

# Safety Data Sheet

düring ag

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

Revision Date: 27.10.14

Print Date: 27.10.14

Revision: dss\_2014\_V.1 en

## durgol® swiss steamer

### 1. Identification of the Substance/Mixture and the Company/Undertaking

1.1	Product name:	durgol® swiss steamer
1.2	Relevant identified uses of the substance or mixture:	Special decalcifier
1.3	Manufacturer:	düring ag Brunnenwiesenstrasse 14 CH-8108 Dällikon
1.4	Telephone/Technical Information:	+41 44 847 27 47 Mon-Fri: 8:00-12:00 and 13:30-16:30 (Fri.-16:00)
	Homepage:	www.dueringag.ch
	Fax:	+41 44 844 38 90
	E-mail address:	info@dueringag.ch
1.5	Distributor/Importer:	Frieling USA, Inc. 398 York Southern Rd Fort Mill, SC 29715-7715 - USA
	Telephone:	+1 704 329 51 00
1.6	Emergency telephone number:	145 or +41 44 251 51 51
	Swiss Toxicological Information Centre, Zurich	+49 30 306 867 90
	Poison emergency center of the Charité - University of medicine, Berlin	

### 2. Identification of potential hazards

2.1 Classification of the substance or mixture according to Directive 67/548/EEC and 1999/45/EC:

**The product is a hazardous preparation and needs to be labeled.**

2.2 Label elements in accordance with Annex II to Directive 67/548/EEC and 1999/45/EC:

Symbol of danger:



Xi / Irritant

Hazard-determining components of labelling:

Contains: Phosphoric acid and hydrochloric acid

2.3 Hazard warnings according to Directive 67/548/EEC Annex III (R-phrases):

**R36/38** Irritating to eyes and skin.

2.4 Safety precautions according to Directive 67/548/EEC Annex IV (S-phrases):

**S2** Keep out of the reach of children.

**S24/25** Avoid contact with skin and eyes.

**S26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**S28.1** After contact with skin, wash immediately with plenty of water.

**S46** If swallowed, seek medical advice immediately and show this container or label.

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### 2. Continuation

2.5 Classification of the substance or mixture according to Regulation (EC) No 1272/2008, Annex VII:

**Skin Irrit. 2, H315 / Eye Irrit. 2, H319**

2.6 Label elements in accordance with Regulation (EC) No 1272/2008, Annex VII:

Icon:



GHS07

Signal word:

Warning

Hazard-determining components of labelling:

Contains: **Phosphoric acid and hydrochloric acid**

2.7 Hazard warnings according to GHS/Regulation (EC) No 1272/2008 (H-phrases):

Health Hazards:

**H315** Causes skin irritation.

**H319** Causes serious eye irritation.

2.8 Safety precautions according to GHS/Regulation (EC) No 1272/2008 (P-phrases):

General:

**P102** Keep out of reach of children.

Prevention:

**P280** Wear protective gloves/eye protection.

Reaction:

**P302+P352** IF ON SKIN: Wash with plenty of soap and water.

**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**P332+P313** If skin irritation occurs: Get medical advice/attention.






**P337+P313** If eye irritation persists: Get medical advice/attention.

### 3. Composition/Information on ingredients

3.1 Chemical characterization:

The product is an aqueous mixture with inorganic acids, which are in the existing concentrations slightly dangerous.

3.2 Hazardous Ingredients:

CAS-No.	EC-No.	Index-No.	Name of substance	Content
7664-38-2	231-633-2	015-011-00-6	Phosphoric acid  C, R34  Skin Corr. 1B, H314	< 25%
7647-01-0	231-595-7	017-002-01-X	Hydrochloric acid  C, R34, R37  Skin Corr. 1B, H314  STOT SE 3, H335 Aquatic Chronic 3, H412	< 5%

Additional Information:

The wording of the risk phrases is listed in Section 16.3

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### 4. First-Aid measures

#### 4.1 General information:

Remove contaminated clothing immediately. If you feel unwell, consult a doctor/medical service. Show this datasheet or the label.

#### 4.2 After inhalation:

If vapour or mist was inhaled, breathe fresh air. In case of irritation of the respiratory system seek medical attention.

#### 4.3 After skin contact:

Wash affected skin with soap and plenty of water.

#### 4.4 After eye contact:

Remove any contact lenses. Rinse opened eye for several minutes with plenty of water. If necessary, consult an ophthalmologist.

