

1. Identification of the substance/mixture and of the company/undertaking

Commercial Product Name
RHENODIV D 638-1

Use of the Substance/Mixture
release agent

Producer
Rhein Chemie Rheinau GmbH
Duesseldorfer Strasse 23-27
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Germany

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2. Hazards identification

Classification
Symbol(s) Highly flammable, Harmful, Dangerous for the environment

R-phrase(s)
Highly flammable.
Irritating to skin.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Harmful: may cause lung damage if swallowed.
Vapours may cause drowsiness and dizziness.

3. Composition/information on ingredients

Chemical characterization
mixture of paraffinic, naphthenic and aromatic hydrocarbons

Hazardous components
petrol (gasoline)
Weight percent: $\geq 60,00$ - $< 80,00$
EEC No.: 265-151-9; Index No.: 649-328-00-1
Hazard symbol(s): F, Xn, N
R-phrase(s): R11-R38-R51/53-R65-R67

hydrotreated heavy naphtha
Weight percent: $\geq 25,00$ - $< 40,00$
EEC No.: 265-150-3; Index No.: 649-327-00-6
Hazard symbol(s): Xn
R-phrase(s): R10-R65-R66-R67

N,N',N''-tributyl-1-methylsilanetriamine
Weight percent: $\geq 1,00$ - $< 2,50$
EEC No.: 240-462-2
Hazard symbol(s): C
R-phrase(s): R10-R22-R34

n-hexane
Weight percent: $\geq 0,10$ - $< 1,00$
EEC No.: 2037776; Index No.: 601-037-00-0
Hazard symbol(s): F, Xn, N
R-phrase(s): R11-R38-R48/20-R62-R65-R67-R51/53

4. First aid measures

General advice

Take off all contaminated clothing 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. Show the Safety Data Sheet or label.

5. Fire-fighting measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which shall not be used for safety reasons

High volume water jet

Special exposure hazards arising from the substance or mixture itself, combustion products, resulting gases

In the event of fire be aware of formation of noxious fumes.

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Additional advice

Containers at risk from fire should be cooled with water and, if possible, removed from the danger area. 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

Personal precautions

Remove sources of fire, ensure adequate ventilation / exhaust ventilation. Keep unauthorised persons away. Use personal protective equipment.

Environmental precautions

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Ensure adequate ventilation.

7. Handling and storage

Handling*Advice on safe handling*

The vapours are heavier than air. Keep container tightly closed. Ensure proper supply and exhaust ventilation, including at floor level. For personal protection see section 8.

Advice on protection against fire and explosion

Vapours may form explosive mixture with air. Avoid formation of aerosol. Provide sufficient air exchange and/or exhaust in work rooms. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Storage

German storage class 3 Flammable Liquids

Requirements for storage areas and containers

Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage

Keep away from oxidising agents. Do not store together with oxidizing and self-igniting products.
Keep away from food, drink and animal feeding stuffs.

Additional advice

No decomposition if stored and applied as directed.

8. Exposure controls/personal protection**Exposure limit values**

n-hexane

AGW: 180 mg/m³ (50 ppm) (TRGS 900)

Peak-limit category: 8

Note: If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).

Short Term Exposure Classification: (TRGS 900)

Note: Category II: substances with a resorptive effect.

MAK: 180 mg/m³ (50 ppm) (DFG MAK)

Peak-limit category: 8

Note: Listed.

Peak limitation category: (DFG MAK)

Note: Category II: substances with a resorptive effect.

limitation and supervision of the exposition

see chapter 7

limitation and supervision of the exposition at working place*Respiratory protection*

Combination filter, e.g. DIN 3181 ABEK

Hand protection

Solvent-resistant gloves

Eye protection

Tightly fitting safety goggles

Skin and body protection

Protective suit

Hygiene measures

Take off all contaminated clothing immediately. When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Keep working clothes separately.

Protective measures

Avoid contact with the skin and the eyes. Do not breathe vapours, aerosols. When handling observe the usual precautionary measures for chemicals.

Environmental precautions

see chapter 6

9. Physical and chemical properties**General Information**

Form liquid

<i>Colour</i>	colourless
<i>Odour</i>	characteristic
<i>Boiling point/boiling range</i>	approx. 81 °C
<i>Density</i>	approx. 0,77 g/cm ³ at 20 °C
<i>Vapour pressure</i>	approx. 65 hPa at 20 °C
<i>Viscosity, kinematic</i>	no data available
<i>Water solubility</i>	insoluble
<i>pH</i>	not applicable
Safety data	
<i>Flash point</i>	-14 °C
<i>Ignition temperature</i>	250 °C

10. Stability and reactivity

Thermal decomposition

No decomposition if used as directed.

Hazardous reactions

No dangerous reaction known under conditions of normal use.

11. Toxicological information

Toxicological tests

Acute oral toxicity

LD50: > 2.000 mg/Kg

Species: rat

supplementary information concerning toxicity

Additional advice

Vapours may cause drowsiness and dizziness.; Solvents may degrease the skin.; Prolonged skin contact may cause skin irritation.

Information given is based on data obtained from similar substances.

12. Ecological information

Additional ecological information

No information on ecology is available.

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

13. Disposal considerations

Waste from residues

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. Do not deposit together with domestic waste. When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be caused by residues.

14. Transport information

ADR/RID/ADNR

UN-Number: **3295** Class: 3 Packaging group: II
 Tunnel-code: (D/E) Additional labelling: Environmentally Hazardous
 Special provision: 640D
 Description of the goods: UN 3295 HYDROCARBONS, LIQUID, N.O.S.
 (MIXTURE, CONTAINS ISOHEXANE, ISOHEPTANES)

IMDG

UN-Number: **3295** Class: 3 Packaging group: II
 EmS-1 (EmS-2): F-E (S-D) MPO: Marine pollutant
 Description of the goods: HYDROCARBONS, LIQUID, N.O.S.
 (MIXTURE, CONTAINS ISOHEXANE, ISOHEPTANES)

ICAO/IATA

UN-Number: **3295** Class: 3 Packaging group: II
 Shipment approval IATA-P: Yes IATA-C: Yes
 Description of the goods: Hydrocarbons, liquid, n.o.s.
 (MIXTURE, CONTAINS ISOHEXANE, ISOHEPTANES)

Other information

Highly flammable. Environmentally hazardous substance. Marine pollutants. Keep separated from foodstuffs.

15. Regulatory information

Labelling according to EC Directives

Symbol(s)

F	Highly flammable
Xn	Harmful
N	Dangerous for the environment

Contains: petrol (gasoline)

R-phrases(s)

R11	Highly flammable.
R38	Irritating to skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R67	Vapours may cause drowsiness and dizziness.

S-phrases(s)

S 9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S33	Take precautionary measures against static discharges.
S37	Wear suitable gloves.
S60	This material and its container must be disposed of as hazardous waste.
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

National legislation

Water contaminating class (Germany)

WGK 2: water endangering (VWVWS A4)

Notification status

All ingredients are on the following inventories or are exempted from listing:
 REACH; TSCA; AICS; ENCS (JP); KECI (KR); PICCS (PH); INV (CN); NZIOC; CH INV

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

R10	Flammable.
R11	Highly flammable.
R22	Harmful if swallowed.
R34	Causes burns.
R38	Irritating to skin.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

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.