Rhenogran S-80



| Version 1.0 | Revision Date: 2019/05/10 | | S Number: 3000014509 | Date of last issue: - Country / Language: HK / 6N | | |
|----------------|--|------|--|--|--|--|
| 1. PRODI | JCT AND COMPANY ID | ENT | IFICATION | | | |
| Prod | Product name | | Rhenogran S-80 | | | |
| Prod | uct code | : | 57471663 | | | |
| Man | ufacturer or supplier's o | deta | ils | | | |
| Supp | Supplier | | 朗盛香港有限公司 港島東 英皇道 979 號 太古坊 康橋大廈 35 樓 3503-3504 室, 香港 | | | |
| Telep | phone | : | 康倚入厦 35 | | | |
| | E-mail address of person responsible for the SDS | | lxs-sds-china@la | anxess.com | | |
| Eme | rgency telephone number | r : | 0049-214-30-993 | 300 (German | | |
| Supp | Supplier | | | Kong Limited 4, 35/F Cambridge House 79 King's Road Island East, Hong Kong, Hong | | |
| Telep | phone | : | +85235268888 | | | |
| | ail address of person onsible for the SDS | : | lxs-sds-china@la | anxess.com | | |
| Eme | rgency telephone | : | 0049-214-30-993 | 300 (German | | |
| Reco | ommended use of the cl | hem | ical and restriction | ons on use | | |

2. HAZARDS IDENTIFICATION

| GHS Classification Skin corrosion/irritation | : | Category 2 |
|---|---|------------------------------|
| GHS label elements Hazard pictograms | : | |
| Signal word | : | Warning |
| Hazard statements | : | H315 Causes skin irritation. |
| | | |



Rhenogran S-80



| Version 1.0 | Revision Date: 2019/05/10 | SDS Number: 103000014509 | Date of last issue: - Country / Language: HK / 6N |
|----------------|-------------------------------------|-----------------------------|--|
| Preca | utionary statements | | in thoroughly after handling. otective gloves. |
| | | P332 + P313 I tion. | F ON SKIN: Wash with plenty of water. f skin irritation occurs: Get medical advice/ atten- Fake off contaminated clothing and wash it before |
| | hazards which do n known. | ot result in classifica | ition |
| 3. COMPC | SITION/INFORMATIC | ON ON INGREDIENTS | 3 |
| Subst | ance / Mixture | : Mixture | |

Hazardous components

| Chemical name | CAS-No. | Concentration (% w/w) |
|---|------------|--------------------------|
| sulfur | 7704-34-9 | >= 70 - < 90 |
| Distillates (petroleum), hydrotreated heavy paraf- finic; Baseoil -unspecified | 64742-54-7 | >= 1 - < 10 |

4. FIRST AID MEASURES

| General advice | : | Move out of dangerous area. Show this safety data sheet to the doctor in attendar Do not leave the victim unattended. | nce. |
|-------------------------|---|---|------------------|
| If inhaled | : | Consult a physician after significant exposure. If unconscious, place in recovery position and seek advice. | medical |
| In case of skin contact | : | If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes. | |
| In case of eye contact | : | Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. | |
| If swallowed | : | Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious pe If symptoms persist, call a physician. | rson. |
| | | 2/13 | A company of the |



Rhenogran S-80



| Vers 1.0 | sion | Revision Date: 2019/05/10 | | DS Number: 3000014509 | Date of last issue: - Country / Language: HK / 6N | | |
|--------------------------|---------------------|--|---|----------------------------------|--|--|--|
| | | nportant symptoms ects, both acute and d | : | Causes skin irrita | tion. | | |
| | - | to physician | : | No special measu | No special measures required. | | |
| 5. FIREFIGHTING MEASURES | | | | | | | |
| | Suitabl | e extinguishing media | : | Use water spray, bon dioxide. | alcohol-resistant foam, dry chemical or car- | | |
| | Hazaro ucts | lous combustion prod- | : Sulphur oxides Carbon dioxide (CO2) Carbon monoxide | | , | | |
| | Specifi ods | c extinguishing meth- | : | Use extinguishing | are for chemical fires. I measures that are appropriate to local cir- the surrounding environment. | | |
| | Specia for firef | l protective equipment ïghters | : | Wear self-contain essary. | ed breathing apparatus for firefighting if nec- | | |

6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protec- : tive equipment and emer- gency procedures | Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. |
|---|---|
| Environmental precautions : | Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for : containment and cleaning up | Keep in suitable, closed containers for disposal. |

7. HANDLING AND STORAGE

HandlingAdvice on protection against
fire and explosion: Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust
is formed.Advice on safe handling: Avoid formation of respirable particles.
Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.