#### 4.5 After swallowing:

Rinse mouth thoroughly with water and drink plenty of water in small sips. Do not induce vomiting. In case of indisposition, seek medical advice.

### 5. Firefighting measures

#### 5.1 Extinguishing media:

Suitable extinguishing media:

Water spray, foam, carbon dioxide and powder.

Unsuitable extinguishing media:

Water spray jet.

#### 5.2 Specific hazards posed by the substance or mixture:

The product is not flammable. Upon contact with metals may evolve hydrogen gas (Risk of explosion).

#### 5.3 Advice for fire fighting:

Staying in hazard area only with protective clothing and a self-contained breathing apparatus. Cool endangered packagings and containers with sprayed water and, if possible, remove them out of the danger zone. Prevent the penetration of extinguishing water into surface water or groundwater.

### 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Do not breathe vapour or mist. Ensure adequate ventilation. Avoid skin and eye contact.

#### 6.2 Environmental protection measures:

Prevent the penetration of the product and large quantities of contaminated wash water in water and soil. Confine with sand or similar material. Collect product mechanically and fill it in marked vessels. Cover drains to prevent the entering of product into the canalisation, if necessary.

#### 6.3 Methods and materials for containment and cleaning:

Pump off large quantities of product. Take up residues with absorbent materials (sand, sawdust etc.), collect it in suitable containers and dispose it in accordance to official regulations. Dilute small spilled quantities (up to approx. 1 Liter) with much water and dispose it in the drains.

#### 6.4 Reference to other sections:

Observe protective measures in sections 7., 8. and 13.

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### 7. Handling and Storage

#### 7.1 Precautions for Safe Handling:

Do not leave containers open. Avoid contact with eyes and skin. Use only in well ventilated areas. Avoid the formation of aerosols.

Measures to protect against fire and explosions:

The product is not flammable and not explosive.

General hygiene measures:

In areas where people work with the product, do not eat, drink or smoke. Wash hands after use.

#### 7.2 Conditions for safe storage, including incompatibilities:

Information about storage conditions:

Store product in original container tightly closed in a cool, well ventilated place. Do not store together with medicines, foods, beverages or feedstuffs.

Storage class: 8B (VCI) Non flammable corrosive substances.

Recommended storage conditions: 5 - 30°C

durability: At least 3 years

#### 7.3 Specific end uses:

Special decalcifier for high-quality steamers of all brands. Additional information, please refer to the label, or our website: [www.dueringag.ch](http://www.dueringag.ch)

### 8. Exposure control/Personal protection

#### 8.1 Control parameters:

##### 8.1.1 Components with workplace control parameters:

8.1.1.1 Substance name:	Phosphoric acid				
CAS-No.:	7664-38-2	EC-No.:	231-633-2	Index-No.:	015-011-00-6
Specification:	TRGS 900 - AGW (Air limit values at the work place; Status 09/13/2012)				
AGW:	-	ml/m <sup>3</sup> (ppm)	2 E	mg/m <sup>3</sup>	
Peak limitation category:	2(I)				
Remarks:	DFG, EU, AGS, Y				
	Y = These are substances for which a risk of foetal damages under the AGW (air limit values at the work place) and BGW (biological limit values) need not be feared.				
Specification:	2000/39/EC				
STEL (Short-term value):	-	ml/m <sup>3</sup> (ppm)	2	mg/m <sup>3</sup>	
	In a period of 15 minutes the threshold concentration shall not be exceeded.				
8h TWA (Long-term value):	-	ml/m <sup>3</sup> (ppm)	1	mg/m <sup>3</sup>	
Other limits:					
DNEL values:	2.92	mg/m <sup>3</sup>	Workers, long-term exposure, inhalation		
	0.73	mg/m <sup>3</sup>	Population, long-term exposure, inhalation		
PNEC values:	No data available				
NOAEL/NOAEC values:	876	mg/m <sup>3</sup>	based on AF 300		
	438	mg/m <sup>3</sup>	based on AF 600		

Notes and comments:

None

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### 8. Continuation

8.1.1.2	<b>Substance name:</b>	Hydrochloric acid				
	CAS-No.:	7647-01-0	EC-No.:	231-595-7	Index-No.:	017-002-01-X
	Specification:	TRGS 900 - AGW (Air limit values at the work place; Status 09/13/2012)				
	AGW:	2	ml/m <sup>3</sup> (ppm)	3	mg/m <sup>3</sup>	
	Peak limitation category:	2(I)				
	Remarks:	DFG, EU, Y				
		Y = These are substances for which a risk of foetal damages under the AGW (air limit values at the work place) and BGW (biological limit values) need not be feared.				
	Specification:	2000/39/EC				
	STEL (Short-term value):	10	ml/m <sup>3</sup> (ppm)	15	mg/m <sup>3</sup>	
		In a period of 15 minutes the threshold concentration shall not be exceeded.				
	8h TWA (Long-term value):	5	ml/m <sup>3</sup> (ppm)	8	mg/m <sup>3</sup>	
	Other limits:					
	DNEL values:	15	mg/m <sup>3</sup>	Workers, short-term exposure, inhalation		
		8	mg/m <sup>3</sup>	Workers, long-term exposure, inhalation		
	PNEC values:	36	µg/l (Freshwater)			
		36	µg/l (Seawater)			
		36	µg/l (Sewage treatment plants)			
		45	µg/l (Sporadic release)			
	NOAEL/NOAEC values:	No data available				
	Notes and comments:					

None

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

Technical measures are not required for the application of the product.

8.2.2 Individual protection measures/Personal protective equipment:

Eye/Face protection:



A special eye / face protection is not required. A direct eye contact with the product should be avoided.

Skin protection:

Gloves:



A special skin protection is not required. A direct skin contact with the product should be avoided.

Body protection:



A special protective equipment is not required.

Respiratory protection:



When used as directed, a respiratory protection is not necessary.

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### 9. Physical and chemical Properties

#### 9.1 Information on basic physical and chemical properties:

Physical state:	Liquid		
Colour:	Colorless		
Odour:	Weak, characteristic		
pH value [20°C] undiluted:	< 1		DIN 19268
Melting point/freezing point:	ca. 0	°C	According to Tottoli
Initial boiling point/boiling range:	ca. 100	°C	DIN 38404 C4-2
Flash point:	Not applicable		
Flammability:	The product is not flammable or explosive.		
Lower flammability or explosive limits:	Not applicable		
Upper flammability or explosive limits:	Not applicable		
Vapour pressure [50°C]:	120.0	hPa	Calculated
Relative density [20°C]:	1.14	g/cm <sup>3</sup>	DIN 51 757 D
Water solubility:	The product is completely miscible.		
Dynamic viscosity [25°C]:	2.80	cP (mPa s)	DIN 53 221
Kinematic viscosity [25°C]:	2.46	cSt	Calculated
VOC content:	Not applicable		

#### 9.2 Additional information:

No data available.

### 10. Stability and reactivity

#### 10.1 Reactivity:

Reacts with strong oxidants and bases under intense generation of heat. Reacts rapidly with carbonates to form carbon dioxide.

#### 10.2 Chemical stability:

Under standard ambient conditions (room temperature), the product is chemically stable.

#### 10.3 Possibility of hazardous reactions:

When used as directed no hazardous reactions are expected.

#### 10.4 Conditions to avoid:

The product should not be used in combination with other cleaning/descaling agents.

#### 10.5 Incompatible materials:

Acid-labile resins (POM), inferior stainless steel, thin/damaged chrome plating, silver and marble are attacked.

#### 10.6 Hazardous decomposition products:

Under normal conditions, hazardous decomposition products are not expected. Upon contact with metals may evolve hydrogen gas (Risk of explosion).

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### 11. Toxicological Information

#### 11.1 Information on toxicological effects:

There are no toxicological findings on the product/mixture.

#### 11.2 Acute toxicity:

##### 11.2.1 **Substance name:** Phosphoric acid

CAS-No.: 7664-38-2 EC-No.: 231-633-2 Index-No.: 015-011-00-6

##### Acute toxicity:

##### Toxicity values:

LD50 (oral, rat), 1530 mg/kg (IUCLID)

LC50 (1h) (inhalation, rabbit), 1.69 mg/l (IUCLID)

LD50 (dermal, rabbit), 2740 mg/kg (IUCLID)

##### Irritating effects:

Skin (rabbit), OECD 404 (2.5%), no skin irritation (IUCLID)

Skin (rabbit), 24h (80%), severe skin irritation (IUCLID)

Eyes (rabbit), OECD 405 (10% and 17%), no eye irritation (IUCLID)

##### Corrosive effects:

Strong corrosive effect to skin and mucous membranes (conventional method).

##### Sensitizing effects:

Based on the available data, the classification criteria are not fulfilled (Conventional method). So far, no sensitizing effects are known.

