Antiox L-powder

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

1.1 Product identifier

Trade name

Antiox L-powder
Ionol LC
Wingstay L
Lowinox CPL
Octolite 888P

Substance name	Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene
REACH registration no.	01-2119496062-39

Identification numbers

CAS no.	68610-51-5
EC no.	271-867-2

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

Relevant identified uses of the substance or mixture
Industrial raw material

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
Tiarco Chemical Europe GmbH
Am Gut Baarking 12
46395 Bocholt

Telephone no.	+49 2871 23476-0
Fax no.	+49 2871 23476-44
e-mail	europeansales@trcc.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aquatic Chronic 4; H413
Repr. 2; H361d

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3 and 4 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Product identifier
68610-51-5 (Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene)

Hazard pictograms

GHS08

Signal word
Warning

Hazard statement(s)

H361d	Suspected of damaging the unborn child.
H413	May cause long lasting harmful effects to aquatic life.

Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P501	Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

PBT assessment
The product is not considered to be a PBT.

vPvB assessment
The product is not considered to be a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterization

Substance name	Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene
Formula	C10H12.C7H8O.C4H8

Identification numbers

CAS no.	68610-51-5
EC no.	271-867-2

3.2 Mixtures

Not applicable. The product is not a mixture.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
In case of accident or if you feel unwell, seek medical advice immediately. Adhere to personal protective measures when giving first aid. Change contaminated, saturated clothing. Remove affected person from danger area, lay him down. If unconscious place in recovery position and seek medical advice.

After inhalation
Remove affected person from the immediate area. Ensure supply of fresh air. In case of persisting adverse effects consult a physician.

After skin contact
Wash off immediately with soap and water. Get medical attention if pain still persists.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion
Seek medical advice immediately. Rinse the mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Alcohol-resistant foam; Carbon dioxide; Extinguishing powder; Water spray jet

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO2); Carbon monoxide (CO); not combusted hydrocarbons; Toxic pyrolysis products

5.3 Advice for firefighters

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Wear full protective suit. Run-off water from fire fighting must not be discharged into drains or enter surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid dust formation. Keep away from ignition sources. Evacuate all unprotected personnel from the danger zone.

For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Knock down dust with water spray jet.

6.3 Methods and material for containment and cleaning up

Collect mechanically. When collected, handle material as described under the section heading "Disposal considerations". Ensure adequate ventilation.

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Avoid the formation and deposition of dust. Provide good ventilation at the work area (local exhaust ventilation, if necessary). Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Provide eye wash fountain in work area. Do not inhale dust. Have emergency shower available.

Advice on protection against fire and explosion
Dust can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition.

Dust explosion class
St2

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed in a cool, well-ventilated place.

Recommended storage temperature

Value	15	-	25	°C

Requirements for storage rooms and vessels
Store product in closed containers. Keep only in the original container.

Incompatible products
Do not store together with: Acids; Alkalis; oxidizing agents

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	**Dust**		
	List of approved workplace exposure limits (WELs) / EH40		
	Dust respirable		
	WEL long-term (8-hr TWA reference period)	4 mg/m³	
	Comments	see Definition 44 "Dust"	
	List of approved workplace exposure limits (WELs) / EH40		
	Dust inhalable		
	WEL long-term (8-hr TWA reference period)	10 mg/m³	
	Comments	see Definition 44 "Dust"	

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**			**68610-51-5 271-867-2**	
	dermal	Long term (chronic)	systemic	0.42	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	0.29	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**			**68610-51-5 271-867-2**	
	oral	Long term (chronic)	systemic	0.04	mg/kg bw/day
	dermal	Long term (chronic)	systemic	0.21	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	0.07	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**		**68610-51-5 271-867-2**	
	water	fresh water	0.01	mg/L
	water	marine water	0.002	mg/L
	water	fresh water sediment	426.26	mg/kg dry weight
	water	marine water sediment	85.25	mg/kg dry weight
	soil	-	85.16	mg/kg dry weight
	sewage treatment plant	-	100	mg/L
	secondary poisoning	-	1.7	mg/kg food

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event that workplace threshold values are not specified.

Respiratory filter (part): FFP2

Eye / face protection
Tightly fitting safety glasses (EN 166).

Hand protection
In case of intensive contact, wear protective gloves (EN 374). Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves. Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product.

Appropriate Material	nitrile rubber		
Material thickness	>=	0.11	mm
Breakthrough time	>=	8	h
Inappropriate material	Leather		

Other
Normal chemical work clothing.

Environmental exposure controls
Do not allow to enter drains or water courses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
solid

Form
Powder

Colour
light beige

Odour
odourless

pH value				
Value	appr. 7	-	8	
Reference temperature			20	°C
Concentration			111	g/l
Source	supplier			

Boiling point / boiling range
No data available

Melting point/freezing point				
Value	appr. 105	-	120	°C
Source	supplier			

Decomposition temperature			
Value	>=	300	°C
Source	supplier		

Flash point			
Value	>	110	°C
Method	DIN 51758		
Source	supplier		

Ignition temperature			
Value		380	°C
Source	supplier		

Explosive properties
Dust may form explosive mixture in air.

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure			
Value	<	2.10-7	mm Hg
Source	supplier		

Relative vapour density
No data available

Relative density
No data available

Density			
Value	appr.	1.1	g/cm³
Reference temperature		20	°C
Source	supplier		

Bulk density				
Value	appr.	300	- 400	kg/m³
Source	supplier			

Solubility in water			
Value	<	0.0002	g/l
Reference temperature		20	°C
Source	supplier		

Solubility
No data available

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**		**271-867-2**
log Pow			7.93	
Reference temperature			25	°C
with reference to	pH 7			
Method	OECD 123			
Source	ECHA			

Kinematic viscosity
No data available

Particle characteristics
No data available

9.2 Other information

Other information
VOC (EU): 0 %

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Danger of dust explosion.

10.4 Conditions to avoid
Static discharges. Heat, naked flames and other ignition sources.

10.5 Incompatible materials
Oxidizing agents; Acids; Alkalis

10.6 Hazardous decomposition products
None if stored, handled and transported properly. In case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**	**271-867-2**

LD50	>	5000	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Acute dermal toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**	**271-867-2**

LD50	>	2000	mg/kg bodyweight
Species	rat		
Method	OECD 402		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Acute inhalational toxicity
No data available

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**	**271-867-2**

Species	rabbit
Method	OECD 404
Source	ECHA
Evaluation	low-irritant
Evaluation/classification	Based on available data, the classification criteria are not met.

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**	**271-867-2**

Species	rabbit
Method	OECD 405
Source	ECHA
Evaluation	non-irritant
Evaluation/classification	Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**	**271-867-2**

Route of exposure	Skin
Species	guinea pig
Method	OECD 406
Source	ECHA
Evaluation	non-sensitizing

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**	**271-867-2**

Type of examination	in vitro gene mutation study in bacteria
Species	S. typhimurium, other: TA 98, TA 100, TA 102, TA 1535, TA 1537, TA 1538
Method	OECD 471
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Type of examination	In vitro mammalian cytogenicity

Species	Chinese hamster Ovary (CHO)
Method	OECD 473
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Type of examination	In vitro mammalian cell gene mutation test
Species	Chinese hamster Ovary (CHO)
Method	OECD 476
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**	**271-867-2**

Route of exposure	oral
Type of examination	Toxicity study
Species	rabbit
Method	OECD 414
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are met.

Carcinogenicity
No data available

STOT - single exposure
No data available

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**	**271-867-2**

Route of exposure	oral
Species	rat
Method	OECD 407, OECD 408
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Aspiration hazard
No data available

Symptoms related to the physical, chemical and toxicological characteristics
Eye contact may cause mechanical irritation through dust particles.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Inhalation of dusts may irritate the respiratory tract.

11.2 Information on other hazards

Endocrine disrupting properties
No data available.

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)					
No	**Substance name**		**CAS no.**		**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**		**68610-51-5**		**271-867-2**
LC50	>	0.2		mg/l	
Duration of exposure		96		h	
Species	Oncorhynchus mykiss				
Method	OECD 203				
Source	ECHA				

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**		**271-867-2**
EC50	>	0.2		mg/l
Duration of exposure		48		h
Species	Daphnia magna			
Method	OECD 202			
Source	ECHA			

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**		**271-867-2**
ErC50	>	0.2		mg/l
Duration of exposure		72		h
Species	Pseudokirchneriella subcapitata			
Method	OECD 201			
Source	ECHA			

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**		**271-867-2**
Type	aerobic biodegradation			
Value		1		%
Duration		28		day(s)
Method	OECD 301 B			
Source	ECHA			
Evaluation	not readily biodegradable			

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene**	**68610-51-5**		**271-867-2**
log Pow		7.93		
Reference temperature		25		°C
with reference to	pH 7			
Method	OECD 123			
Source	ECHA			

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	The product is not considered to be a PBT.
vPvB assessment	The product is not considered to be a vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN
The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG
The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA
The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information
No data available.

14.5 Environmental hazards
Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user
No data available.

14.7 Maritime transport in bulk according to IMO instruments
Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
In accordance with the REACH regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

REACH candidate list of substances of very high concern (SVHC) for authorisation
In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES
The substance is not subject to the provisions of annex XVII (restriction entries) of the Reach regulation (EC) 1907/2006.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances
This substance is not subject to Part 1 or 2 of Annex I

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

National regulations

National chemical inventories

USA (TSCA)	listed	
DSL/NDSL (Canada)	DSL listed	
ENCS (Japan)	listed	7-2034
ECL (Korea)	listed	KE-24797
AICS (Australia)	listed	
IECSC / NEPA (China)	listed	

PICCS (Philippines)	listed
NZIoC (New Zealand)	listed

15.2 Chemical safety assessment

A chemical safety assessment has been carried out for this substance.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Creation of the safety data sheet
UMCO GmbH
Georg-Wilhelm-Str. 187, D-21107 Hamburg
Tel.: +49 40 / 555 546 300 Fax: +49 40 / 555 546 357 e-mail: umco@umco.de

This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

Prod-ID 613579