Rhenogran S-80



| Version 1.0 | Revision Date: 2019/05/10 | | S Number: 000014509 | Date of last issue: - Country / Language: HK / 6N |
|----------------|-------------------------------------|---|---------------------------------------|---|
| | | | plication area. Provide sufficient | and drinking should be prohibited in the ap- air exchange and/or exhaust in work rooms. water in accordance with local and national |
| Stora | ge | | | |
| Condi | tions for safe storage | | place. Electrical installa | ghtly closed in a dry and well-ventilated tions / working materials must comply with safety standards. |
| | er information on stor- tability | : | No decompositio | n if stored and applied as directed. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parame- ters / Permissible concentration | Basis |
|--|--|-------------------------------------|--|--------|
| Distillates (petroleum), hy- drotreated heavy paraffinic; Baseoil -unspecified | 64742-54-7 | OEL-TWA (Mist) | 5 mg/m3 | HK OEL |
| | Further information: As sampled by method that does not col vapour | | es not collect | |
| | | OEL-STEL (Mist) | 10 mg/m3 | HK OEL |
| | Further information: As sampled by method that does not colle vapour | | es not collect | |
| | | TWA (Inhal- able fraction) | 5 mg/m3 | ACGIH |

Personal protective equipment

| Respiratory protection | : | In the case of dust or aerosol formation use respira approved filter. Dust safety masks are recommended when the dus tration is more than 10 mg/m3. | |
|---|---|--|------------------|
| Hand protection Material Wearing time | - | Nitrile rubber - NBR < 60 min | |
| Remarks | : | The suitability for a specific workplace should be dis with the producers of the protective gloves. | scussed |
| Eye protection | : | Tightly fitting safety goggles | |
| | | 4/13 | A company of the |



Rhenogran S-80



| Version 1.0 | Revision Date: 2019/05/10 | SDS Number: 103000014509 | Date of last issue: - Country / Language: HK / 6N |
|----------------|------------------------------|-----------------------------|---|
| Skin a | and body protection | Choose body p | is protective suit protection according to the amount and concen- angerous substance at the work place. |
| Hygie | ene measures | When using do | o not eat or drink. o not smoke. efore breaks and at the end of workday. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | 5/13 |
|---|---|---|
| Ignition temperature | : | No data available |
| Partition coefficient: n- octanol/water | : | No data available |
| Solubility(ies) Water solubility | : | insoluble |
| Density | : | 1.65 g/cm³ (20 °C) |
| Relative density | : | No data available |
| Relative vapour density | : | No data available |
| Vapour pressure | : | No data available |
| Lower explosion limit | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Flammability (solid, gas) | : | Not classified as a flammability hazard |
| Evaporation rate | : | No data available |
| Flash point | : | No data available |
| Boiling point/boiling range | : | No data available |
| Melting point/freezing point | : | No data available |
| pH | : | No data available |
| Odour Threshold | : | No data available |
| Odour | : | odourless |
| Colour | : | yellow |
| Appearance | : | granular |



Rhenogran S-80



| Ver 1.0 | sion | Revision Date: 2019/05/10 | | S Number: 3000014509 | Date of last issue: - Country / Language: HK / 6N |
|------------|------------------|------------------------------|---|---|--|
| | | | | | |
| | Decom | position temperature | : | No data available | 9 |
| | Viscosi | ty | : | No data available | |
| | Explosi | ve properties | : | No data available |) |
| | Oxidizir | ng properties | : | No data available |) |
| | Molecu | lar weight | : | No data available |) |
| 10. | STABIL | ITY AND REACTIVITY | (| | |
| | | | | | |
| | Reactiv | vity | : | No dangerous re | action known under conditions of normal use. |
| | Chemic | cal stability | : | Stable under nor | mal conditions. |
| | Possibi tions | lity of hazardous reac- | : | tions will not occu Stable under rec No hazards to be | nditions of storage and use, hazardous reac- ur. commended storage conditions. e specially mentioned. xplosive mixture in air. |

| Conditions to avoid | : No data available |
|-------------------------------------|--|
| Incompatible materials | : No specific data. |
| Hazardous decomposition products | : No hazardous decomposition products are known. |

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Components:

sulfur:

| Acute oral toxicity | LD50 (Rat, male and female): > 2,000 mg/kg Method: OECD Test Guideline 401 GLP: yes Assessment: The substance or mixture has no acute oral tox- icity |
|---------------------------|--|
| Acute inhalation toxicity | LC50 (Rat, male and female): > 5.43 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 GLP: yes Assessment: The substance or mixture has no acute inhala- |
| | |



