SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1. Identification of the product
Trade name: PRO-SULPHUR S 800 SC

1.2. Identification of significant applications of the substance or preparation and applications that are not recommended
Mineral two-phase fertilizer. Designed mainly for sulphur deficient soils and fertilizing sulphur loving plants.

1.3. Manufacturer information
Supplier: “Siarkopol” TARNOBRZEG Chemical Plants Ltd.
Address: ul. Chemiczna 3, 39-400 Tarnobrzeg
Tel./Fax: (00-48-15) 822 15 61 /(00-48-15) 822 97 97
E-mail: sekretariat@zchsiarkopol.pl

1.4. Emergency telephone:
(00-48-15) 855 41 14 or 855 45 48

SECTION 2. HAZARD IDENTIFICATION

2.1. Classification of the substance or preparation

<table>
<thead>
<tr>
<th>Classification</th>
<th>Acc to Regulation (EC) No. 1272/2008 (CLP)+ additional classification:</th>
<th>Acc to Directive 1999/45/EC:</th>
</tr>
</thead>
<tbody>
<tr>
<td>effects of physical and chemical properties</td>
<td>Not classified. No hazard.</td>
<td>Not classified. No hazard.</td>
</tr>
<tr>
<td>for humans</td>
<td>Irritating effects on skin: Skin Irritant. 2 (H315 Causes skin irritation).</td>
<td>Xi, R38 Irritating to skin.</td>
</tr>
</tbody>
</table>

2.2. Labeling

GHS Pictograms: GHS07
Signal Word: Warning
Hazard Statement:
H315 Causes skin irritation
Precautionary Statement
P280 Wear protective gloves/protective clothing/eye protection/ face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.

2.3. Other hazards
None.

SECTION 3. COMPOSITION/INFORMATION ABOUT INGREDIENTS

3.2. Mixtures
Substance name | % by weight | CAS No. | EC No. | Index No. | Classification acc to 67/548/EEC | CLP Classification | Registration No.
--- | --- | --- | --- | --- | --- | --- | ---
Sulphur | approx. 57 | 7704-34-9 | 231-722-6 | 016-094-00-1 | Xi, R38 | Skin Irritant 2, H315 | 01-2119487295-27-XXXX
Silica* | ≤ 0.5 | 112945-52-5 | 231-545-4 – – – | – – – | No information | No information |
Methanol* | < 0.01 | 67-56-1 | 200-659-6 | 603-001-00-X | F, R11 | No information | No information

*Substances with a specified value for the maximum occupational exposure limit (OEL).

Concentrate in the form of an aqueous suspension containing active sulphur and additives (emulsifier, dispersant, surfactants, etc.).

The mixture does not include other substances that can be harmful to human health or the natural environment (in relation to Directive 67/548/EEC and EC Regulation No. 1272/2008); substances, for which EC maximum occupational exposure limit has been provided; PBT or vPvB substances with concentration exceeding the levels provided in regulations.

SECTION 4. FIRST-AID MEASURES

4.1. Description of first-aid measures

Inhalation:
Getting the victim into fresh air should be sufficient. Seek medical advice if symptoms persist or when feeling unwell.

Skin contact:
Change contaminated clothing. Carefully wash the contaminated skin with soap and water, then rinse with plenty of water. Seek medical advice if symptoms persist or in the case of irritation.

Eye contact:
Rinse the eyes with wide open lids using running water for a few minutes. Seek medical advice if irritation symptoms persist.

Indigestion:
Medical advice is recommended. Rinse the mouth with water. Give a large amount of water to drink.

4.2. Main acute and delayed symptoms and effects of exposure
Not likely to occur.

4.3. Recommendations related to emergency medical aid and the specific handling of the affected person
Show the safety data sheet, label or container to the medical personnel providing aid.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: The product is not flammable. Use extinguishing media suitable for extinguishing burning materials.

Extinguishing media to avoid: Do not use extinguishing media that are not suitable for extinguishing burning materials.

5.2. Specific hazards related to the substance or preparation
The product is not flammable. It should not pose a hazard. Sulphur and carbon oxides may be released during fire.

5.3. Information for fire-fighters
Self-contained breathing apparatus, particularly when extinguishing fire in closed rooms. Avoid contamination of surface or ground waters with the fire water.
SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Individual precautions, personal protective equipment and emergency procedures

Use adequate personal protection equipment, e.g. safety goggles and gloves – see section 8 of this safety data sheet. Restrict the access of passers-by to the area affected by the emergency until necessary cleaning actions are finished. Avoid contamination of the skin and eyes.

6.2. Environmental precautions:

Do not release the product to waters, sewage drains and soil.

6.3. Methods and materials to avoid contamination expansion and cleaning

If possible, eliminate the leakage (seal, place damaged containers in emergency containers). Restrict the spread of liquids by dikes around the contaminated area. Pump out larger quantities of the liquid and remove smaller leaks with a neutral sorbent (e.g. earth, sand, diatomaceous earth), collect in adequately labeled waste containers. Carefully wash the fouled surface and remove the remaining product with water. Dispose of the collected liquid or sorbent contaminated with the product in accordance with applicable regulations. If necessary, use specialized companies handling waste utilization.

6.4. References to other sections

Refer also to sections 8 and 13 of this safety data sheet.

SECTION 7. HANDLING AND STORAGE

7.1. Conditions for safe handling

Adhere to basic hygiene rules: do not eat, drink or smoke when using the product; wash hands with soap and water after each use. Take off contaminated clothing; wash it before reusing. Avoid contact with eyes and skin. Avoid inhaling product spray vapors. Use necessary personal protection equipment as indicated in section 8 of this safety data sheet.

Use the product in accordance with its intended use and recommendations specified on the approved label or instructions for use attached to the packaging.

7.2. Conditions for safe storage, including information on any non-compatible products

Store the product in original, adequately labeled and tightly sealed packaging in a dry, well-ventilated storage area at temperatures up to 30°C. Keep away from food articles, pellets and containers used for feeding, heat sources and naked flame. Keep away from children and unauthorized persons.

Shelf life: 2 years after the manufacture date. Upon the expiry of that period, the product may be used after checking the parameters against specification.

7.3. Specific end-use application(-s)

Not defined.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure control parameters

Synthetic amorphous silica total inhalable ash: 10 mg/m³, respirable dust: 2 mg/m³. Methanol OEL: 100 mg/m³, TLV-STEL: 300 mg/m³, TLV-C: –


Product DNEL: no data Sulphur DNEL: not applicable (non-toxic substance)
PNEC: no data PNEC: not applicable (non-toxic substance)

8.2. Exposure controls

Technical measures to prevent exposure:

General ventilation is recommended.

Eye and face protection:

Tightly fitting safety goggles.
Skin protection:
Waterproof safety gloves (e.g. rubber, PVC). Standard safety clothing or protective apron.

Respiratory protection:
Under normal conditions, protection measures are not required when sufficient ventilation is provided; use safety masks when vapor pressure exceeds the maximum allowable limit.

Thermal hazards:
N/A

Environmental exposure control:
Avoid releasing the substance to soils, sewage drains and waters.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1. Information on basic physical and chemical properties**

- **a) Form:** Cream-like aqueous suspension
- **b) Smell:** Delicate
- **c) Odor threshold:** No data
- **d) pH:** 5.5% (1% suspension)
- **e) Melting/freezing points:** Not determined
- **f) Initial boiling point and boiling range:** >100°C
- **g) Flash point:** Not applicable
- **h) Evaporation rate:** No data
- **i) Combustibility (solid, gas):** Not applicable
- **j) Upper/lower flammability limit or upper/lower explosive limit:** Not applicable
- **k) Vapor pressure:** No data
- **l) Vapor density:** No data
- **m) Relative density:** approx. 1.4 g/cm³
- **n) Solubility:** Soluble in water
- **o) N-octanol/water partition coefficient (Pow):** No data
- **p) Self-ignition temperature:** No data
- **q) Decomposition temperature:** No data
- **r) Viscosity:** No data
- **s) Explosive properties:** No data
- **t) Oxidizing properties:** No data

**9.2. Other information**

Surface tension : No data

### SECTION 10. STABILITY AND REACTIVITY

**10.1. Reactivity**
The product is not reactive.

**10.2. Chemical stability**
The substance is stable during storage and handling under normal ambient conditions, nominal temperature and pressure.

**10.3. Dangerous reactions**
No dangerous reactions identified.

**10.4. Conditions to avoid**
Keep away from heat.

**10.5. Materials to avoid**
No materials to avoid identified.

**10.6. Hazardous decomposition products**
No hazardous decomposition products identified. Combustion products released under fire conditions. See section 5 of this safety data sheet.
SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Product: Sulphur:
LD50: >2000 mg/kg BM (oral, rat)  
LD50: >2000 mg/kg BM (skin, rabbit)  
May result in stomach disorders.  
LC50: >5430 mg/m³ (inhalation, rat, 4h)

Caustic/irritating effects on skin:
Sulphur dust irritates the skin.

Severe disturbances to eyes/irritating effects on eyes:
Based on the available information, classification criteria are not met. Sulphur dust irritates the skin. The product may be irritating to eyes and results in reddening or even pain.

Allergic effects on respiratory system or skin:
Based on the available information, classification criteria are not met.

Mutagenic effects on reproductive cells:
Based on the available information, classification criteria are not met.

Carcinogenic effects:
Based on the available information, classification criteria are not met.

Reproductive effects:
Based on the available information, classification criteria are not met.

Toxic effects on specific organs – one-time exposure:
Inhaling vapors results in shortening of breath with coughing. Vapors released from molten sulphur may be absorbed by the lungs very quickly. When swallowed, nausea and vomiting occur, or, in more severe cases hand and leg shaking and dizziness may result.

