SECTION 1: Identification of the substance / preparation and of the company

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1.1	.1 Product identifier		
		SWAG 30 91 2710 antifreeze Article number 99 90 1381, 32 92 2274, 32 92 2272, 30 93 3830, 30 91 2710	
1.2	Relevant identified uses of the se	ubstance or mixture and uses advised against	
1.2.1	1 Relevant uses		
		Anti-freezing agents	
1.2.2	2 Uses advised against		
		None known.	
1.3	Details of the supplier of the safe	ety data sheet	
	Company	SWAG Autoteile GmbH Am Kiesberg 4-6 42117 Wuppertal / GERMANY Phone +49 (0)202 26454-0 Fax +49 (0)202 26454-5000 Homepage www.swag.de E-mail info@swag.de	
	Address enquiries to Technical information Safety Data Sheet	info@swag.de info@swag.de	
1.4	Emergency phone		
1.4	Advisory body	+49 (0)89-19240 (24h) (english)	
	Company	+49 (0)202 26454-0	
SEC	TION 2: Hazards identification		
2.1	Classification of the substance of	r mixture	
2.1.1	1 Classification according to Regu	lation (EC) No 1272/2008 [CLP] see SECTION 16	
2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC Xn, Harmful - R 22: Harmful if swallowed.			
2.2	Label elements		
		The product is classified and required to be labelled in accordance with EC-Directives	
	Labelling according to Regulatio	n <u>67/548/EEC or 1999/45/EC</u>	
	Hazard symbols	Harmful	
	Contains:	Ethylene glycol	
	R-phrases	R 22: Harmful if swallowed.	
	S-phrases	S 2: Keep out of the reach of children. S 46: If swallowed, seek medical advice immediately and show this container or label.	
2.3	Other hazards		
	Physico-chemical hazards	No particular hazards known.	
	Human health dangers	If swallowed or in the event of vomiting, risk of product entering the lungs. Frequent persistent contact with the skin can cause skin irritation.	
	Other hazards	none	

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SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

	Range [%] Substance			
	85 - 90 Et	85 - 90 Ethylene glycol		
		CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1		
	G	GHS/CLP: Acute Tox. 4: H302		
	E	EEC: Xn, R 22		
	1 - <5 S	odium 2-ethylhexanoate		
	C	CAS: 19766-89-3, EINECS/ELINCS: 243-283-8		
	G	GHS/CLP: Repr. 2: H361d		
	E	EC: Xn, R 63		
	Comment on compo	onent partsSubstances of Very High Concern - SVHC: substances are not contained or are below 0,1%.For full text of H-statements and R-phrases: see SECTION 16.		
SEC	TION 4: First aid me	easures		
l.1	Description of first	t aid measures		
	General information			
	Inhalation	Ensure supply of fresh air.		
		In the event of symptoms seek for medical treatment.		
	Skin contact	In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.		
	Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.		
	Ingestion	Consult a doctor immediately. Rinse out mouth and give plenty of water to drink. Do not induce vomiting.		
4.2	Most important sv	mptoms and effects, both acute and delayed		
		Headache		
1.3	Indication of any immediate medical attention and special treatment needed			
	indication of any i	Treat symptomatically.		
		If swallowed or in the event of vomiting, risk of product entering the lungs.		
		Forward this sheet to the doctor.		
SEC	TION 5: Fire-fighting	g measures		
5.1	Extinguishing med	dia		
-	Suitable extinguishir			
		Dry powder. Foam.		
	Extinguishing media be used			
5.2	Special hazards ar	rising from the substance or mixture		

5.2 Special hazards arising from the substance or mixture

Unknown risk of formation of toxic pyrolysis products. Carbon monoxide (CO)

