

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : S-RSD-PE 0600/1 GOLD FOLCO SOL S-RSD-PE

Article-No. : 17131-002

Revision Date : 09.01.2017

Version : 1 /en

FOLMANN

Replaces version from : 09.01.2017

Print date : 23.03.2017

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

1.1 Product identifier

Commercial Product Name S-RSD-PE 0600/1 GOLD FOLCO SOL S-RSD-PE

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

Relevant identified uses wallpaper

1.3 Details of the supplier of the safety data sheet

Address Follmann GmbH & Co. KG
Postfach 12 63
D-32372 Minden
Telephone : +49 (571) 93 39 -0
FAX : +49 (571) 93 39 -300

Responsible Department Environmental Department +49 (571) 9339-176

E-mail (competent person) sicherheitsdatenblatt@follmann.de

1.4 Emergency telephone number

Emergency telephone number Outside USA: -001 703 527 3887 (D813)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 Resp. Sens. 1; H334 Aquatic Acute 1; H400 Aquatic Chronic 1; H410

2.2 Label elements

Hazard pictogram



GHS08



GHS09

Signal word

Danger

Hazardous component(s) to be indicated on label

C , C'-azodi(formamide) , C , C'-azodi(formamide) , ethylenediamine , 1 , 2-diaminoethane , ethylenediamine , 1 , 2-diaminoethane

H-statement(s)

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H410: Very toxic to aquatic life with long lasting effects.

P-statement(s)

P273: Avoid release to the environment.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P391: Collect spillage.

SECTION 3: Composition/information on ingredients

3.2 Mixture

Chemical characterization

polyvinylchloride compounded with plasticizer and blowing agent

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Hazardous ingredients

Ingredient		Classification (EC) 1272/2008	SVHC	Concentration
COPPER	CAS No. : 7440-50-8 EC-No. : 231-159-6 REACH No. : 01-2119480154-42-XXXX	Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 2; H411		10.0 – 15.0 % by weight
COPPER	CAS No. : 7440-50-8 EC-No. : 231-159-6 REACH No. : 01-2119480154-42-XXXX	Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 2; H411		10.0 – 15.0 % by weight
C,C'-azodi(formamide)	CAS No. : 123-77-3 EC-No. : 204-650-8 Index-No. : 611-028-00-3 REACH No. : 01-2119493056-35-XXXX	Resp. Sens. 1; H334	✓	1.0 – 5.0 % by weight
C,C'-azodi(formamide)	CAS No. : 123-77-3 EC-No. : 204-650-8 Index-No. : 611-028-00-3 REACH No. : 01-2119493056-35-XXXX	Resp. Sens. 1; H334	✓	1.0 – 5.0 % by weight
zinc powder – zinc dust (stabilised)	CAS No. : 7440-66-6 EC-No. : 231-175-3 Index-No. : 030-002-00-7 030-001-01-9 REACH No. : 01-2119467174-37-XXXX	Aquatic Acute 1; H400 Aquatic Chronic 1; H410		1.0 – 5.0 % by weight
zinc powder – zinc dust (stabilised)	CAS No. : 7440-66-6 EC-No. : 231-175-3 Index-No. : 030-002-00-7 030-001-01-9 REACH No. : 01-2119467174-37-XXXX	Aquatic Acute 1; H400 Aquatic Chronic 1; H410		1.0 – 5.0 % by weight
ethylenediamine, 1,2- diaminoethane	CAS No. : 107-15-3 EC-No. : 203-468-6 Index-No. : 612-006-00-6 REACH No. : 01-2119480383-37-XXXX	Flam. Liq. 3; H226 Acute Tox. 4; H302 Acute Tox. 3; H311 Acute Tox. 3; H331 Skin Corr. 1B; H314 Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Chronic 3; H412		0.1 – 1.0 % by weight
ethylenediamine, 1,2- diaminoethane	CAS No. : 107-15-3 EC-No. : 203-468-6 Index-No. : 612-006-00-6 REACH No. : 01-2119480383-37-XXXX	Flam. Liq. 3; H226 Acute Tox. 4; H302 Acute Tox. 3; H311 Acute Tox. 3; H331 Skin Corr. 1B; H314 Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Chronic 3; H412		0.1 – 1.0 % by weight

SECTION 4: First aid measures**4.1 Description of first aid measures**

General advice

Move out of dangerous area. Take off all contaminated clothing immediately. Do not leave the victim unattended. Show this safety data sheet to the doctor in attendance.