Rhenogran S-80



| Version 1.0 | Revision Date: 2019/05/10 | SDS Number: 103000014509 | Date of last issue: - Country / Language: HK / 6N |
|----------------|---|---|---|
| | | tion toxicity | |
| Acute | e dermal toxicity | Method: OEC GLP: yes | ale and female): > 2,000 mg/kg D Test Guideline 402 The substance or mixture has no acute dermal |
| Distil | lates (petroleum), hy | drotreated heavy p | araffinic; Baseoil -unspecified: |
| Acute | e oral toxicity | : LD50 (Rat): > | ⊳ 5,000 mg/kg |
| Acute | inhalation toxicity | Exposure tim Test atmosph Method: OEC | ale and female): > 5.53 mg/l e: 4 h here: dust/mist CD Test Guideline 403 The substance or mixture has no acute inhala- |
| Acute | e dermal toxicity | : > 5000 ml/kg Method: OEC GLP: yes | bw D Test Guideline 402 |
| Skin | corrosion/irritation | | |
| Caus | es skin irritation. | | |
| <u>Com</u> | ponents: | | |
| sulfu | r: | | |
| Expos Metho | ies: Rabbit sure time: 4 h od: OECD Test Guidel lt: Irritating to skin. yes | ine 404 | |
| | lates (petroleum), hy lt: No skin irritation | drotreated heavy p | araffinic; Baseoil -unspecified: |
| | us eye damage/eye i lassified based on ava | | |
| <u>Com</u> | ponents: | | |
| Expos Metho | ies: Rabbit sure time: 24 h od: OECD Test Guidel lt: No eye irritation | ine 405 | |



Rhenogran S-80



| 1.0 2019/05/10 103000014509 Country / Language: HK / 6 | Version 1.0 | Revision Date: 2019/05/10 | SDS Number: 103000014509 | Date of last issue: - Country / Language: HK / 6N |
|--|----------------|---------------------------|-----------------------------|--|
|--|----------------|---------------------------|-----------------------------|--|

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil -unspecified:

Result: No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

sulfur:

Exposure routes: Skin contact Species: Guinea pig Method: OECD Test Guideline 406 Result: Did not cause sensitisation on laboratory animals. GLP: yes

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil -unspecified:

Exposure routes: Skin contact Species: Guinea pig Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:

sulfur:

| Genotoxicity in vitro | : | Test Type: reverse mutation assay Test system: Salmonella typhimurium Metabolic activation: with and without metabolic ac Method: OECD Test Guideline 471 Result: negative GLP: yes | tivation |
|-----------------------|---|--|----------------|
| | | Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic ac Method: OECD Test Guideline 473 Result: negative GLP: yes | tivation |
| Genotoxicity in vivo | : | Test Type: Micronucleus test Species: Mouse (male and female) Application Route: Oral Exposure time: 2 d Dose: 2000 mg/kg bw/ d Method: OECD Test Guideline 474 | |
| | | 8 / 13 | A company of t |



Revision Date:

Rhenogran S-80

Version



Date of last issue: -

| 1.0 | 2019/05/10 | 103000014509 | Country / Language: HK / 6N |
|--------------|---|----------------------|--|
| | | Result: negative | e |
| | inogenicity classified based on ava | ilable information. | |
| <u>Com</u> | ponents: | | |
| Disti | llates (petroleum), hy | drotreated heavy par | affinic; Baseoil -unspecified: |
| Carc ment | inogenicity - Assess- | | d on DMSO extract content < 3% (Regulation 3, Annex VI, Part 3, Note L) |

SDS Number:

Reproductive toxicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil -unspecified:

| u // | |
|----------------------|---|
| Effects on fertility | : Test Type: Fertility |
| | Species: Rat |
| | Application Route: Oral |
| | Frequency of Treatment: 28 daily |
| | Fertility: NOAEL: 1,000 mg/kg body weight |
| | Symptoms: No effects on fertility |
| | Cymptoms. No eneold on fertility |
| | Test Type: Fertility |
| | Application Route: Inhalation |
| | Remarks: No data available |
| | Remarks. No data avaliable |
| | Test Type: Fertility |
| | Species: Rat |
| | • |
| | Application Route: Skin contact |
| | Frequency of Treatment: 28 daily |
| | Fertility: NOAEL: 1,000 mg/kg body weight |
| | Symptoms: No effects on fertility |
| | |
| | |
| | |

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

sulfur:

Species: Rat, male and female NOAEL: 1,000 mg/kg Application Route: Oral Exposure time: 90 d Number of exposures: daily



Rhenogran S-80



| Version | Revision Date: | SDS Number: |
|---------|----------------|--------------|
| 1.0 | 2019/05/10 | 103000014509 |

Date of last issue: -Country / Language: HK / 6N

Dose: 100 - 400 - 1000 mg/kg Method: OECD Test Guideline 408 GLP: yes Remarks: Subchronic toxicity

Species: Rat, male and female NOAEL: 400 mg/kg Application Route: Skin contact Exposure time: 28 d Number of exposures: 6 hours/day Dose: 100 - 400 - 1000 mg/kg Method: OECD Test Guideline 410 GLP: yes Remarks: Subacute toxicity

