

**SAFETY DATA SHEET****SWISS 400P**

According to Regulation (EC) No. 1907/2008

Issue Date: 29.11.2023

Revision Date: -

Version: 00

**1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

**PRODUCT NAME** SWISS 400P  
**APPLICATION** REVERSE OSMOSIS ANTISCALANT  
**SUPPLIER** SwissDesal GmbH  
Stadlerstrasse 35 - 8472 Seuzach - Switzerland  
Tel: +41335522201  
E-mail: info@swissdesal.eu  
**CONTACT PERSON** Luciano Ferreira

**2 HAZARD IDENTIFICATION****CLASSIFICATION OF THE SUBSTANCE OR MIXTURE****PRODUCT DEFINITION:** Mixture**CLASSIFICATION ACCORDING TO REGULATION (EC) 1272/2008 (CLP):** Not classified.**CLASSIFICATION ACCORDING TO DIRECTIVE 1999/45/EC [DPD]:** The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.**CLASSIFICATION:** Not classified.**PHYSICAL/CHEMICAL HAZARDS:** Not applicable.**HUMAN HEALTH HAZARDS:** Not applicable.**ENVIRONMENTAL HAZARDS:** Not applicable.

See Section 16 for the full text of the R phrases or H statements declared above.

See section 11 for more detailed information on health effects and symptoms.

**LABEL ELEMENTS****SIGNAL WORD:** No signal word.**HAZARD STATEMENTS:** No known significant effects or critical hazards.**PRECAUTIONARY STATEMENT(S):**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED Remove person to fresh air and keep 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.

P310 Immediately call a POISON CENTER or doctor/ physician.

**SPECIAL PACKAGING REQUIREMENTS****CONTAINERS TO BE FITTED WITH CHILD RESISTANT FASTENINGS:** Not applicable.**TACTILE WARNING OF DANGER:** Not applicable.**OTHER HAZARDS****SUBSTANCE MEETS THE CRITERIA FOR:** Not applicable.**PBT ACCORDING TO REGULATION (EC) NO. 1907/2006, ANNEX XIII****SUBSTANCE MEETS THE CRITERIA FOR:** Not applicable.**VPVB ACCORDING TO REGULATION (EC) NO. 1907/2006, ANNEX XIII**

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**OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION:** Not applicable

### **3 COMPOSITION/INFORMATION ON INGREDIENTS**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

### **4 FIRST AID MEASURES**

**EYE CONTACT:** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**INHALATION:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**SKIN CONTACT:** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**INGESTION:** Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

#### **MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:**

##### **POTENTIAL ACUTE HEALTH EFFECTS**

**EYE CONTACT:** No known significant effects or critical hazards.

**INHALATION:** Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**SKIN CONTACT:** No known significant effects or critical hazards.

**INGESTION:** No known significant effects or critical hazards.

##### **OVER-EXPOSURE SIGNS/SYMPTOMS:**

**EYE CONTACT:** No specific data.

**INHALATION:** No specific data.

**SKIN CONTACT:** No specific data.

**INGESTION:** No specific data

##### **INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:**

**NOTES TO PHYSICIAN:** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**SPECIFIC TREATMENTS:** No specific treatment.

### **5 FIRE FIGHTING MEASURES**

**SUITABLE EXTINGUISHING MEDIA:** Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**UNSUITABLE EXTINGUISHING MEDIA:** None known.

#### **SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE**

**HAZARDS FROM THE SUBSTANCE OR MIXTURE:** In a fire or if heated, a pressure increase will occur and the container may burst.

**HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:** Decomposition products may include the following materials:

Carbon monoxide, Carbon dioxide, Nitrogen oxides, Phosphorus oxides, Phosphine

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#### **ADVICE FOR FIREFIGHTERS**

**SPECIAL PROTECTIVE ACTIONS FOR FIRE-FIGHTERS:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

**ADDITIONAL INFORMATION:** Not available.

#### **6 ACCIDENTAL RELEASE MEASURES**

##### **PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:**

**FOR NON-EMERGENCY PERSONNEL:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**FOR EMERGENCY RESPONDERS:** If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**ENVIRONMENTAL PRECAUTIONS:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). May be harmful to the environment if released in large quantities.