In case of skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation occurs, seek medical advice/attention.

In case of eye contact

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

If swallowed

Rinse mouth. Do NOT induce vomiting. Call a physician immediately.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide (CO₂), Foam, Water spray, Dry powder

Extinguishing media which must not be used for safety reasons High volume water jet

5.2 Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases Gaseous hydrogen chloride (HCl). Hazardous decomposition products formed under fire conditions. Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

Special protective equipment for firefighting In the event of fire, wear self-contained breathing apparatus.

Additional information on firefighting Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated surface thoroughly. Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections

Reference to other sections Disposal considerations See also section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Do not breathe vapours or spray mist. Provide appropriate exhaust ventilation at machinery. Handle and open container with care. Avoid contact with skin and eyes.

Precautions Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Observe label precautions.

Advice on protection against fire and explosion No special protective measures against fire required.

7.2 Conditions for safe storage, including any incompatibilities

Storage space and container requirements Keep in properly labelled containers. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage specifications Protect from frost.

TRGS 510 10

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Recommended storage temperature 0 - 30 °C

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****COPPER****DNEL**

Value	Target group	Exposure route	Exposure frequency	Source
273 mg/kg	Workers	Skin	Short-term effects systemic	2
20 mg/kg	Workers	Inhalation	Short-term effects systemic	2
137 mg/kg	Workers	Skin	Long term effects systemic	2

Source : 2 - SimChem

PNEC

Value	Exposure route	Source
7,8 µg/l	freshwater	2
5,2 µg/l	marine water	2
230 g/l	Onsite STP	2
87 mg/kg	freshwater sediment	2
676 mg/kg	marine sediment	2
65,5 mg/kg	Soil	2

Source : 2 - SimChem

COPPER**DNEL**

Value	Target group	Exposure route	Exposure frequency	Source
273 mg/kg	Workers	Skin	Short-term effects systemic	2
20 mg/kg	Workers	Inhalation	Short-term effects systemic	2
137 mg/kg	Workers	Skin	Long term effects systemic	2

Source : 2 - SimChem

PNEC

Value	Exposure route	Source
7,8 µg/l	freshwater	2
5,2 µg/l	marine water	2
230 g/l	Onsite STP	2
87 mg/kg	freshwater sediment	2
676 mg/kg	marine sediment	2
65,5 mg/kg	Soil	2

Source : 2 - SimChem

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C,C'-AZODI(FORMAMID)

DNEL

Value	Target group	Exposure route	Exposure frequency	Source
10,58 mg/kg	Workers	inhale	Long term effects systemic	100
8,0	Workers	dermal	Long term effects systemic	100

Source : 100 - Firmendaten

C,C'-AZODI(FORMAMID)

DNEL

Value	Target group	Exposure route	Exposure frequency	Source
10,58 mg/kg	Workers	inhale	Long term effects systemic	100
8,0	Workers	dermal	Long term effects systemic	100

Source : 100 - Firmendaten

ZINC POWDER - ZINC DUST

DNEL

Value	Target group	Exposure route	Exposure frequency	Source
50 mg/day	Workers	Oral insoluble	Exposure time per day	100
5000 mg/day	Workers	dermal insoluble	Exposure time per day	100
2,5 mg/m ³	Consumers	inhale insoluble		100
5 mg/m ³	Workers	inhale insoluble		100

Source : 100 - Firmendaten

PNEC

Value	Target group	Exposure route	Source
20,6 µg/l	Environment	fresh water	100
6,1 µg/l	Environment	marine water	100
117,8 mg/kg	Environment	freshwater sediment	100
56,5 mg/kg	Environment	marine sediment	100
52 µg/l	Environment	STP	100
35,6 mg/kg	Environment	Soil	100

Source : 100 - Firmendaten

ZINC POWDER - ZINC DUST

DNEL

Value	Target group	Exposure route	Exposure frequency	Source
50 mg/day	Workers	Oral insoluble	Exposure time per day	100
5000 mg/day	Workers	dermal insoluble	Exposure time per day	100
2,5 mg/m ³	Consumers	inhale insoluble		100
5 mg/m ³	Workers	inhale insoluble		100

Source : 100 - Firmendaten

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PNEC

Value	Target group	Exposure route	Source
20,6 µg/l	Environment	fresh water	100
6,1 µg/l	Environment	marine water	100
117,8 mg/kg	Environment	freshwater sediment	100
56,5 mg/kg	Environment	marine sediment	100
52 µg/l	Environment	STP	100
35,6 mg/kg	Environment	Soil	100