##### Germ cell mutagenicity:

No data available

##### Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

##### Reproductive toxicity:

No data available

##### Specific target organ toxicity - single exposure:

No data available

##### Specific target organ toxicity - repeated exposure:

No data available

##### Aspiration hazard:

No data available

##### Potential health effects:

##### Inhalation:

Inhalation (aerosols) can cause irritation of the upper respiratory tract.

##### Ingestion:

Causes gastrointestinal upset and irritation of mucous membranes. In severe cases, possible formation of coagulation necrosis.

##### Skin:

Causes burns to skin and mucous membranes.

##### Eyes:

Direct eye contact may cause burns.

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## 11. Continuation

11.2.2 **Substance name:** Hydrochloric acid  
CAS-No.: 7647-01-0 EC-No.: 231-595-7 Index-No.: 017-002-01-X

Acute toxicity:

Toxicity values:

LD50 (oral, rat), 700 mg/kg (IUCLID)

LD50 (oral, rabbit), 900 mg/kg (IUCLID)

LC50 (1h) (inhalation, rat), 3124 mg/l (IUCLID)

LD50 (dermal, rabbit), > 5010 mg/kg (IUCLID)

Irritating effects:

Skin (rabbit), 0.5 ml (1%) daily for 5 days, no skin irritation (IUCLID)

Skin (rabbit), 0.5 ml (3.3%) daily for 5 days, severe skin irritation (IUCLID)

Eyes (rabbit), 0.1 ml (0.33%) 48h, no eye irritation (IUCLID)

Eyes (rabbit), 0.1 ml (3.3%) 48h, slight eye irritation (IUCLID)

Corrosive effects:

Based on the available data, the classification criteria are not fulfilled (Conventional method).

Sensitizing effects:

Based on the available data, the classification criteria are not fulfilled (Conventional method). So far, no sensitizing effects are known.

Germ cell mutagenicity:

No data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity:

No data available

Specific target organ toxicity - single exposure:

No data available

Specific target organ toxicity - repeated exposure:

No data available

Aspiration hazard:

No data available

Potential health effects:

Inhalation:

Inhalation (aerosols) can lead to caustic effects in the upper respiratory tract.

Ingestion:

Causes gastrointestinal upset and irritation of mucous membranes. In severe cases, possible formation of coagulation necrosis.

Skin:

Causes burns to skin and mucous membranes.

Eyes:

Direct eye contact may cause burns.



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### 11. Continuation

#### 11.2.3 Signs and Symptoms of Exposure:

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Symptoms and signs of poisoning are: burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, Nausea, Vomiting. Inhalation may provoke the following symptoms: spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx. Aspiration or inhalation may cause chemical pneumonitis.

#### 11.3 Additional Information:

RTECS: no data available

The information/values are valid for the pure substances and not for the mixture (product).

### 12. Ecological Information

#### 12.1 Aquatic toxicity:

##### 12.1.1 Substance name: Phosphoric acid

CAS-No.: 7664-38-2 EC-No.: 231-633-2 Index-No.: 015-011-00-6

Toxicity values:

Acute Toxicity to Fish:

Lepomis macrochirus (bluegill); static (96h); 70.3 mg/l; 50% mortality at pH 3-3.5; LD50 equivalent dose; sublethal effects even at higher pH values (IUCLID)

Acute Toxicity to Aquatic Invertebrates:

Daphnia magna; EC50 (12h); > 29 mg/l; 50% mortality at pH 4.6; LD50 equivalent dose (IUCLID)

Daphnia pulex; EC50 (12h); 50% mortality at pH 4.1; LD50 equivalent dose (IUCLID)

Toxicity to Aquatic Plants e.g. Algae:

No data available

Toxicity to Microorganisms e.g. Bacteria:

Sewage treatment plant, Activated sludge (anaerobic); EC50 (24h); 270 mg/l; pH 2.8 (IUCLID)

Chronic Toxicity to Fish:

No data available

Chronic Toxicity to Aquatic Invertebrates:

No data available

##### 12.1.2 Substance name: Hydrochloric acid

CAS-No.: 7647-01-0 EC-No.: 231-595-7 Index-No.: 017-002-01-X

Toxicity values:

Acute Toxicity to Fish:

Leuciscus idus (Ide); LC50 (48h); 862 mg/l (IUCLID)

Gambusia affinis (Mosquitofish); LC50 (96h); 282 mg/l (IUCLID)

Acute Toxicity to Aquatic Invertebrates:

Daphnia magna; LC80 (72h); 56 mg/l (IUCLID)

Toxicity to Aquatic Plants e.g. Algae:

No data available

Toxicity to Microorganisms e.g. Bacteria:

No data available

Chronic Toxicity to Fish:

No data available

Chronic Toxicity to Aquatic Invertebrates:

No data available

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## 12. Continuation

### 12.2 Persistence and degradability:

The surfactants contained in this product comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

DOC-Elimination: Not determined

Mineralization: Not determined

The biodegradability of this product has no relevance because the theoretical degradable organic content is below 0.1%.