##### **METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP**

**SMALL SPILL:** Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**LARGE SPILL:** Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

**REFERENCE TO OTHER SECTIONS:** See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

#### **7 HANDLING AND STORAGE**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

##### **PRECAUTIONS FOR SAFE HANDLING**

**PROTECTIVE MEASURES:** Put on appropriate personal protective equipment (see section 8).

**ADVICE ON GENERAL OCCUPATIONAL HYGIENE:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove

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contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:** Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

#### **SPECIFIC END USE(S)**

**RECOMMENDATIONS:** Not available.

**INDUSTRIAL SECTOR SPECIFIC SOLUTIONS:** Not available.

### **8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### **CONTROL PARAMETERS**

**OCCUPATIONAL EXPOSURE LIMITS:** No exposure limit value known.

**RECOMMENDED MONITORING PROCEDURES:** If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

#### **EXPOSURE CONTROLS**

**APPROPRIATE ENGINEERING CONTROLS:** No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

#### **INDIVIDUAL PROTECTION MEASURES**

**HYGIENE MEASURES:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**EYE/FACE PROTECTION:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

#### **SKIN PROTECTION**

**HAND PROTECTION:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**BODY PROTECTION:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**OTHER SKIN PROTECTION:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE:	Liquid
APPEARANCE:	Colorless to yellowish
ODOR:	Odorless
pH (100%) (25 °C):	10.5 ± 1.00
RELATIVE DENSITY (25 °C):	1.34 ± 0.05 g/cm <sup>3</sup>
SOLUBILITY(IES):	Miscible in water.

**NOTE:** These physical properties are typical values for this product and are subject to change.

**10 STABILITY AND REACTIVITY**

**REACTIVITY:** No specific test data related to reactivity available for this product or its ingredients.

**CHEMICAL STABILITY:** The product is stable.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Under normal conditions of storage and use, hazardous reactions will not occur.

**CONDITIONS TO AVOID:** No specific data.

**INCOMPATIBLE MATERIALS:** Reactive or incompatible with the following materials: Metals, Acids, Oxidizing materials.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**11 TOXICOLOGICAL INFORMATION****ACUTE TOXICITY**

Product/ingredient name	Result	Species	Dose	Exposure
SWISS 400P				
	LD50 Oral	Rat	>5.000 mg/kg	-
	LD50 Dermal	Rabbit	>5.000 mg/kg	

**CONCLUSION/SUMMARY:** Conclusive but not sufficient for classification.

**IRRITATION/CORROSION**

**SKIN:** Non-irritating to the skin.

**EYES:** Conclusive but not sufficient for classification.

**SENSITIZATION**

**SKIN:** Conclusive but not sufficient for classification.

**RESPIRATORY:** Conclusive but not sufficient for classification.

**MUTAGENICITY**

**CONCLUSION/SUMMARY:** Conclusive but not sufficient for classification.

**CARCINOGENICITY**

**CONCLUSION/SUMMARY:** Conclusive but not sufficient for classification.

**REPRODUCTIVE TOXICITY**

**CONCLUSION/SUMMARY:** Conclusive but not sufficient for classification.

**TERATOGENICITY**

**CONCLUSION/SUMMARY:** Conclusive but not sufficient for classification.

**SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)**

Product/ingredient name	Category	Route of exposure	Target organs
SWISS 400P	Category 3		Respiratory tract irritation

**INFORMATION ON THE LIKELY ROUTES OF EXPOSURE:**

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#### POTENTIAL ACUTE HEALTH EFFECTS

**EYE CONTACT:** No known significant effects or critical hazards.

**INHALATION:** Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**SKIN CONTACT:** No known significant effects or critical hazards.

**INGESTION:** No known significant effects or critical hazards.

#### SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

**EYE CONTACT:** No specific data.

**INHALATION:** No specific data.

**SKIN CONTACT:** No specific data.

**INGESTION:** No specific data.

#### DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT AND LONG TERM EXPOSURE

##### SHORT TERM EXPOSURE

**POTENTIAL IMMEDIATE EFFECTS:** Not available.

**POTENTIAL DELAYED EFFECTS:** Conclusive but not sufficient for classification.

##### LONG TERM EXPOSURE

**POTENTIAL IMMEDIATE EFFECTS:** Not available.

**POTENTIAL DELAYED EFFECTS:** No data available for this end-point, hence this classification is not considered to be applicable.

