

RHENOCURE L

according to Regulation (EC) No. 1907/2006

Division Rubber

1. Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**Commercial Product Name : **RHENOCURE L**Substance No. : 006-012-00-2
205-288-3
137-30-4**1.2 Relevant identified uses of the substance or mixture and uses advised against**Use of the : Accelerator
Substance/Mixture**1.3 Details of the supplier of the safety data sheet****Manufacturer**Rhein Chemie Rheinau GmbH
Duesseldorfer Strasse 23-27
68219 Mannheim
GermanyTelephone +49 (0)621-8907-270
Telefax +49 (0)621-8907-404
E-Mail
product.safety@rheinchemie.com**1.4 Emergency telephone number**

+49 (0)621-8907-313

2. Hazards identification**2.1 Classification of the substance or mixture****GHS Classification**

Acute toxicity, Category 2	H330: Fatal if inhaled.
Acute toxicity, Category 4	H302: Harmful if swallowed.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure if swallowed.
Specific target organ toxicity - single exposure, Category 3	H335: May cause respiratory irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitization, Category 1	H317: May cause an allergic skin reaction.
Acute aquatic toxicity, Category 1	H400: Very toxic to aquatic life.
Chronic aquatic toxicity, Category 1	H410: Very toxic to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)

Very toxic	Harmful if swallowed.
Dangerous for the environment	Very toxic by inhalation.
	Irritating to respiratory system.
	Risk of serious damage to eyes.
	May cause sensitization by skin contact.
	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements**GHS-Labeling**

Symbol(s)	:	   																
Signal word	:	Danger																
Hazard statements	:	<table><tr><td>H330</td><td>Fatal if inhaled.</td></tr><tr><td>H302</td><td>Harmful if swallowed.</td></tr><tr><td>H317</td><td>May cause an allergic skin reaction.</td></tr><tr><td>H318</td><td>Causes serious eye damage.</td></tr><tr><td>H335</td><td>May cause respiratory irritation.</td></tr><tr><td>H373</td><td>May cause damage to organs through prolonged or repeated exposure if swallowed.</td></tr><tr><td>H410</td><td>Very toxic to aquatic life with long lasting effects.</td></tr></table>	H330	Fatal if inhaled.	H302	Harmful if swallowed.	H317	May cause an allergic skin reaction.	H318	Causes serious eye damage.	H335	May cause respiratory irritation.	H373	May cause damage to organs through prolonged or repeated exposure if swallowed.	H410	Very toxic to aquatic life with long lasting effects.		
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Precautionary statements	:	<table><tr><td>Prevention:</td><td></td></tr><tr><td>P260</td><td>Do not breathe dust or mist.</td></tr><tr><td>P280</td><td>Wear protective gloves/ eye protection/ face protection.</td></tr><tr><td>P273</td><td>Avoid release to the environment.</td></tr><tr><td>Response:</td><td></td></tr><tr><td>P302 + P352</td><td>IF ON SKIN: Wash with plenty of soap and water.</td></tr><tr><td>P304 + P340</td><td>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</td></tr><tr><td>P305 + P351 + P338</td><td>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td></tr></table>	Prevention:		P260	Do not breathe dust or mist.	P280	Wear protective gloves/ eye protection/ face protection.	P273	Avoid release to the environment.	Response:		P302 + P352	IF ON SKIN: Wash with plenty of soap and water.	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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Hazardous components which must be listed on the label:
137-30-4 zinc bis dimethyldithiocarbamate

3. Composition/information on ingredients**Hazardous components**

zinc bis dimethyldithiocarbamate

Weight percent	Index-No. EC-No. CAS-No.	Classification according to EU Directives 67/548/EEC or 1999/45/EC	GHS Classification
100	006-012-00-2 205-288-3 137-30-4	T+, N, R22, R26, R37, R41, R43, R48/22, R50/53	Acute Tox. 2, H330 Acute Tox. 4, H302 STOT RE 2, H373 STOT SE 3, H335 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES**4.1 Description of first aid measures**

- General advice : Take off contaminated clothing and shoes immediately.
- Inhalation : Remove to fresh air.
If symptoms persist, call a physician.
- Skin contact : Wash off immediately with soap and plenty of water.
If symptoms persist, call a physician.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids.
If eye irritation persists, consult a specialist.
- Ingestion : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.

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Risks : see Chapter 11

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

5. Fire-fighting measures**5.1 Extinguishing media**

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : In case of fire be aware of formation of nitrous gases, sulphur dioxide and further toxic gases.

5.3 Advice for firefighters

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

Further information : Do not allow run-off from fire fighting to enter drains or water courses.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**Personal precautions : Avoid dust formation.
Ensure adequate ventilation.
Use personal protective equipment.**6.2 Environmental precautions**Environmental precautions : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.**6.3 Methods and materials for containment and cleaning up**Methods for cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal.
Avoid dust formation.**7. Handling and storage****7.1 Precautions for safe handling**

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- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
For personal protection see section 8.
- Advice on protection against fire and explosion : During processing, dust may form explosive mixture in air.
Avoid formation of dust and aerosols.
Ventilate room well, using suitably positioned air extractors if necessary.
Take precautionary measures against static discharges.
Keep away from sources of ignition - No smoking.

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.
- Advice on common storage : Keep away from tobacco products.
Keep away from food, drink and animal feedingstuffs.
- German storage class : 6.1A
Combustible substances, toxic
- Other data : No decomposition if stored and applied as directed.

8. Exposure controls/personal protection**8.1 Control parameters**

Contains no substances with occupational exposure limit values.

