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

### 1.1 Product identifier

Identification of the substance

Article number

Standard for cryoscopy ROTI®Calipure $621 \mathrm{~m}^{\circ} \mathrm{H}$ $\left(-0,600{ }^{\circ} \mathrm{C}\right)$

1PH2
1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses:

Uses advised against:

Laboratory and analytical use Laboratory chemical

Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).
1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany
Telephone:+49 (0) 721-56 060
Telefax: +49 (0) 721-5606149
e-mail: sicherheit@carlroth.de
Website: www.carlroth.de
Competent person responsible for the safety data sheet:
e-mail (competent person):
:Department Health, Safety and Environment
sicherheit@carlroth.de
1.4 Emergency telephone number

| Name | Street | Postal <br> code/city | Telephone | Website |
| :---: | :---: | :---: | :---: | :---: |
| National Poisons Information <br> Service <br> City Hospital | Dudley Rd | B187QH <br> Birmingham | 8448920111 |  |

## SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS
This mixture does not meet the criteria for classification.

### 2.2 Label elements

Labelling
not required

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### 2.3 Other hazards

## Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

not relevant (mixture)
3.2 Mixtures

Description of the mixture
This product does not meet the criteria for classification in any hazard class according to GHS

## SECTION 4: First aid measures

### 4.1 Description of first aid measures



General notes
No special measures are necessary.
Following inhalation
No hazard identified.
Following skin contact
No hazard identified.
Following eye contact
No hazard identified.
Following ingestion
Rinse mouth. Call a doctor if you feel unwell.
4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.
4.3 Indication of any immediate medical attention and special treatment needed none

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media



## Suitable extinguishing media

The product itself does not burn
Unsuitable extinguishing media
no restriction

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5.2 Special hazards arising from the substance or mixture

None.
5.3 Advice for firefighters

No special fire protection measures are necessary.

## SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
No special measures are necessary.
6.2 Environmental precautions

Not required.
6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill
No special measures are necessary.
Advice on how to clean up a spill
Wipe up with absorbent material (e.g. cloth, fleece).
Other information relating to spills and releases
Place in appropriate containers for disposal.
6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special measures are necessary.
Advice on general occupational hygiene
Keep away from food, drink and animal feedingstuffs.
7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.
Incompatible substances or mixtures
Observe hints for combined storage.
Consideration of other advice:
Specific designs for storage rooms or vessels
Recommended storage temperature: $15-25^{\circ} \mathrm{C}$
7.3 Specific end use(s)

No information available.

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SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

National limit values
Occupational exposure limit values (Workplace Exposure Limits)
This information is not available.

### 8.2 Exposure controls

Individual protection measures (personal protective equipment)
Eye/face protection


Use protective eyewear to guard against splash of liquids.
Skin protection


- hand protection

Hand protection is not required.
Respiratory protection


Respiratory protection necessary at: Aerosol or mist formation. Type: Hg (against mercury vapour, colour code: Red).

Environmental exposure controls
Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state
Colour
Odour
Melting point/freezing point
Boiling point or initial boiling point and boiling range

Flammability
Lower and upper explosion limit
Flash point
Auto-ignition temperature
liquid
colourless
odourless
$0^{\circ} \mathrm{C}$
$100^{\circ} \mathrm{C}$ at 1.013 hPa
non-combustible
not determined
not determined
not determined

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Decomposition temperature
pH (value)
Kinematic viscosity
$\underline{\text { Solubility(ies) }}$
Water solubility not determined

Partition coefficient
Partition coefficient n-octanol/water (log value): this information is not available

Vapour pressure

Density and/or relative density
Density
Relative vapour density

Particle characteristics

Other safety parameters
Oxidising properties

### 9.2 Other information

Information with regard to physical hazard classes:

Other safety characteristics:
hazard classes acc. to GHS
(physical hazards): not relevant
There is no additional information.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 Possibility of hazardous reactions

Violent reaction with: Alkali metals, Carbide, Alkaline earth metal

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

There is no additional information.

### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.
Classification procedure
The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## Classification acc. to GHS

This mixture does not meet the criteria for classification.

## Acute toxicity

Shall not be classified as acutely toxic.
Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.
Serious eye damage/eye irritation
Shall not be classified as seriously damaging to the eye or eye irritant.
Respiratory or skin sensitisation
Shall not be classified as a respiratory or skin sensitiser.

## Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.
Carcinogenicity
Shall not be classified as carcinogenic.
Reproductive toxicity
Shall not be classified as a reproductive toxicant.
Specific target organ toxicity - single exposure
Shall not be classified as a specific target organ toxicant (single exposure).
Specific target organ toxicity - repeated exposure
Shall not be classified as a specific target organ toxicant (repeated exposure).

## Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

- If swallowed

Data are not available.

- If in eyes

Data are not available.

- If inhaled

Data are not available.

- If on skin

Data are not available.

- Other information

Health effects are not known.

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### 11.2 Endocrine disrupting properties

None of the ingredients are listed.

### 11.3 Information on other hazards

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

## Biodegradation

Data are not available.

### 12.2 Process of degradability

Data are not available.

### 12.3 Bioaccumulative potential

Data are not available.

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

 Data are not available.
### 12.6 Endocrine disrupting properties

None of the ingredients are listed.

### 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods



Consult the appropriate local waste disposal expert about waste disposal.

## Sewage disposal-relevant information

Do not empty into drains.

### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).

### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

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## SECTION 14: Transport information

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards

### 14.6 Special precautions for user

There is no additional information.
14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

### 14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

Not subject to ADR, RID and ADN.
International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information Not subject to ICAO-IATA.

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

Seveso Directive
2012/18/EU (Seveso III)

| No | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the ap- <br> plication of lower and upper-tier re- <br> quirements | Notes |
| :---: | :---: | :---: | :---: |
|  | not assigned |  |  |

## Deco-Paint Directive

| VOC content | $0 \%$ <br> 0$/$ |
| :--- | :--- |

Industrial Emissions Directive (IED)

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| VOC content | $0 \%$ |
| :--- | :--- |
| VOC content (Water content was discounted) | $09 / 1$ |

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)
none of the ingredients are listed
Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)
none of the ingredients are listed
Regulation on the marketing and use of explosives precursors
none of the ingredients are listed
Regulation on drug precursors
none of the ingredients are listed
Regulation on substances that deplete the ozone layer (ODS)
none of the ingredients are listed
Regulation concerning the export and import of hazardous chemicals (PIC)
chemicals subject to the international prior informed consent (PIC) procedure (the 'PIC procedure').
Regulation on persistent organic pollutants (POP)
none of the ingredients are listed

## Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive ( $92 / 85 / \mathrm{EEC}$ ) for expectant or nursing mothers.

National inventories

| Country | Inventory | Status |
| :---: | :---: | :---: |
| AU | AIIC | all ingredients are listed |
| CA | DSL | all ingredients are listed |
| CN | IECSC | all ingredients are listed |
| EU | ECSI | all ingredients are listed |
| EU | REACH Reg. | not all ingredients are listed |
| JP | CSCL-ENCS | all ingredients are listed |
| JP | ISHA-ENCS | not all ingredients are listed |
| KR | KECI | all ingredients are listed |
| MX | INSQ | all ingredients are listed |
| NZ | NZIoC | all ingredients are listed |
| PH | PICCS | all ingredients are listed |
| TR | CICR | not all ingredients are listed |
| TW | TCSI | all ingredients are listed |
| US | TSCA | all ingredients are listed |

Legend
AIIC Australian Inventory of Industrial Chemicals

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acc. to Regulation (EC) No. 1907/2006 (REACH)

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Legend
CICR
Chemical Inventory and Control Regulation
CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)
DSL Domestic Substances List (DSL)
ECSI EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC Inventory of Existing Chemical Substances Produced or Imported in China
INSQ National Inventory of Chemical Substances
ISHA-ENCS Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI Korea Existing Chemicals Inventory
NZIoC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg. REACH registered substances
TCSI Taiwan Chemical Substance Inventory
TSCA Toxic Substance Control Act

### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

## Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
| :---: | :---: |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by InIand Waterways) |
| ADR | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road) |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United $\mathrm{Na}-$ tions |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods Code |
| NLP | No-Longer Polymer |
| PBT | Persistent, Bioaccumulative and Toxic |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail) |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and very Bioaccumulative |

## Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

## Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)

## Standard for cryoscopy ROTI®Calipure $621 \mathrm{~m}^{\circ} \mathrm{H}\left(-\mathbf{0 , 6 0 0}{ }^{\circ} \mathrm{C}\right)$

article number: 1PH2

## Classification procedure

Physical and chemical properties. The classification is based on tested mixture.
Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

