

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

### 1.1 Product identifier

**antifreeze G12+ (-35°C Ready Mix )**  
**Article number: 33 10 1124, 33 10 1125, 33 10 1126**  
**UFI: FKS-5XCY-V40N-HM5H**

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

#### 1.2.1 Relevant uses

Anti-freezing agents

#### 1.2.2 Uses advised against

For all uses not specified in SECTION 1.2.1

### 1.3 Details of the supplier of the safety 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](http://www.swag.de)  
E-mail [info@swag.de](mailto:info@swag.de)

#### Address enquiries to

**Technical information** [info@swag.de](mailto:info@swag.de)

**Safety Data Sheet** [info@swag.de](mailto:info@swag.de)

### 1.4 Emergency telephone number

**Advisory body** +49 (0)89-19240 (24h) (English)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Acute Tox. 4: H302 Harmful if swallowed.  
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure if swallowed. (kidneys)

### 2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

#### Hazard pictograms



#### Signal word

WARNING

#### Contains:

Ethylene glycol

#### Hazard statements

H302 Harmful if swallowed.  
H373 May cause damage to organs through prolonged or repeated exposure.

#### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P260 Do not breathe vapours.  
P270 Do not eat, drink or smoke when using this product.  
P301+P312 IF SWALLOWED: Call a POISON CENTER / doctor if you feel unwell.  
P501 Dispose of contents / container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

## 2.3 Other hazards

Human health dangers	It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin.
Environmental hazards	Does not contain any PBT or vPvB substances.
Other hazards	Contains no ingredients with endocrine-disrupting properties. Further hazards were not determined with the current level of knowledge.

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

not applicable

### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
40 - 50	Ethylene glycol
	CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1, Reg-No.: 01-2119456816-28-XXXX
	GHS/CLP: Acute Tox. 4: H302 - STOT RE 2: H373
1 - < 3	3,5,5-Trimethylhexanoic acid
	CAS: 3302-10-1, EINECS/ELINCS: 221-975-0
	GHS/CLP: Acute Tox. 4: H302 - Eye Irrit. 2: H319

Comment on component parts      For full text of H-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General information	Change soaked clothing.
Inhalation	Ensure supply of fresh air. In the event of symptoms seek 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	In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.
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  
Unconsciousness  
Headache  
Vertigo

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.  
Forward this sheet to your doctor.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

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

risk of formation of toxic pyrolysis products, carbon monoxide (CO), not combusted hydrocarbons

## 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.

## SECTION 6: Accidental release measures

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

High risk of slipping due to leakage/spillage of product.

Use personal protective equipment (protective gloves, safety glasses, protective clothing).

### 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 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

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Provide solvent-resistant and impermeable floor.

Use solvent-resistant equipment.

Use only in well-ventilated areas.

Keep away from all sources of ignition - Refrain from smoking.

Take precautionary measures against static discharges.

Vapours can form an explosive mixture with air.

Remove soiled or soaked clothing immediately.

Do not eat, drink or smoke when using this product.

Wash hands before breaks and after work.

Use barrier skin cream.

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, including any incompatibilities

Keep only in original container.

Do not store together with oxidizing agents.

Do not store with alkalies.

Do not store together with food and animal food/diet.

Protect from heat/overheating and from sun.

Keep container in a well-ventilated place.

Keep container tightly closed.

Recommended storage temperature: < 40°C

### 7.3 Specific end use(s)

See product use, SECTION 1.2

## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

#### Ingredients with occupational exposure limits to be monitored (UK)

Substance
Ethylene glycol
CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1, Reg-No.: 01-2119456816-28-XXXX
Long-term exposure: 20 ppm, 52 mg/m <sup>3</sup> , Vapour, particulate: 10 mg/m <sup>3</sup>
Short-term exposure (15-minute): 40 ppm, 104 mg/m <sup>3</sup>

#### Ingredients with occupational exposure limits to be monitored EU (2004/37/EG)

Substance / EC LIMIT VALUES
Ethylene glycol
CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1, Reg-No.: 01-2119456816-28-XXXX
Eight hours: 20 ppm, 52 mg/m <sup>3</sup> , H
Short-term (15-minute): 40 ppm, 104 mg/m <sup>3</sup>