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

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SEC	SECTION 6: Accidental release measures			
6.1	Personal precautions, protective	equipment and emergency procedures High risk of slipping due to leakage/spillage of product. Forms slippery surfaces with water.		
6.2	2 Environmental precautions			
		Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater.		
6.3	3 Methods and material for containment and cleaning up			
		Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth). Dispose of absorbed material in accordance within the regulations.		
6 4	Reference to other sections			
6.4	Reference to other sections	See SECTION 8+13		
SEC	TION 7: Handling and storage			
7.1	Precautions for safe handling			
		Use only in well-ventilated areas.		
		Remove soiled or soaked clothing immediately.		
		Do not eat, drink, smoke or take drugs at work.		
		Use barrier skin cream. Wash hands before breaks and after work.		
		Cloths contaminated with product should not be kept in trouser pockets.		
		Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash before reuse.		
7.2	2 Conditions for safe storage, including any incompatibilities			
		Keep only in original container. Prevent penetration into the ground.		
		Do not store together with oxidizing agents. Do not store together with food and animal food/diet.		
		Keep container tightly closed. Keep container in a well-ventilated place.		
7.3	Specific end use(s)			
		See product use, SECTION 1.2		

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SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Range [%]	Substance

85-90	Ethylene glycol	
	CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1, ECB-Nr.: 01-2119456816-28-XXXX	
	Long-term exposure: 20 ppm, 52 mg/m ³ , Vapour, particulate: 10 mg/m ³	
	Short-term exposure (15-minute): 40 ppm, 104 mg/m ³	

Ingredients with occupational exposure limits to be monitored (EU)

exposure minits to be monitored (EO)		
Range [%] Substance / EC LIMIT VALUES		
85-90 Ethylene glycol		
	CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1, ECB-Nr.: 01-2119456816-28-XXXX	
Eight hours: 20 ppm, 52 mg/m ³ , H		
	Short-term (15-minute): 40 ppm, 104 mg/m ³	

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	Safety glasses.
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. Nitrile rubber, >480 min (EN 374).
Skin protection	Light protective clothing.
Other	Avoid contact with eyes and skin. Do not inhale vapours. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.
Respiratory protection	Breathing apparatus in the event of high concentrations. Short term: filter apparatus, combination filter A-P2.
Thermal hazards	No information available.
Delimitation and monitoring of the environmental exposition	See SECTION 6+7.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

information on basic physical and	renemiear properties
Form	liquid
Color	red
Odor	characteristic
Odour threshold	not determined
pH-value	7,5-9 (33%)
pH-value [1%]	not determined
Boiling point [°C]	120
Flash point [°C]	> 110 (DIN 51758)
Flammability [°C]	> 400 (DIN 51794)
Lower explosion limit	~3,2 Vol.%
Upper explosion limit	~15,3 Vol.%
Oxidizing properties	no
Vapour pressure/gas pressure [kPa]	< 0,01 (20°C)
Density [g/ml]	1,12 (DIN 51757)
Bulk density [kg/m³]	not applicable
Solubility in water	miscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	15 mm²/s (20°C) (DIN 51562/T1)
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	not determined

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with acids, alkalies and oxidizing agents.

10.4 Conditions to avoid

See SECTION 7.2. Strong heating.

10.5 Incompatible materials

not determined

10.6 Hazardous decomposition products

No hazardous decomposition products known.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Range [%]	Substance
85 - 90 Ethylene glycol, CAS: 107-21-1	
	LD50, oral, Rat: > 2000 mg/kg (IUCLID).

Serious eye damage/irritation	not determined
Skin corrosion/irritation	not determined
Respiratory or skin sensitisation	not determined
Specific target organ toxicity — single exposure	not determined
Specific target organ toxicity — repeated exposure	not determined
Mutagenicity	not determined
Reproduction toxicity	not determined
Carcinogenicity	not determined
General remarks	Frequent persistent contact with the skin can cause skin irritation.
	The product was classified on the basis of the calculation procedure of the preparation directive. The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 12: Ecological information

12.1 Toxicity

Range [%]	Substance
85 - 90 Ethylene glycol, CAS: 107-21-1	
	LC50, (96h), Oncorhynchus mykiss: > 18500 mg/l.
	EC50, (24h), Daphnia magna: 74000 mg/l.