Source : 100 – Firmendaten

Ethylenediamine**DNEL**

Value	Target group	Exposure route	Exposure frequency	Source
25 mg/m ³	Workers	Inhalation	Long term effects systemic	100
3,6 mg/kg	Workers	Skin	Long term effects systemic	100

Source : 100 – Firmendaten

PNEC

Value	Exposure route	Source
0,768 mg/kg	freshwater sediment	100
0,768 mg/kg	marine sediment	100
4,36 mg/kg	Soil	100
16 µg/l	freshwater	100
2 µg/l	marine water	100
0,5 mg/l	Onsite STP	100

Source : 100 – Firmendaten

Ethylenediamine**DNEL**

Value	Target group	Exposure route	Exposure frequency	Source
25 mg/m ³	Workers	Inhalation	Long term effects systemic	100
3,6 mg/kg	Workers	Skin	Long term effects systemic	100

Source : 100 – Firmendaten

PNEC

Value	Exposure route	Source
0,768 mg/kg	freshwater sediment	100
0,768 mg/kg	marine sediment	100
4,36 mg/kg	Soil	100
16 µg/l	freshwater	100
2 µg/l	marine water	100
0,5 mg/l	Onsite STP	100

Source : 100 – Firmendaten

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NAPHTHA (PETROLEUM) HYDRODESULFURIZED HEAVY

DNEL

Value	Target group	Exposure route	Exposure frequency	Source
330 mg/m ³	Workers	Inhalation	Long term effects systemic	100
44 mg/kg	Workers	Skin	Long term effects systemic	100
71 mg/kg	Consumers	Inhalation	Long term effects systemic	100
26 mg/kg	Consumers	Skin	Long term effects systemic	100

Source : 100 – Firmendaten

NAPHTHA (PETROLEUM) HYDRODESULFURIZED HEAVY

DNEL

Value	Target group	Exposure route	Exposure frequency	Source
330 mg/m ³	Workers	Inhalation	Long term effects systemic	100
44 mg/kg	Workers	Skin	Long term effects systemic	100
71 mg/kg	Consumers	Inhalation	Long term effects systemic	100
26 mg/kg	Consumers	Skin	Long term effects systemic	100

Source : 100 – Firmendaten

8.2 Exposure controls**Respiratory protection**

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).

Note: Should no job-related limit values are indicated, the product, which a monitoring exposure limit is allocated, do not contains ingredients in relevant concentrations.

Hand protection

Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Unsuitable material :

woven fabric, Leather gloves

Suitable material :

Nitriles

Eye protection

Tightly fitting safety goggles

Skin and body protection

Wear suitable protective equipment. Long sleeved clothing

General protective and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and at the end of workday. Use protective skin cream before handling the product. Avoid contact with the skin and the eyes.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical state

liquid

Form

paste

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C,C'-AZODI(FORMAMID)

Oral toxicity [mg/kg]	Test criterion	Test species	Source
>5000 mg/kg	LD50	rat	100

Source : 100 - Firmendaten

Dermal toxicity [mg/kg]	Test criterion	Test species	Source
>2000 mg/kg	LD50	rabbit	100

Source : 100 - Firmendaten

Inhalative toxicity [mg/l]	Test criterion	Test species	Source
>0,52 mg/l	LC50	rat	100

Source : 100 - Firmendaten

C,C'-AZODI(FORMAMID)

Oral toxicity [mg/kg]	Test criterion	Test species	Source
>5000 mg/kg	LD50	rat	100

Source : 100 - Firmendaten

Dermal toxicity [mg/kg]	Test criterion	Test species	Source
>2000 mg/kg	LD50	rabbit	100

Source : 100 - Firmendaten

Inhalative toxicity [mg/l]	Test criterion	Test species	Source
>0,52 mg/l	LC50	rat	100

Source : 100 - Firmendaten

ZINC POWDER - ZINC DUST

Oral toxicity [mg/kg]	Test species	Source
> 2001 mg/kg	rat	100

Source : 100 - Firmendaten

Inhalative toxicity [mg/l]	Test criterion	Test species	Exposure duration	Source
5,41 mg/l	LC50	rat	4 h	2

Source : 2 - SimChem

ZINC POWDER - ZINC DUST

Oral toxicity [mg/kg]	Test species	Source
> 2001 mg/kg	rat	100

Source : 100 - Firmendaten

Inhalative toxicity [mg/l]	Test criterion	Test species	Exposure duration	Source
5,41 mg/l	LC50	rat	4 h	2

