carcinogen.

Reproductive toxicity

Product:

Reproductive toxicity

Assessment : Not classified due to lack of data.

Components:

diphenylamine:

Reproductive toxicity

Assessment : No toxicity to reproduction 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:

N-1-naphthylaniline:

Exposure routes: Oral

Target Organs: Liver, Kidney

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

Repeated dose toxicity

Components:

diphenylamine:

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Species: Mouse, male NOAEL: 1.7 mg/kg LOAEL: 93.8 mg/kg Application Route: Oral Exposure time: 90 d

Target Organs: Blood, Liver, Kidney

Species: Mouse, female NOAEL: 2.1 mg/kg LOAEL: 107 mg/kg Application Route: Oral Exposure time: 90 d

Target Organs: Blood, Liver, Kidney

Aspiration toxicity

Product:

No aspiration toxicity classification

Further information

Product:

Remarks: No data is available on the product itself.

SECTION 12: Ecological information

12.1 Toxicity

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 bacteria : EC50 (Protozoa): 2 mg/l

Exposure time: 48 h

EC50 (Bacteria): > 10,000 mg/l

Exposure time: 3 h

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Toxicity to daphnia and other

aquatic invertebrates

Exposure time: 21 d

: NOEC: 0.02 mg/l

(Chronic toxicity) Species: Daphnia magna (Water flea)

Analytical monitoring: yes

diphenylamine:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.2 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 1.2 mg/l

Exposure time: 48 h

12.2 Persistence and degradability

Product:

Biodegradability : Result: No data available

Components:

N-1-naphthylaniline:

Biodegradability : Test Type: 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

12.3 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

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

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12.5 Results of PBT and vPvB assessment

Product:

Assessment : 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

: Remarks: The product itself has not been tested.

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

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.

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



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14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regu-

lations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 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

Major Accident Hazard Legislation

Seveso Directive

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

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

AICS : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or 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



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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 : On TSCA Inventory

15.2 Chemical safety assessment

No information available.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H412 Harmful to aquatic life with long lasting effects.

Emergency Phone Number

Europe:	All European Countries	+44 (0) 1235 239 670 (NCEC)
Asia Pacific:	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)
Middle East / Africa:		+44 (0) 1235 239 671 (NCEC)
North America	United States of America (USA)	(800) 424-9300 (CHEMTREC)
	Canada	(800) 424-9300 (CHEMTREC)
Latin America	Mexico	+52 555 004 8763 (NCEC)



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Brazil	+55 11 3197 5891 (NCEC)
Chile	+56 2 2582 9336 (NCEC)
All other countries	+44 (0) 1235 239 670 (NCEC)

Further information

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.