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

No classification on the basis of the calculation procedure of the preparation directive. Ecological data of complete product are not available. Do not discharge product unmonitored into the environment or into the drainage. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

	Dispose of as hazardous waste. Disposal in an incineration plant in accordance with the regulations of the local authorities.
Waste no. (recommended)	160114*
Contaminated packaging	
	Packaging that cannot be cleaned should be disposed of as for product. Uncontaminated packaging may be taken for recycling.
Waste no. (recommended)	150110* 150102

SECTION 14: Transport information

14.1 UN number

See SECTION 14.2 in accordance with UN shipping name

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS	
Inland navigation (ADN)	NO DANGEROUS GOODS	

Marine transport in accordance with NOT CLASSIFIED AS "DANGEROUS GOODS" IMDG

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name

14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

not applicable

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SEC	TION 15: Regulatory information				
5.1	-	Safety, health and environmental regulations/legislation specific for the substance or mixture			
	EEC-REGULATIONS	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach) 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC			
	TRANSPORT-REGULATIONS	DOT-Classification, ADR (2013); IMDG-Code (2013, 36. Amdt.); IATA-DGR (2013).			
	NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4			
	- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.			
	- VOC (1999/13/CE)	0%			
5.2	5.2 Chemical safety assessment				
		not applicable			
SEC	TION 16: Other information				
6.1	Classification according to Regulation (EC) No 1272/2008 [CLP]				
	Hazard pictograms	\wedge			
		 ✓ ✓ 			
	Signal word	WARNING			
		Acute Tox. 4: H302 Harmful if swallowed. Repr. 2: H361d Suspected of damaging the unborn child.			
	Classification procedure	Classification according to conversion table Annex VII 1272/2008/EC			
6.2	R-phrases (SECTION 3)				
		R 22: Harmful if swallowed. R 63: Possible risk of harm to the unborn child.			
6.3	Hazard statements (SECTION 3)				
		H361d Suspected of damaging the unborn child. H302 Harmful if swallowed.			
6.4	Abbreviations and acronyms:				
	,	ADR = Accord européen relatif au transport international des marchandises Dangereuses pa			
		Route RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses			
		ADN = Accord européen relatif au transport international des marchandises dangereuses pa voie de navigation intérieure			
		CAS = Chemical Abstracts Service			
		CLP = Classification, Labelling and Packaging DMEL = Derived Minimum Effect Level			
		DNEL = Derived No Effect Level			
		EC50 = Median effective concentration ECB = European Chemicals Bureau			
		EEC = European Economic Community			
		EINECS = European Inventory of Existing Commercial Chemical Substances ELINCS = European List of Notified Chemical Substances			
		GHS = Globally Harmonized System of Classification and Labelling of Chemicals			
		IATA = International Air Transport Association IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk			
		IC50 = Inhibition concentration, 50%			
		IMDG = International Maritime Code for Dangerous Goods IUCLID = International Uniform ChemicaL Information Database			
		LC50 = Lethal concentration, 50%			
		LD50 = Median lethal dose MARPOL = International Convention for the Prevention of Marine Pollution from Ships PBT = Persistent, Bioaccumulative and Toxic substance			
		PNEC = Predicted No-Effect Concentration			
		REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals TLV®/TWA = Threshold limit value – time-weighted average			
		TLV®STEL = Threshold limit value – short-time exposure limit VOC = Volatile Organic Compounds			

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1	6.5	Other	information
	0.5	Other	mormation

Modified position

SECTION 2 been added: The product is classified and required to be labelled in accordance with EC-Directives

SECTION 2 been added: H361d Suspected of damaging the unborn child.

SECTION 2 been added: Gesundheitsgefahr

SECTION 2 been added: Repr. 2

SECTION 4 been added: Forward this sheet to the doctor.

SECTION 4 been added: If eye irritation persists: Get medical advice/attention.

SECTION 4 been added: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 7 been added: Take off contaminated clothing and wash before reuse.

SECTION 7 been added: Contaminated work clothing should not be allowed out of the workplace.

SECTION 7 been added: Cloths contaminated with product should not be kept in trouser pockets.

SECTION 10 been added: Strong heating.

SECTION 15 been added: 1 (self-classification)

SECTION 15 deleted: 3, gem. VwVwS vom 27.07.2005