



1 Identification of substance

- **Product details**
- **Trade name:** IONOL LC
- **Article number:** 7000400104
- **Application of the substance / the preparation** Antioxidant
- **Manufacturer/Supplier:**
 - Manufacturer :
RASCHIG GMBH
Mundenheimer Str. 100
D-67061 Ludwigshafen/Rhein
Tel.No.: ++49 (0)621/5618-0
Fax No.: ++49 (0)621/588285
e-mail : info@raschig.de
 - Supplier :
PMC Specialities Group Inc.
501 Murray Road, USA-Cincinnati OH 45217
- **Information department:**
 - Chemical division/Health and safety department
Tel. : +49 (0)621-5618-0
Fax : +49 (0)621-5618-397
Contact persons :
Email : gohler@raschig.de, rreinke@raschig.de
- **Emergency information:**
 - Chemtec International + 1-703-527-3887
Chemtec USA (800)-424-9300 (24 hours)
PMC Spec. Group Inc. + 1-513-242-3300

2 Composition/Data on components

- **Chemical characterization:**
- **CAS No. Description**
68610-51-5 Butylated reaction product of p-cresol and dicyclopentadiene
- **Identification number(s)**
- **EINECS Number:** 271-867-2

3 Hazards identification

- **Hazard description:** Not applicable.
- **Information pertaining to particular dangers for man and environment:**
Not a hazardous material, according to EU guide lines/Dangerous goods regulations
No hazards to be particularly mentioned. Please note the information of this Material Safety Data Sheet.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 0
Reactivity = 0

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· HMIS-ratings (scale 0 - 4)

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

4 First aid measures:

· General information:

Personal protection for the First Aider.
 Immediately remove any clothing soiled by the product.
 Take affected persons out of danger area and lay down.
 Position and transport stably on side.
 Artificial respiration with respiration bag or respirator

· After inhalation:

Take affected persons into fresh air and keep quiet.
 Seek medical treatment in case of complaints.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.
 If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water.
 In case of irritation consult an oculist

· After swallowing:

Rinse out mouth and then drink plenty of water.
 Induce vomiting, only if affected person is fully conscious.
 Vomiting, possible danger of aspiration, keep breathing passages free
 Seek medical treatment.

· Information for doctor:

· Treatment If swallowed, gastric irrigation.

5 Fire fighting measures:

· Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.

· Special hazards caused by the material, its products of combustion or resulting gases:

Carbon monoxide and carbon dioxide
 Danger of toxic pyrolysis products.

· Protective equipment:

Wear fully protective suit.
 Do not inhale explosion gases or combustion gases.
 Wear self-contained respiratory protective device.

· Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

· Person-related safety precautions:

Use respiratory protective device against the effects of fumes/dust/aerosol.

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Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources

Measures for environmental protection:

Damp down dust with water spray.

Do not allow to enter sewers/ surface or ground water.

Measures for cleaning/collecting:

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

7 Handling and storage

Handling:

Information for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Development and deposition of dust has to be avoided.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Dust can combine with air to form an explosive mixture.

Storage:

Requirements to be met by storerooms and receptacles: *Store only in the original receptacle.*

Information about storage in one common storage facility:

Heating in presence of strong mineral acids will liberate Isobutylene.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

Recommended storage temperature: *At 15 °C to 25 °C*

8 Exposure controls and personal protection

Additional information about design of technical systems: *No further data; see item 7.*

Components with limit values that require monitoring at the workplace: *Not required.*

Additional information: *The lists that were valid during the creation were used as basis.*

Personal protective equipment:

General protective and hygienic measures:

Do not inhale gases / fumes / dust / aerosols.

Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

Breathing equipment:

Use suitable respiratory protective device in case of insufficient ventilation.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Recommended filter device for short term use: *Filter P2*

Protection of hands: *Protective gloves*

Material of gloves

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

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- **Penetration time of glove material**
Penetration time ≥ 8 h
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Not suitable are gloves made of the following materials:**
Leather gloves
Strong gloves
- **Eye protection:** Safety glasses

9 Physical and chemical properties

· General Information

Form:	Flakes Powder
Color:	Light beige
Odor:	Odorless

· Change in condition

Melting point/Melting range:	105-120°C (221-248°F)
Boiling point/Boiling range:	n.d. °C

· **Flash point:** n.a. °C

· **Ignition temperature:** $\geq 300^\circ\text{C}$ ($\geq 572^\circ\text{F}$) (T-onset, DSC)

· **Density at 20°C (68°F):** 1.1 g/cm³

· **Bulk density at 20°C (68°F):** 300-400 kg/m³

· Solubility in / Miscibility with

Water at 20°C (68°F): ≤ 0.002 g/l

· **pH-value (111 g/l) at 20°C (68°F):** 7-8

· Additional information:

VOC European Union % 0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions**
Risk of dust explosion.
Reacts with acids, alkalis and oxidizing agents.
- **Dangerous products of decomposition:**
Carbon monoxide and carbon dioxide
Danger of toxic pyrolysis products.

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11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

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Oral	LD50	> 5000 mg/kg (Rat (Ratte))
Dermal	LD50	> 5000 mg/kg (Rabbit (Kaninchen))

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** Sensitising of people disposed to that may occur.

12 Ecological information

· **Information about elimination (persistence and degradability):**

· **Method:**

· **Analyzing method:** Sturm test

· **Degree of elimination:** < 1 %, 28 d

· **Classification:** Not readily biodegradable.

· **Behavior in environmental systems:**

· **Mobility and bioaccumulation potential:**

The bio accumulation potential is considered to be negligible

Log P o/w : > 9 calculated

BCF : 3.162, log BCF 0.5, calculated, BCFWIN 2.17

· **Ecotoxicological effects:**

· **Acquatic toxicity:**

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EC50	> 0.2 mg/ltr. (Daphnia magna, 48h)
	limit of solubility
	> 0.2 mg/ltr. (Selenastrum capricornutum 72 h)
	limit of solubility
LC50	> 0.2 mg/ltr. (Oncorhynch. mykiss (Rainbow trout) 96h)
	limit of solubility

· **Remark:** Avoid penetration into soil, sewage, and water ways.

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water (Germany)

No. 5241 (Germany)

13 Disposal considerations:

· **Product:**

· **Recommendation:**

After prior treatment product has to be landfilled or incinerated adhering to the regulations pertaining to the disposal of especially hazardous waste. Details have to be arranged with the authority concerned and the local waste management enterprise.

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- **Uncleaned packagings:**
- **Recommendation:**
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

- **Transport/Additional information:** Not dangerous according to the above specifications.

* 15 Regulations

- **Sara**
- **Section 355 (extremely hazardous substances):**
Substance is not listed.
- **Section 313 (Specific toxic chemical listings):**
Substance is not listed.
- **TSCA (Toxic Substances Control Act):** Substance is listed.
- **Proposition 65**
- **Chemicals known to cause cancer:**
Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:**
Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:**
Substance is not listed.
- **Chemicals known to cause developmental toxicity:**
Substance is not listed.
- **Carcinogenicity categories**
- **EPA (Environmental Protection Agency)**
Substance is not listed.
- **IARC (International Agency for Research on Cancer)**
Substance is not listed.
- **NTP (National Toxicology Program)**
Substance is not listed.

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· **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

· **MAK (German Maximum Workplace Concentration)**

Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

· **Product related hazard informations:**

Observe the general safety regulations when handling chemicals.

The substance is not subject to classification according to the sources of literature known to us.

· **National regulations:**

· **Information about limitation of use:**

Employment restrictions concerning women of child-bearing age must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

Employment restrictions concerning young persons must be observed.

· **Technical instructions (air):**

· **Paragraph : / Class : 5,2,1**

16 Other information

Further product information see under technical data sheet

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Chemical division/Health and safety department

· **Contact:** Dr. Ohler (GOhler@raschig.de) / Mr. Reinke (RReinke@raschig.de)

· * **Data compared to the previous version altered.**

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