##### POTENTIAL CHRONIC HEALTH EFFECTS

**CONCLUSION/SUMMARY:** Conclusive but not sufficient for classification.

**GENERAL:** No known significant effects or critical hazards.

**DEVELOPMENTAL EFFECTS:** No known significant effects or critical hazards.

##### TOXICOKINETICS

**ABSORPTION:** Not applicable

**DISTRIBUTION:** Not applicable

**METABOLISM:** Not applicable

**ELIMINATION:** Not applicable

**OTHER INFORMATION:** Not applicable.

#### **12 ECOLOGICAL INFORMATION**

##### **TOXICITY**

Product/ingredient name	Result	Species	Exposure
SWISS 400P			
	Acute LC50 15 mg/l Fresh water	Fish-Gambusia affinis	4 d

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	Acute LC50 > 100 mg/l	Fish-Oncorhynchus mykiss	96 h
	Acute > 100 mg/l Fresh water	Daphnia-Daphnia magna	48 h

**CONCLUSION/SUMMARY:** Conclusive but not sufficient for classification.

##### PERSISTENCE AND DEGRADABILITY

**CONCLUSION/SUMMARY:** No additional remark.

##### BIO-ACCUMULATIVE POTENTIAL

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Product/ingredient name	LogPow	BCF	Potential
SWISS 400P	-3,5	-	

**MOBILITY IN SOIL:** Not available**RESULTS OF PBT AND VPVB ASSESSMENT:** Not available**OTHER ADVERSE EFFECTS:** No known significant effects or critical hazards.**13 DISPOSAL CONSIDERATIONS**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**WASTE TREATMENT METHODS****PRODUCT:**

**METHODS OF DISPOSAL:** The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**HAZARDOUS WASTE:** Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

**EUROPEAN WASTE CATALOGUE (EWC)**

Waste Code	Waste designation
	Not available

**PACKAGING:**

**METHODS OF DISPOSAL:** The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**SPECIAL PRECAUTIONS:** This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**14 TRANSPORT INFORMATION****UN NUMBER:****ADR/RID:** -**IMDG:** -**IATA:** -**UN PROPER SHIPPING NAME****ADR/RID:** Not dangerous goods**IMDG:** Not dangerous goods**IATA:** Not dangerous goods**TRANSPORT HAZARD CLASS(ES)****ADR/RID:** -**IMDG:** -**IATA:** -**PACKAGING GROUP****ADR/RID:** -**IMDG:** -**IATA:** -**ENVIRONMENTAL HAZARDS****ADR/RID:** no**IMDG Marine pollutant:** no**IATA:** no**SPECIAL PRECAUTIONS FOR USER:** No data available



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**15 REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

This product has received NSF/International certification under ANSI/NSF Standard 60 in the reverse osmosis antiscalant category. The official name is "Miscellaneous Water Supply Products." Maximum product application dosage is : 10 mg/l.

**SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE****EU REGULATION (EC) NO. 1907/2006 (REACH)****ANNEX XIV - LIST OF SUBSTANCES SUBJECT TO AUTHORIZATION****SUBSTANCES OF VERY HIGH CONCERN****CARCINOGEN:****MUTAGEN:****TOXIC TO REPRODUCTION:****PBT:****VPVB:**

**ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES:** Not applicable.

**OTHER EU REGULATIONS**

**EUROPE INVENTORY:** Listed

**INTEGRATED POLLUTION PREVENTION AND CONTROL LIST (IPPC) - AIR:** Not listed

**INTEGRATED POLLUTION PREVENTION AND CONTROL LIST (IPPC) - WATER:** Not listed

**AEROSOL DISPENSERS:** Not applicable.

**NATIONAL REGULATIONS****INTERNATIONAL REGULATIONS**

**CHEMICAL WEAPONS CONVENTION LIST SCHEDULE I CHEMICALS:** Not listed

**CHEMICAL WEAPONS CONVENTION LIST SCHEDULE II CHEMICALS:** Not listed

**CHEMICAL WEAPONS CONVENTION LIST SCHEDULE III CHEMICALS:** Not listed

**CHEMICAL SAFETY ASSESSMENT:** Not applicable.

**16 OTHER INFORMATION**

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

**EMERGENCY TELEPHONE NUMBER(S):** 0 850 522 71 04

**SDS Authorized Person:** SILA ARSLAN

**Certificate Validity Date:** 09.10.2028

**Certificate No:** TÜV/ 11.214.09