#### DNEL

Substance
Ethylene glycol, CAS: 107-21-1
Industrial, inhalative, Long-term - local effects, 35 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 106 mg/m <sup>3</sup>
general population, inhalative, Long-term - local effects, 7 mg/m <sup>3</sup>
general population, dermal, Long-term - systemic effects, 53 mg/m <sup>3</sup>

#### PNEC

Substance
Ethylene glycol, CAS: 107-21-1
sediment (seawater), 3,7 mg/kg
sewage treatment plants (STP), 199,5 mg/l (AF=10)
soil, 1,53 mg/kg
sediment (freshwater), 37 mg/kg
seawater, 1 mg/L
freshwater, 10 mg/L

## 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
<b>Eye protection</b>	Safety glasses. (EN 166:2001)
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. 0,45 mm Nitrile rubber, >480 min (EN 374-1/-2/-3).
<b>Skin protection</b>	Light protective clothing.
<b>Other</b>	Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Avoid contact with eyes and skin. It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin.
<b>Respiratory protection</b>	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Respiratory protection mask in the event of high concentrations. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
<b>Thermal hazards</b>	none
<b>Delimitation and monitoring of the environmental exposition</b>	Comply with applicable environmental regulations limiting discharge to air, water and soil.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	liquid
Form	liquid
Color	red
Odor	characteristic
Odour threshold	No information available.
pH-value	7,5 - 11
pH-value [1%]	not determined
Boiling point or initial boiling point and boiling range [°C]	>105
Flash point [°C]	No information available.
Flammability	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/cm³]	1,05 - 1,08
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	miscible
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	No information available.
Kinematic viscosity	No information available.
Relative vapour density	No information available.
Melting point [°C]	<= -35
Auto-ignition temperature [°C]	No information available.
Decomposition temperature [°C]	No information available.
Particle characteristics	not applicable

### 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 strong oxidizing agents.  
Reactions with acids.

### 10.4 Conditions to avoid

Strong heating.

#### **10.5 Incompatible materials**

No information available.

#### **10.6 Hazardous decomposition products**

No hazardous decomposition products known.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute oral toxicity

Product
ATE-mix, oral, > 300 mg/kg bw
Substance
Ethylene glycol, CAS: 107-21-1
LD50, oral, Rat, 7712 mg/kg bw
ATE, oral, 500 mg/kg (Acute Tox. 4)
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
LD50, oral, Rat, 1160 mg/kg

#### Acute dermal toxicity

Substance
Ethylene glycol, CAS: 107-21-1
LD50, dermal, mouse, > 3500 mg/kg bw
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
LD50, dermal, mouse, > 2000 mg/kg

#### Acute inhalational toxicity

Substance
Ethylene glycol, CAS: 107-21-1
LC50, inhalative, Rat, > 2,5 mg/L air, 6h

#### Serious eye damage/irritation

Based on the available information, the classification criteria are not fulfilled.

Substance
Ethylene glycol, CAS: 107-21-1
Eye, Rabbit, In vivo study, non-irritating

#### Skin corrosion/irritation

Based on the available information, the classification criteria are not fulfilled.

Substance
Ethylene glycol, CAS: 107-21-1
dermal, Rabbit, In vivo study, non-irritating

#### Respiratory or skin sensitisation

Based on the available information, the classification criteria are not fulfilled.

Substance
Ethylene glycol, CAS: 107-21-1
dermal, Guinea pig, In vivo study, non-sensitizing

#### Specific target organ toxicity — single exposure

Based on the available information, the classification criteria are not fulfilled.

