



SAFETY DATA SHEET

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ANDEROL 500

Product Use Description: Lubricant

Company: Manufacturer
Anderol Specialty Lubricants, a division of Chemtura Corporation
215 Merry Lane
East Hanover, NJ
07936
United States of America

Telephone: +1 203-573-4596, Toll Free: +1 888-263-3765

Email: msdsrequest@chemtura.com
Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
:
Chemtura Corporation Emergency Response: CHEMTURA : 800-292-5898

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

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

MSDSRequest@chemtura.com

Recommended use of the chemical and restrictions on use

Recommended use : Lubricant

SECTION 2. HAZARDS IDENTIFICATION

Form	liquid
Colour	amber
Odour	mild

GHS Classification

Acute toxicity (Inhalation) : Category 4
Skin irritation : Category 2
Skin sensitisation : Category 1
Acute aquatic toxicity : Category 3
Chronic aquatic toxicity : Category 3

GHS Label element

Signal word : **Warning**

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

Hazard pictograms :



Hazard statements :

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Other hazards :

None

Precautionary statements :

Prevention:
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.



SAFETY DATA SHEET

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
di-"isodecyl" phthalate	26761-40-0	>= 70 - < 90 %
Butene, homopolymer	9003-29-6	>= 10 - < 20 %
2,2',6,6'-tetra-tert-butyl-4,4'-methylenediphenol	118-82-1	>= 1 - < 5 %
NJTS#: 46728100000-0002 - Proprietary amine		>= 0.1 - < 1 %
diphenylamine	122-39-4	>= 0.1 - < 1 %

SECTION 4. FIRST AID MEASURES

- If inhaled : If inhaled
Move to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
In case of bluish discoloration (lips, ear lobes, fingernails), give oxygen as quickly as possible.
If symptoms persist, call a physician.
- In case of skin contact : In case of skin contact
Wash off with soap and water.
Remove contaminated clothing and shoes.
Wash contaminated clothing before re-use.
Get medical attention if irritation develops and persists.
- In case of eye contact : In case of eye contact
Rinse thoroughly with plenty of water, also under the eyelids.
If eye irritation persists, consult a specialist.
- If swallowed : If swallowed, DO NOT induce vomiting.
Consult a physician if necessary.
- Most important symptoms and effects, both acute and delayed : None known.
- Notes to physician : No information available.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO₂)
Dry powder
Dry sand



SAFETY DATA SHEET

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

Alcohol-resistant foam
Water mist

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Burning produces noxious and toxic fumes.
Do not allow run-off from fire fighting to enter drains or water courses.

Specific extinguishing methods : In the event of fire, cool tanks with water spray.

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.

Environmental precautions : Should not be released into the environment.
Do not contaminate water.
Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.
Keep container closed when not in use.
Do not use pressure to empty drums.
Ensure all equipment is electrically grounded before beginning transfer operations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.

Materials to avoid : Strong acids and strong bases, Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION



SAFETY DATA SHEET

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

Components with workplace control parameters

NJTS#: 46728100000-0002 - Proprietary amine		TWA	10 ml/m3	ACGIH
diphenylamine	122-39-4	TWA	10 mg/m3	ACGIH
		TWA	10 mg/m3	OSHA P0
		TWA	10 mg/m3	NIOSH REL

Personal protective equipment

- Respiratory protection : Breathing apparatus needed only when aerosol or mist is formed.
In the case of vapour formation use a respirator with an approved filter.
- Hand protection
Remarks : Neoprene gloves
- Eye protection : Safety glasses with side-shields
Tightly fitting safety goggles
- Skin and body protection : impervious clothing
- Hygiene measures : Avoid contact with skin, eyes and clothing.
Provide adequate ventilation.
Do not breathe dust or spray mist.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : amber
- Odor : mild
- Odour Threshold : No data available
- pH : No data available
- Melting point/range :
Not applicable
- Boiling point/boiling range : No data available
- Evaporation rate : No data available
- Flash point : 249 °C
Method: open cup
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : No data available
- Relative vapour density : No data available
- Relative density : 0.96



SAFETY DATA SHEET

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

Solubility(ies)

Water solubility : slightly soluble
Solubility in other solvents : No data available

Partition coefficient: n-
octanol/water : No data available

Auto-ignition temperature : No data available

Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : 104.3 mm²/s (40 °C)
Method: ASTM D 445

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous
reactions : Hazardous polymerisation does not occur.

Conditions to avoid : Contamination
Heat, flames and sparks.

Incompatible materials : Strong acids and strong bases
Strong oxidizing agents

Hazardous decomposition
products : Carbon oxides
Nitrogen oxides (NO_x)

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Product) : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity
(Product) : Acute toxicity estimate: 14.66 mg/l
Exposure time: 4 h
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg



SAFETY DATA SHEET

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

(Product)

Method: Calculation method

Skin irritation (Product)

: Remarks: Not classified due to lack of data.

Eye irritation

di-"isodecyl" phthalate

(Component)

: Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

NJTS#: 46728100000-0002 -

Proprietary amine

(Component)

: Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

diphenylamine (Component)

: Species: Rabbit

Result: Mild eye irritation

Sensitisation

di-"isodecyl" phthalate

(Component)

: Species: Human

Classification: Did not cause sensitisation on laboratory animals.

Maximisation Test (GPMT)

Species: Guinea pig

Classification: Did not cause sensitisation on laboratory animals.

Buehler Test

Species: Guinea pig

Classification: Did not cause sensitisation on laboratory animals.

NJTS#: 46728100000-0002 -

Proprietary amine

(Component)

: Maximisation Test (GPMT)

Species: Guinea pig

Classification: May cause sensitisation by skin contact.

Result: May cause sensitisation by skin contact.

Patch Test

Species: Human

Classification: May cause sensitisation by skin contact.

Result: The product is a skin sensitiser, sub-category 1A.

diphenylamine (Component)

: Species: Guinea pig

Result: Does not cause skin sensitisation.

Repeated dose toxicity

diphenylamine (Component)

: Species: Mouse, male

Application Route: Oral

Target Organs: Blood, Liver, Kidney

Exposure time: (90 d)

NOEL: 1.7 mg/kg

Lowest observed effect level: 93.8 mg/kg

Species: Mouse, female

Application Route: Oral



SAFETY DATA SHEET

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

Target Organs: Blood, Liver, Kidney
Exposure time: (90 d)
NOEL: 2.1 mg/kg
Lowest observed effect level: 107 mg/kg

Aspiration toxicity (Product) : No aspiration toxicity classification

CMR effects

di-"isodecyl" phthalate (Component) : Mutagenicity: In vitro tests did not show mutagenic effects
Teratogenicity: No effects on or via lactation

NJTS#: 46728100000-0002 - Proprietary amine (Component) : Carcinogenicity: Animal testing did not show any carcinogenic effects.
Mutagenicity: Animal testing did not show any mutagenic effects., Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

diphenylamine (Component) : Carcinogenicity: Not classifiable as a human carcinogen.
Mutagenicity: Animal testing did not show any mutagenic effects.
Teratogenicity: No toxicity to reproduction
Reproductive toxicity: No toxicity to reproduction

Further information (Product) : There is no data available for this product.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish (Product) : Remarks:
No data available

Toxicity to daphnia and other aquatic invertebrates (Product) : Remarks:
No data available

Toxicity to algae (Product) : Remarks:
No data available

Toxicity to bacteria
NJTS#: 46728100000-0002 - Proprietary amine (Component) : EC50: 2 mg/l
Exposure time: 48 h
Species: Protozoa

EC50: > 10,000 mg/l
Exposure time: 3 h



SAFETY DATA SHEET

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

Species: Bacteria

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

NJTS#: 46728100000-0002 - : NOEC: 0.02 mg/l

Proprietary amine Exposure time: 21 d

(Component) Species: Daphnia magna (Water flea)

Analytical monitoring: yes

Elimination information (persistence and degradability)

Bioaccumulation (Product) : Remarks:
No data available

Mobility (Product) : Remarks:
No data available

Biodegradability
di-"isodecyl" phthalate : aerobic
(Component) Result: Readily biodegradable.
99 %

NJTS#: 46728100000-0002 - : aerobic
Proprietary amine Result: According to the results of tests of biodegradability this
(Component) product is not readily biodegradable.
0 %
Method: OECD Test Guideline 301

Further information on ecology

Ecotoxicology Assessment

Results of PBT assessment (Product)

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological : There is no data available for this product.

information (Product)

(Product) : The product itself has not been tested.
Harmful to aquatic organisms, may cause long-term adverse
effects in the aquatic environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : In accordance with local and national regulations.

Contaminated packaging : Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION



SAFETY DATA SHEET

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

ADR

Not dangerous goods

RID

Not dangerous goods

MERCOSUR

Not dangerous goods

DOT

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
aniline	62-53-3	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
aniline	62-53-3	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.



SAFETY DATA SHEET

ANDEROL 500

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

US State Regulations

California Prop 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

di-"isodecyl" phthalate

26761-40-0

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

US.TSCA

On TSCA Inventory

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

PICCS

On the inventory, or in compliance with the inventory

IECSC

On the inventory, or in compliance with the inventory

CH INV

The mixture contains a polymer. The monomers for this polymer have been notified.

SECTION 16. OTHER INFORMATION

Further information

Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
<u>Mexico:</u>		+52 555 004 8763

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.