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil -unspecified:

Species: Rabbit NOAEL: 200 mg/kg Application Route: Skin contact Exposure time: 28 d Dose: 200 mg/kg Remarks: Chronic toxicity

Species: Rat NOAEL: 0.21 mg/l Application Route: Inhalation Exposure time: 28 d Dose: 0,21 mg/l Remarks: Chronic toxicity

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

12. ECOLOGICAL INFORMATION

| Ecotoxicity | |
|------------------|---|
| Components: | |
| sulfur: | |
| Toxicity to fish | LC0 (Oncorhynchus mykiss (rainbow trout)): > 0.005 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 Remarks: Fresh water |
| | 10/10 |



Rhenogran S-80



| | Revision Date: 2019/05/10 | | S Number: 3000014509 | Date of last issue: - Country / Language: HK / 6N |
|----------|---|-----------|--|---|
| | | | Exposure time: 9 Test Type: semi Method: OECD | -static test Test Guideline 203 |
| | y to daphnia and other c invertebrates | : | End point: Immo Exposure time: 4 Test Type: semi | magna (Water flea)): > 0.005 mg/l bilization 48 h -static test Test Guideline 202 |
| | | | End point: Immo Exposure time: 4 Test Type: semi | 48 h -static test Test Guideline 202 |
| | y to daphnia and other invertebrates (Chron- ity) | : | | oduction 21 d ia magna (Water flea) Test Guideline 211 |
| Ecoto | kicology Assessment | | | |
| Acute a | aquatic toxicity | : | No toxicity at the | e limit of solubility |
| Chroni | c aquatic toxicity | : | No toxicity at the | e limit of solubility |
| | ates (petroleum), hydr y to fish | otro : | | a <mark>ffinic; Baseoil -unspecified:</mark> Ichus mykiss (rainbow trout)): > 5,000 mg/l 96 h |
| | y to daphnia and other c invertebrates | : | EC50 (Daphnia Exposure time: 4 | magna (Water flea)): > 1,000 mg/l 48 h |
| Toxicity | y to algae | : | EC50 (Desmod mg/l Exposure time: 9 | esmus subspicatus (green algae)): > 1,000 |

Components:

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil -unspecified:

Biodegradability : Result: Inherently biodegradable.



Rhenogran S-80



| Version 1.0 | Revision Date: 2019/05/10 | SDS Nun 1030000 | | Date of last issue: - Country / Language: HK / 6N |
|-------------------------------|---|--------------------|---------------------------|--|
| No da Mobi No da | ccumulative potential ata available lity in soil ata available | | | |
| Prod | ional ecological infor- | : No da | ta available | |
| 13. DISPO | SAL CONSIDERATIO | NS | | |
| Disp | osal methods | | | |
| Wast | e from residues | Do no cal or | t contamina used conta | f waste into sewer. ate ponds, waterways or ditches with chemi- iner. d waste management company. |
| Conta | aminated packaging | Dispo | | contents. used product. pty containers. |
| 14. TRAN | SPORT INFORMATION | 1 | | |
| Inter | national Regulations | | | |
| | -DGR egulated as a dangerou | s good | | |

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

| Hazard statements | : Not dangerous cargo. |
|-------------------|---------------------------------|
| | Irritating to skin. |
| | Keep separated from foodstuffs. |

15. REGULATORY INFORMATION

National regulatory information

| International Chemical Weapons Convention (CWC) | : | Not applicable |
|---|---|----------------|
| Schedules of Toxic Chemicals and Precursors | | |



Rhenogran S-80



| Version | Revision Date: | SDS Number: | Date of last issue: - |
|---------|----------------|--|--|
| 1.0 | 2019/05/10 | 103000014509 | Country / Language: HK / 6N |
| Furth | er information | Factories and I F&IU (Dangerio Waste Disposa (General) Regu Air Pollution Co Compounds) R | oods Ordinance (Cap295) ndustrial Undertaking Ordinance (Cap59), ous Substances) Regulations al Ordinance Waster Disposal (Chemical Waste) ulations (Cap354) ontrol Ordinance Air Pollution (Volatile Organic tegulation (Cap311) ce on Control of Air Impurities (Chemical Sub- Workplace |

Other international regulations

16. OTHER INFORMATION

Full text of other abbreviations

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals

| ACGIH HK OEL | | USA. ACGIH Threshold Limit Values (TLV) Code of Practice on Control of Air Impurities (Chemical Sub- stances) in the Workplace |
|--|---|--|
| ACGIH / TWA HK OEL / OEL-TWA HK OEL / OEL-STEL | : | 8-hour, time-weighted average Time weighted Average Short-Term Exposure Limit |

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.