8.2 Exposure controls**Personal protective equipment**

- Respiratory protection : Suitable mask with particle filter P3 (European Norm 143)
- Hand protection : Wear suitable protective gloves (e.g. rubber gloves).
Avoid skin contact with the wetted surfaces of the protective gloves.
In the event of contamination, change protective gloves immediately.
- Eye protection : Tightly fitting safety goggles
- Skin and body protection : Protective suit
- Hygiene measures : When using, do not eat, drink or smoke.
Wash hands before breaks and at the end of workday.
Keep working clothes separately.
- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Ensure that eyewash stations and safety showers are close to

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the workstation location.
Avoid contact with the skin and the eyes.
Do not breathe dust.
When handling observe the usual precautionary measures for chemicals.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

9. Physical and chemical properties**9.1 Information on basic physical and chemical properties****Appearance**

Form : powder
Colour : white
Odour : slightly

Safety data

Flash point : not applicable
Ignition temperature : no data available
Lower explosion limit : no data available
Upper explosion limit : no data available
pH : not applicable
Melting point/range : 249 - 253 °C
Density : approx. 1,7 g/cm³
at 20 °C
Water solubility : practically insoluble
Partition coefficient: n-
octanol/water : log Pow : 1,086
Viscosity, kinematic : not applicable

10. Stability and reactivity**10.1 Reactivity**

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Reactivity : Stable under normal conditions.

10.2 Chemical stability

Chemical stability : Stable under normal conditions.

10.3 Possibility of hazardous reactionsHazardous reactions : Dust may form explosive mixture in air.
Contact with nitrosating agents (e.g. nitrites and nitrogen oxides) may cause the formation of nitrosamines under certain conditions.**10.4 Conditions to avoid**

Conditions to avoid : Keep away from sources of ignition - No smoking.

10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : In case of fire be aware of formation of sulphur dioxide and further toxic gases.

11. Toxicological information**11.1 Information on toxicological effects**Acute oral toxicity : LD50: 1.400 mg/Kg
Species: ratAcute inhalation toxicity : LC50: 0,07 mg/l
Exposure time: 4 h
Species: ratAcute dermal toxicity : LD50: > 2.000 mg/Kg
Species: rabbit

Skin irritation : Irritating to respiratory system and skin.

Eye irritation : Risk of serious damage to eyes.

Sensitisation : May cause sensitization by skin contact.

Further information : Nausea may occur in workers who consume alcohol after exposure to the product (Antabuse Syndrome).

12. Ecological information**12.1 Toxicity**

Toxicity to fish : LC50: 0,7 mg/l
Exposure time: 96 h
Species: rainbow trout (*Salmo gairdneri*)

: EC50/LC50: 0,75 mg/l
Exposure time: 96 h
Species: Guppy (*Poecilia reticulata*)

Toxicity to daphnia and
other aquatic
invertebrates. : EC50: 0,14 mg/l
Exposure time: 48 h
Species: Daphnia

Toxicity to algae : EC50: 1,2 mg/l
Exposure time: 96 h
Species: *Chlorella pyrenoidosa*

M-Factor : 100

12.2 Persistence and degradability

Biodegradability : no data available

12.3 Bioaccumulative potential

Bioaccumulation : no data available

12.4 Mobility in soil

Mobility : no data available

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB
assessment : no data available

12.6 Other adverse effects

Additional ecological
information : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

13. Disposal considerations

13.1 Waste treatment methods

- Product : The relevant EC Directives as well as local, regional and national regulations have to be observed.
It is among the tasks of the polluter to assign the waste to waste codes specific to industrial sectors and processes according to the European Waste Catalogue.
It is recommended that details be sorted out with the waste disposer responsible.
- Method of disposal : If utilisation or recycling of the product is not possible, it should be disposed of according to the local regulations and laws, e.g. by incineration in a suitable plant.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

ADR/RID/ADNR

UN number: **2811** Class: 6.1 Packaging group: I
Tunnel-code: (E) Additional labelling: Environmentally Hazardous
Description of the goods: UN 2811 TOXIC SOLID, ORGANIC, N.O.S.
(ZINC BIS(DIMETHYLDITHIOCARBAMATE))

IMDG

UN number: **2811** Class: 6.1 Packaging group: I
EmS-1 (EmS-2): F-A (S-A) MPO: Marine pollutant
Description of the goods: TOXIC SOLID, ORGANIC, N.O.S.
(ZINC BIS(DIMETHYLDITHIOCARBAMATE))

ICAO/IATA

UN number: **2811** Class: 6.1 Packaging group: I
Shipment approval IATA-P: No IATA-C: No
Description of the goods: Toxic solid, organic, n.o.s.
(ZINC BIS(DIMETHYLDITHIOCARBAMATE))

Other information

Very toxic. Environmentally hazardous substance. Marine pollutants. Risk of serious damage to eyes. Keep dry. Keep separated from foodstuffs.

15. Regulatory information

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

Water contaminating class (Germany)

WGK 3: highly water endangering (VWVWS A4)

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Notification status

All ingredients are on the following inventories or are exempted from listing:

REACH; TSCA; AICS; DSL; ENCS (JP); ISHL (JP); KECI (KR); PICCS (PH); INV (CN); NZIOC; CH INV

15.2 Chemical Safety Assessment

Chemical Safety Assessment not yet performed.

16. Other information**Text of R-phrases mentioned in Section 3**

R22	Harmful if swallowed.
R26	Very toxic by inhalation.
R37	Irritating to respiratory system.
R41	Risk of serious damage to eyes.
R43	May cause sensitization by skin contact.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
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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.