Toxic effects on specific organs – repeated exposure:
Persons under repeated exposure to the inhalation of air containing a large amount of sulphur vapors and dust may suffer from sensitization of mucous membranes, headaches and dizziness, excitement or sedation, digestive disorders, dryness and cracking of the skin.

Hazards related to aspiration:
Based on the available information, classification criteria are not met.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity:

Aquatic environment:

Product: - fish  brook trout (Salvelinus fontinalis)  LC50(96 h) > 1000 mg/l  
- carp (Ciprinus carpio)  LC50(96 h) > 1000 mg/l  
- large daphnia (Daphnia magna)  EC50(48 h) 302,3 mg/l  
- algae (Scenedesmus quadricauda)  IC50(72 h) > 100 mg/l

Sediment:
Examination of toxic effects on species in sediment: no data.

Land environment:
Examination of toxic effects on invertebrates: no data.
Examination of toxic effects on plants: no data.
Examination of toxic effects on earthworms: no data.

12.2. Persistence and biodegradability
Sulphur: as a result of microbiological decomposition in soil, unbound sulphur is oxidized to sulfate (aerobic conditions) or reduced to sulfide (anaerobic conditions).
12.3. Bioaccumulation
No data.

12.4. Mobility in soil
No data.

12.5. PBT and vPvB assessment results
No data.

12.6. Other hazardous effects
No data.

### SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste disposal methods
Waste management recommended if possible. If it is not possible, dispose in accordance with applicable regulations.

Rinse contaminated packaging with water three times, then pour the liquid into the spraying machine container with process fluid. Emptied and cleaned packaging is classified as municipal waste. IT IS NOT ALLOWED TO incinerate packaging of crop protection chemicals in-house. Packaging waste should be disposed of in accordance with applicable regulations.

The Act of 27 April 2001 on wastes (Journal of Laws No. 62, item 628, including further amendments).
The Act of 11 May 2001 on packaging and packaging waste (Journal of Laws No. 63, item 628; including further amendments).
Regulation of the Minister of Environment of 27 September 2001 on waste catalogue (Journal of Laws No. 112, item 1206, including further amendments).

### SECTION 14. TRANSPORT INFORMATION

The preparation is not subject to the regulations on the carriage of dangerous goods contained in ADR (road transport), RID (rail transport), IMDG (maritime transport).

14.1. UN number
Not applicable

14.2. Proper shipping name (UN)
Not applicable

14.3. Transportation hazard class
Not applicable

14.4. Packaging group
Not applicable

14.5. Environmental hazards
Not applicable

14.6. Special precautions for users
Not applicable

14.7. Bulk transport in accordance to MARPOL Annex II 73/78 and IBC Code
Not applicable

### SECTION 15. REGULATORY INFORMATION

15.1. Health, safety and environmental protection regulations related specifically to the substance or preparation.

Regulation of the Minister of Economy of 8 July 2010 on minimal requirements of the safety and health protection at work related with a

15.2. Chemical safety assessment

The manufacturer has not performed the assessment of the preparation chemical safety.

SECTION 16. OTHER INFORMATION

Modifications introduced in this revision:
Verification of the applicable regulations and a new Company address. Modified sections: 1, 15.

List of abbreviations used in this safety data sheet:

OEL Occupational Exposure Limit
STEL Short-Term Exposure Limit
TLV-C Threshold Limit Value - Ceiling
DNEL Derived No Effect Level
PNEC Predicted No Effect Concentration
LD₅₀ Median lethal dosage, at which the death of 50% of the tested animals is observed
LC₅₀ Median lethal concentration, at which the death of 50% of the tested animals is observed
vPvB Very Persistent and Very Bioaccumulative (substance)
PBT Persistent, Bioaccumulative and Toxic (substance)
RID Regulations concerning the international carriage of dangerous goods by rail
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG International Maritime Dangerous Goods Code

Literature and resources:
Regulations referred to in sections 2 – 15 of this material safety data sheet.
Information provided by Siarkopol TARNOBZRZEG Chemical Plants Ltd.

The full list of applicable R-phrases, hazard phrases, S-phrases and precaution phrases, which has not been provided in sections 2 - 15 of this material safety data sheet.

R11 Highly flammable product.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Recommendations related to personnel training:
All personnel handling the product should be trained in health risks, hygienic requirements, usage of personal protection equipment, accident prevention, rescue operations, etc.

Disclaimer: This material safety data sheet has been developed based on the composition and properties of the product ingredients contained in respective safety data sheets, information on product properties, applicable regulations and our current knowledge and experience. This material safety data sheet is not a product quality certificate. Information contained in this data sheet should be only used as guidance for safe handling during transport, distribution, usage and storage. Information contained in this safety data sheet refers only to the specific physical form of the product and its use being compliant with the intended use specified in the data sheet. Users of the product must ensure adherence to all applicable standards and regulations and they are responsible for the effects resulting from improper use of the information contained in this safety data sheet or improper application of the product.