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

1.1 Product identifier

SWAG 60 92 6580 antifreeze Article number 60 92 6580, 60 92 6581, 60 92 6582

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

Company

Anti-freezing agents

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (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

Labelling according to Regulation 67/548/EEC or 1999/45/EC

The product is classified and required to be labelled in accordance with EC-Directives

Hazard symbols



Harmful Ethylene glycol R 22: Harmful if swallowed.

R-phrases2.3 Other hazards

Contains:

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.
Environmental hazards	Does not contain any PBT or vPvB substances.
Other hazards	none



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SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

	Range [%]	Substance		
	40 - 60	Ethylene glycol		
		CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1, ECB-Nr.: 01-2119456816-28-XXXX		
		GHS/CLP: Acute Tox. 4: H302 - STOT RE 2: H373		
		EEC: Xn, R 22		
	1 - < 5	Sodium 2-ethylhexa	noate	
		CAS: 19766-89-3, E	EINECS/ELINCS: 243-283-8	
		GHS/CLP: Repr. 2:	H361d	
		EEC: Xn, R 63		
	Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below For full text of H-statements and R-phrases: see SECTION 16.		Substances 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	measures		
4.1	Description of fi	rst aid measures		
	General information		Change soaked clothing.	
	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 symptoms and effects, both acute and delayed

Tiredness Spasms Diarrhoea

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Forward this sheet to the doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

	0 0	
	Suitable extinguishing media	Carbon dioxide. Water spray jet. Dry powder. Foam.
	Extinguishing media that must not be used	Full water jet.
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	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	Methods and material for contain	ment 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			
		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.		
		Contaminated work clothing should not be allowed out of the workplace.		
		Take off contaminated clothing and wash before reuse.		
7.2	Conditions for safe storage, inclu	ding 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
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40 - 60	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)			
Range [%]	Substance / EC LIMIT VALUES		
40 - 60 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		

DNEL

Range [%]	Substance		
40 - 60	40 - 60 Ethylene glycol, CAS: 107-21-1		
	Industrial, dermal, Long-term - systemic effects: 106 mg/m ³ .		
	Industrial, inhalative, Long-term - local effects: 35 mg/m ³ .		
	general population, dermal, Long-term - systemic effects: 53 mg/m ³ .		
	general population, inhalative, Long-term - local effects: 7 mg/m ³ .		
PNEC			

Range [%] Substance 40 - 60 Ethylene glycol, CAS: 107-21-1 soil, 1,53 mg/kg. sediment (fresh water), 20,9 mg/kg. sediment (fresh water), 20,9 mg/kg. sewage treatment plants (STP), 199,5 mg/l. marine water, 1 mg/l. fresh water, 10 mg/l.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	If there is a risk of splashing: 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	none
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

Form	liquid
Color	green
Odor	mild
Odour threshold	not determined
pH-value	7,5 - 9
pH-value [1%]	not determined
Boiling point [°C]	not determined
Flash point [°C]	> 100 (DIN 51758)
Flammability [°C]	> 400 (DIN 51794)
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidizing properties	no
Vapour pressure/gas pressure [kPa]	< 0,01 (20°C)
Density [g/ml]	~ 1,06 (DIN 51757) (20 °C / 68,0 °F)
Bulk density [kg/m³]	not applicable
Solubility in water	miscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	not determined
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.

10.5 Incompatible materials

No information available.

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		
40 - 60	Ethylene glycol, CAS: 107-21-1		
	LD50, dermal, mouse: > 3500 mg/kg.		
	LD50, oral, Rat: 7712 mg/kg.		
	LC50, inhalative, Rat: > 2,5 mg/l 6h.		
	LDLo, oral, Human: ca. 1600 mg/kg.		

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	
40 - 60	60 Ethylene glycol, CAS: 107-21-1	
	LC50, (96h), Pimephales promelas: 72860 mg/l.	
EC50, (96h), Selenastrum capricornutum: 6500 - 13000 mg/l.		
	EC50, (48h), Daphnia magna: > 100 mg/l OECD 202.	

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.

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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.

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	
	Uncontaminated packaging may be taken for recycling.
	Packaging that cannot be cleaned should be disposed of as for product.
Waste no. (recommended)	150110*

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	NO DANGEROUS GOODS
ADR/RID	

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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42117 Wuppertal Date printed 21.02.2014, Revision 21.02.2014 **SECTION 15: Regulatory information** 15.1 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 Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people. for people - VOC (1999/13/CE) 0% 15.2 Chemical safety assessment not applicable **SECTION 16: Other information** 16.1 Classification according to Regulation (EC) No 1272/2008 [CLP] Hazard pictograms Signal word WARNING Acute Tox. 4: H302 Harmful if swallowed. Repr. 2: H361d Suspected of damaging the unborn child. Classification according to conversion table Annex VII 1272/2008/EC Classification procedure 16.2 R-phrases (SECTION 3) R 63: Possible risk of harm to the unborn child. R 22: Harmful if swallowed. 16.3 Hazard statements (SECTION 3) H373 May cause damage to organs through prolonged or repeated exposure. H302 Harmful if swallowed. H361d Suspected of damaging the unborn child. 16.4 Abbreviations and acronyms: ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses voie de navigation intérieure CAS = Chemical Abstracts Service

ADN = Accord européen relatif au transport international des marchandises dangereuses par CLP = Classification, Labelling and Packaging DMEL = Derived Minimum Effect Level DNFL = 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 vPvB = very Persistent and very Bioaccumulative



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16.5 Other information

Modified position

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 4 been added: Forward this sheet to the doctor.

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 8 been added: If there is a risk of splashing: