



SAFETY DATA SHEET

ANDEROL 465

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/21/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ANDEROL 465

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
	oily
Colour	clear
Odour	mild

GHS Classification

Skin sensitisation : Category 1
Acute aquatic toxicity : Category 3
Chronic aquatic toxicity : Category 3

GHS Label element

Signal word : **Warning**

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Hazard pictograms :



Hazard statements :

H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Other hazards :

None

Precautionary statements :

Prevention:
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
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.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing 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 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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
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 %



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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 : Sensitisation
- Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO₂)
Dry powder
Foam
Alcohol-resistant foam
Water mist
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Burning produces noxious and toxic fumes.
- 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.



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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

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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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
oily

Color : clear

Odor : mild

pH : No data available

pour point : -54 °C

Boiling point/boiling range : No data available

Flash point : ≥ 238 °C
Method: No information available.

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative density : 0.9100 - 0.9300 No data available

Density : 0.91 - 0.93 g/cm³ (15 °C)
Method: No information available.

Solubility(ies)

Water solubility : slightly soluble

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

Auto-ignition temperature : No data available

Viscosity

Viscosity, dynamic : 9.60 - 65 mPa.s (40 - 100 °C)
Method: ASTM D 445

Viscosity, kinematic : No data available



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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	: Heat.
Incompatible materials	: Strong acids and strong bases
Hazardous decomposition products	: Carbon oxides

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: > 40 mg/l Exposure time: 4 h Method: Calculation method
Acute dermal toxicity (Product)	: Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method
Skin irritation NJTS#: 46728100000-0002 - Proprietary amine (Component)	: Species: Rabbit Result: No skin irritation Method: Draize Test
diphenylamine (Component)	: Species: Rabbit Result: Mild skin irritation
Eye irritation 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 NJTS#: 46728100000-0002 -	: Maximisation Test (GPMT)



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Proprietary amine
(Component)

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

CMR effects
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



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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 - : EC50: 2 mg/l
Proprietary amine Exposure time: 48 h
(Component) Species: Protozoa

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

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods



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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

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

WHMIS Classification : not rated

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

SARA304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302

: The following components are subject to reporting levels established by SARA Title III, Section 302:

aniline	62-53-3	0.0013
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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.



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US State Regulations

California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

aniline

62-53-3

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

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.