Source : 2 - SimChem

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Ethylenediamine

Oral toxicity [mg/kg]	Test criterion	Test species	Measuring method	Source
866 mg/kg	LD50	rat	OECD Test Guideline 401	100

Source : 100 – Firmendaten

Dermal toxicity [mg/kg]	Test criterion	Test species	Source
730 mg/kg	LD50	rabbit	100

Source : 100 – Firmendaten

LC50 Inhalation 4h for vapours [mg/l]	Test criterion	Test species	Source
9,2 mg/l	LC50	rat	100

Source : 100 – Firmendaten

Ethylenediamine

Oral toxicity [mg/kg]	Test criterion	Test species	Measuring method	Source
866 mg/kg	LD50	rat	OECD Test Guideline 401	100

Source : 100 – Firmendaten

Dermal toxicity [mg/kg]	Test criterion	Test species	Source
730 mg/kg	LD50	rabbit	100

Source : 100 – Firmendaten

LC50 Inhalation 4h for vapours [mg/l]	Test criterion	Test species	Source
9,2 mg/l	LC50	rat	100

Source : 100 – Firmendaten

11.2 Additional information

Other information (chapter 11.) No toxicology information is available.

SECTION 12: Ecological information**12.1 Toxicity****Hazardous ingredients****COPPER**

NOEC (fish) [mg/l]	Test species	Source
0,0114 mg/l	Oncorhynchus mykiss (rainbow trout)	100

Source : 100 – Firmendaten

COPPER

NOEC (fish) [mg/l]	Test species	Source
0,0114 mg/l	Oncorhynchus mykiss (rainbow trout)	100

Source : 100 – Firmendaten

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C,C'-AZODI(FORMAMID)

Toxicity to fish [mg/l]	Test criterion	Test species	Exposure duration	Source
50 mg/l	LC50	Carassius auratus (goldfish)	96 h	100

Source : 100 - Firmendaten

Toxicity to daphnia [mg/l]	Test criterion	Source
12 mg/l	LC50	100

Source : 100 - Firmendaten

Biodegradability Biodegradable.

C,C'-AZODI(FORMAMID)

Toxicity to fish [mg/l]	Test criterion	Test species	Exposure duration	Source
50 mg/l	LC50	Carassius auratus (goldfish)	96 h	100

Source : 100 - Firmendaten

Toxicity to daphnia [mg/l]	Test criterion	Source
12 mg/l	LC50	100

Source : 100 - Firmendaten

Biodegradability Biodegradable.

Ethylenediamine

Toxicity to fish [mg/l]	Source
640 mg/l	100

Source : 100 - Firmendaten

Toxicity to daphnia [mg/l]	Source
16,7 mg/l	100

Source : 100 - Firmendaten

Toxicity to algae [mg/l]	Source
645 mg/l	100

Source : 100 - Firmendaten

Ethylenediamine

Toxicity to fish [mg/l]	Source
640 mg/l	100

Source : 100 - Firmendaten

Toxicity to daphnia [mg/l]	Source
16,7 mg/l	100

Source : 100 - Firmendaten

Toxicity to algae [mg/l]	Source
645 mg/l	100

Source : 100 - Firmendaten

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12.5 Results of PBT and vPvB assessment

Results of PBT characteristics determination

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other adverse effects

Further information on ecology

We have no quantitative data concerning the ecological effects of this product.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Disposal considerations




According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The following Waste Codes are only suggestions:

Waste Code

07 02 08* other still bottoms and reaction residues

Uncleaned empty packaging

-
-**SECTION 14: Transport information**

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.1 UN-No	3082	3082	3082
14.2 Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
14.2 UN proper shipping name		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.
14.3 Transport hazard class(es)	9	9	9
14.4 Packaging group	III	III	III
Danger releasing substance	Zinkpulver - Zinkstaub (stabilisiert), KUPFER	zinc powder - zinc dust (stabilised), COPPER	zinc powder - zinc dust (stabilised), COPPER
Inducer/cause of environmental hazard	KUPFER	COPPER	COPPER
14.5 Environmental hazards	U - Environmentally hazardous	U - marine pollutant	U - Environmentally hazardous
Labels	9 	9 	9 
Risk No.	90		
Category	3		
Factor	1		
Classification Code	M6		
Tunnel restriction code	E		
EmS		F-A;S-F	
Stowage category		A	

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not relevant