### 12.3 Bioaccumulative potential:

No data available

### 12.4 Mobility in soil:

No data available

### 12.5 Results of PBT and vPvB assessment:

No data available

### 12.6 Other adverse effects:

No data available

## 13. Disposal considerations

### 13.1 Waste treatment methods:

According to the Waste Catalogue Ordinance 2001/118/EC (AVV) the product/product leftovers are not classified as a hazardous waste. If recycling is not possible, waste must be removed in compliance with local regulations.

#### 13.1.1 Product:

Waste code according to Waste Catalogue 2001/118/EC Regulation (AVV):

**20 01 30**

**Detergents**

Recommendation:

The correct waste code number has to be determined in accordance with the local waste disposer.

#### 13.1.2 Packaging:

Packing material:

**PET (bottles); HD-PE (canisters)**

Contaminated packaging:

**Empty, not dried out container must be disposed of as containers of harmful residues.**

Waste code according to Waste Catalogue 2001/118/EC Regulation (AVV):

**15 01 02**

**Plastic packaging**

Cleaned packaging:

**Uncontaminated and cleaned packaging can be recycled.**

Recommended cleaning agent:

**Water**

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### 14. Transport Information

#### 14.1 General information:

The product (mixture / preparation) is according to current classifications no dangerous goods within the meaning of ADR / RID and IATA transport regulations. According to the IMDG Code, this product can be classified as hazardous depending on the particular quantity limits. In this case, the following information applies.

14.2 UN-Number (ADR / RID, IMDG, IATA): 3264

#### 14.3 UN proper shipping name:

ADR/RID: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONT. PHOSPHORIC ACID AND HYDROCHLORIC ACID)

IMDG, IATA: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONT. PHOSPHORIC ACID AND HYDROCHLORIC ACID)

UN Model Regulations:

UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONT. PHOSPHORIC ACID AND HYDROCHLORIC ACID), 8, III, (E)

#### 14.4 Transportation hazard class and transport labeling:

Class (ADR / RID, IMDG, IATA):

8  
Corrosive materials



Classification Code (ADR):

C1

14.5 Packing Group (ADR / RID, IMDG, IATA):

III

14.6 Transport category (ADR):

3

Maximum total quantity per transport unit (ADR):

1000 kg

Limited and exempted amount (ADR):

5 L (22 L equivalent amount)

#### 14.7 Environmental hazards:

ADR/RID:

No

IMDG Marine pollutant:

No

#### 14.8 Special precautions for user:

Ems-No.:

F-A, S-B

Hazchem Code:

2Z

Hazard no. (Kemler):

80

Corrosive or slightly corrosive substance

Tunnel restriction code:

E

#### 14.9 Additional information:

The above information are based on the regulations of ADR 2013, the IMDG Code 2013 (Amdt. 36-12) and the IATA 2013 (54.). Other precautions for user: Refer to section 6. and 8.

### 15. Regulatory Information

#### 15.1 Safety, health and environmental regulations / Legislation specific for the substance or mixture:

The product is hazardous or classified as dangerous under Directives 1999/45/EC and Regulations (classification, packaging and labeling of dangerous preparations), 67/548/EEC (packaging and labeling regulation) and (EC) 648 / 2004 (Detergent). The designated rules will be replaced on 1 June 2015 by the CLP Regulation (EC) 1272/2008 as part of the GHS.

#### 15.2 EU legislation:

Regulation (EC) No 2037/2000 (Substances that deplete the ozone layer):

Not applicable

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Regulation (EC) No 850/2004 (Persistent Organic Pollutants):

**Not applicable**

Regulation (EC) No 689/2008 (Export and import of dangerous chemicals):

**Not applicable**

Regulation (EC) No 648/2004 (Detergent):

**The product (mixture/preparation) meets the criteria laid down in Regulation (EC) No 648/2004.**

Restrictions set forth in Title III of Regulation (EC) No 1907/2006 (REACH):

**Not applicable**

### 15.3 National regulations:

Water hazard class according VwVwS, Annex 4:

**1 (weakly water polluting)**

Solvents Regulation (31. BImSchV):

VOC content: **Not applicable**

Hazardous Incident Ordinance (12. BImSchV):

**Not applicable**

Technical Instructions on Air Quality (TA-Luft; Germany):

**Not applicable**

Reference to technical rules for hazardous substances (TRGS):

**TRGS 900 (Occupational Exposure Limits, OEL's)**

### 15.4 Chemical safety assessment:

**The product (mixture/preparation) was not subjected to safety assessment.**

## 16. Other Information

### 16.1 Changes since the last version:

**None**

Author of the safety data sheet:

**Dr. H. Hopfstock, Duering AG, Division R&D/QA, herbert.hopfstock@dueringag.ch**

### 16.2 Literature and data sources:

Regulations:

**Preparation Directive 1999/45/EC, as last amended by Regulation (EC) No 1907/2006.**

**Substances Directive 67/548/EEC, as last amended by Directive 2009/2/EC.**

**REACH Regulation (EC) No 1907/2006, as last amended by Regulation (EC) No 253/2011.**

**CLP Regulation (EC) No 1272/2008, as amended by Regulation (EC) No 790/2009.**

**AGW Directives 2000/39/EC of 8 June 2000; 2006/15/EC of 7 February 2006 and 2009/161/EC of 17 December 2009.**

Internet:

**<http://esis.jrc.ec.europa.eu>**

**<http://www.bag.admin.ch/>**

### 16.3 Hazard warnings which are referred in section 2. and 3.:

According to directive 67/548/EEC and Dangerous Preparations Directive 1999/45/EC:

**R34 Causes burns.**

**R37 Irritating to respiratory system.**

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According to the CLP Regulation (EC) No 1272/2008:

Skin Corr. 1B; H314; Skin corrosion; Causes severe skin burns and eye damage.

STOT SE 3; H335; Specific target organ toxicity (single exposure), Category 3; May cause respiratory irritation.

Aquatic Chronic 3, H412; CHRONIC AQUATIC TOXICITY - Category 3; Harmful to aquatic life with long lasting effects.

16.4 Methods according to Article 9 of the Regulation (EC) No 1272/2008 of the evaluation of data for classification purposes:

Classification in accordance with Regulation (EC) No 1272/2008, Annex VII (Conversion table).

16.5 Other product-related information:

None

16.6 Abbreviations used:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AF	Overall assessment factor
AGS	Ausschuss für Gefahrstoffe (Committee on Hazardous Substances)
AGW	Occupational Exposure Limits, OEL
BImSchV	Ordinance for the implementation of the Federal Pollution Control Act
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging (Regulation)
DFG	German Research Foundation
DIN	Standards of the German Institute for Standardization
DNEL	Derived No Effect Level
DOC	Dissolved Organic Carbon
EC	Effective concentration
EG	European Community (EC)
EWG	European Economic Community (EEC)
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
HD-PE	High density polyethylene, thermoplastic
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods - International Regulations for the carriage of dangerous goods by sea
IUCLID	International Uniform Chemical Information Database
LC	Lethal concentration
LD	Lethal dose
NIOSH	US National Institute of Occupational Safety & Health
NOAEL/NOAEC	No Observed Adverse Effect Level/Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, bioaccumulative, toxic
PET	Polyethylene terephthalate, thermoplastic
PNEC	Predicted No Effect Concentration
POM	Polyoxymethylene (polyacetal) thermoplastic

# Safety Data Sheet

düring ag

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

Revision Date: 27.10.14

**durgol® swiss steamer**

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Revision: dss\_2014\_V.1 en

## 16. Continuation

REACH	Registration, Evaluation and Authorisation of Chemicals (Regulation)
RID	Rules for international carriage of dangerous goods by rail
RTECS	Registry of Toxic Effects of Chemical Substances
STEL	Short-Term Exposure Limit
TRGS	Technical Rules for Hazardous Substances
UN	United Nations
VCI	Association of Chemical Industry (Germany)
VOC	Volatile Organic Compounds
vPvB	Very persistent and very bioaccumulative
VwVwS	Administrative Regulation on substances hazardous to water (Germany)

This safety data sheet corresponds to Article 31 and Annex II of the REACH Regulation (EC) No 1907/2006 (as amended by Regulation (EU) No 453/2010). The above information is based on our present knowledge and describes the safety requirements of the substances or the product (Mixture/Preparation), however they are no assurance of product properties and do not justify a contractual legal relationship.