#### Specific target organ toxicity — repeated exposure

May cause damage to organs through prolonged or repeated exposure if swallowed. (kidneys)  
Calculation method

Substance
Ethylene glycol, CAS: 107-21-1
NOAEL, dermal, Dog, 2200 mg/kg bw/day, adverse effect observed
NOEL, oral, Rat, 150 mg/kg bw/day, OECD 408, adverse effect observed



**Mutagenicity** Based on the available information, the classification criteria are not fulfilled.

Substance
Ethylene glycol, CAS: 107-21-1
in vitro, OECD 471, no adverse effect observed

**Reproduction toxicity** Based on the available information, the classification criteria are not fulfilled.

**- Fertility**

Substance
Ethylene glycol, CAS: 107-21-1
NOAEL, oral, Rat, > 1000 mg/kg bw/day, no adverse effect observed

**- Development**

Substance
Ethylene glycol, CAS: 107-21-1
NOAEL, oral, Rat, 500 mg/kg bw/day, no adverse effect observed

**Carcinogenicity** Based on the available information, the classification criteria are not fulfilled.

Substance
Ethylene glycol, CAS: 107-21-1
NOAEL, oral, Rat, 1000 mg/kg bw/day, In vivo study, no adverse effect observed

**Aspiration hazard** Based on available data, the classification criteria are not met.

**General remarks**

Toxicological data of complete product are not available.  
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.

**11.2 Information on other hazards**

**11.2.1 Endocrine disrupting properties** Does not contain a relevant substance that meets the classification criteria.

**11.2.2 Other information** none

**SECTION 12: Ecological information**

**12.1 Toxicity**

Substance
Ethylene glycol, CAS: 107-21-1
LC50, (3d), fish, 72.86 g/L
LC50, (28d), fish, 1,5 g/L
EC50, (48h), Invertebrates, 100 mg/L
EC50, (21d), Invertebrates, 33,911 g/L
EC50, (4d), Invertebrates, 3,536 - 13 g/L
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
LC50, (96h), fish, 122 mg/L (OECD 203)
EC50, (72h), Algae, 51 mg/L (OECD 201)
EC50, (3h), Microorganisms, 470 mg/L (OECD 209)
NOEC, (48h), Daphnia magna, 68 mg/L (OECD 202)



12.2 Persistence and degradability

Behaviour in environment compartments	
Behaviour in sewage plant	
Biological degradability	The product is biodegradable.

12.3 Bioaccumulative potential

Product has having no bioaccumulation potential.

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 Endocrine disrupting properties

Does not contain a relevant substance that meets the classification criteria.

12.7 Other adverse effects

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	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.
Waste no. (recommended)	150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

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

#### 14.3 Transport hazard class(es)

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

#### 14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

#### 14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 14.7 Maritime transport in bulk according to IMO instruments

not applicable



**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

<b>EEC-REGULATIONS</b>	2008/98/EG (2000/532/EC ) ; 2010/75/EU; 2004/42/EG; (EG) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEG ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014; (EU) 2019/1148; (EU) 2019/1021, (EU) 2023/707
- Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
- Annex I (REACH)	The product is not subject to Annex I restrictions.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances $\geq 0.1\%$ that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains $\geq 0.1\%$ of substances with the following restrictions. 75 According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is subject to the following restrictions. 3
<b>TRANSPORT-REGULATIONS</b>	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2024)
<b>NATIONAL REGULATIONS (UK):</b>	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for young people. Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for women of child-bearing age.
- VOC (2010/75/CE)	0 %

**15.2 Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

**16.1 Hazard statements (SECTION 3)**

H373 May cause damage to organs through prolonged or repeated exposure.  
H319 Causes serious eye irritation.  
H302 Harmful if swallowed.

## 16.2 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  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
ATE = acute toxicity estimate  
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  
EL50 = Median effective loading  
ELINCS = European List of Notified Chemical Substances  
EmS = Emergency Schedules  
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  
IVIS = In vitro irritation score  
LC50 = Lethal concentration, 50%  
LD50 = Median lethal dose  
LC0 = lethal concentration, 0%  
LOAEL = lowest-observed-adverse-effect level  
LL50 = Median lethal loading  
LQ = Limited Quantities  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
NOAEL = No Observed Adverse Effect Level  
NOEC = No Observed Effect Concentration  
PBT = Persistent, Bioaccumulative and Toxic substance  
PNEC = Predicted No-Effect Concentration  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
STP = Sewage Treatment Plant  
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

## 16.3 Other information

### Classification procedure

Acute Tox. 4: H302 Harmful if swallowed. (Calculation method)  
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure if swallowed. (kidneys) (Calculation method)

### Modified position

none