

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Coolant readymix G12evo

Creation date 28th April 2021
Revision date Version 2.0

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

- 1.1. Product identifier**
Coolant readymix G12evo
Substance / mixture mixture
Number 000096320JG
UFI SF00-Q070-K008-41VC
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use
Antifreeze agent.
Mixture uses advised against
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Supplier
Name or trade name ŠKODA AUTO a.s.
Address tř. Václava Klementa 869, Mladá Boleslav II, 293 01
Czech Republic
VAT Reg No CZ00177041
Phone +420 326 811 111
E-mail msds@skoda-auto.cz
Web address www.skoda-auto.cz
Competent person responsible for the safety data sheet
Name Petr Hovorka
E-mail petr.hovorka2@skoda-auto.cz
- 1.4. Emergency telephone number**
European emergency number: 112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is classified as dangerous.
Acute Tox. 4, H302
STOT RE 2, H373 (kidneys)
Full text of all classifications and hazard statements is given in the section 16.
Most serious adverse effects on human health and the environment
Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure.

- 2.2. Label elements**
Hazard pictogram



Signal word
Warning

Hazardous substances

ethanediol

Hazard statements

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

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

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P102	Keep out of reach of children.
P260	Do not breathe vapours.
P264	Wash hands and exposed parts of the body thoroughly after handling.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of contents/container to by handing over to the person authorized to dispose of waste or by returning to the supplier.

Requirements for child-resistant fastenings and tactile warning of danger

Container must carry a tactile warning of danger.

2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 603-027-00-1 CAS: 107-21-1 EC: 203-473-3 Registration number: 01-2119456816-28	ethanediol	≥30-<50	Acute Tox. 4, H302 STOT RE 2, H373 (kidneys)	1
CAS: 17265-14-4 EC: 241-300-3 Registration number: 01-2120762063-61	decanedioic acid, disodium salt	1-<10	Eye Irrit. 2, H319	

Notes

1 Substance with a Union workplace exposure limit.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes.

If swallowed

DO NOT INDUCE VOMITING! Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment.

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4.2. Most important symptoms and effects, both acute and delayed

If inhaled

Cough, headache.

If on skin

Not expected.

If in eyes

Not expected.

If swallowed

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Do not inhale aerosols. Prevent contact with skin and eyes. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

Storage temperature

min -35 °C, max 100 °C

7.3. Specific end use(s)

not available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union

EU limits

Substance name (component)	Type	Value
ethanediol (CAS: 107-21-1)	OEL 8 hours	52 mg/m ³
	OEL 8 hours	20 ppm
	OEL 15 minutes	104 mg/m ³
	OEL 15 minutes	40 ppm

DNEL

decanedioic acid, disodium salt

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	35.26 mg/m ³	Systemic chronic effects	
Workers	Dermal	10 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	8.7 mg/m ³	Systemic chronic effects	
Workers	Dermal	5 mg/kg bw/day	Systemic chronic effects	
Workers	Oral	5 mg/kg bw/day	Systemic chronic effects	

ethanediol

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	35 mg/m ³	Systemic acute effects	
Workers	Dermal	106 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	7 mg/m ³	Systemic acute effects	
Consumers	Dermal	53 mg/kg bw/day	Systemic chronic effects	

PNEC

decanedioic acid, disodium salt

Route of exposure	Value	Determining method
Freshwater environment	18 µg/l	
Sea sediments	1.8 µg/l	
Microorganisms in wastewater treatment plants	10 mg/l	
Freshwater sediment	0.548 mg/kg of dry substance of sediment	
Sea sediments	0.0548 mg/kg of dry substance of sediment	
Freshwater sediment	0.0988 mg/kg of dry substance of soil	

ethanediol

Route of exposure	Value	Determining method
Freshwater environment	10 mg/l	
Seawater	1 mg/l	
Microorganisms in wastewater treatment plants	199.5 mg/l	

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Route of exposure	Value	Determining method
Freshwater sediment	37 mg/kg of dry substance of sediment	
Sea sediments	3.7 mg/kg of dry substance of sediment	
Soil (agricultural)	1.53 mg/kg of dry substance of sediment	

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

It is not needed.

Skin protection

Hand protection: Protective gloves resistant to the product. Contaminated skin should be washed thoroughly.

Respiratory protection

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Color	By specification.
Odour	characteristic
Melting point/freezing point	-42 °C
Boiling point or initial boiling point and boiling range	108 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	≥250 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	8-8,5 (undiluted at 20 °C)
Kinematic viscosity	3,7-4,0 mm ² /s at 40 °C
Solubility in water	miscible
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	1,071-1,079 g/cm ³ at 20 °C
data not available	

9.2. Other information

Evaporation rate	data not available
Oxidising properties	The product has no oxidizing properties.
Explosive properties	The product does not have explosive properties.
none	

SECTION 10: Stability and reactivity

10.1. Reactivity

not available

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10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.

Acute toxicity

Harmful if swallowed.

decanedioic acid, disodium salt

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Oral	LD ₅₀		5000 mg/kg bw			
Dermal	LD ₅₀		2000 mg/kg bw			

ethanediol

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Oral	LD ₅₀		500 mg/kg			
Inhalation	LC ₅₀		>2.5 mg/l	6 hour	Rat (Rattus norvegicus)	
Dermal	LD ₅₀	OECD 402	>3500 mg/kg		Mouse	

Skin corrosion/irritation

Based on available data the classification criteria are not met.

decanedioic acid, disodium salt

Route of exposure	Result	Time of exposure	Species
Skin	Not irritating		

ethanediol

Route of exposure	Result	Time of exposure	Species
Dermal	Not irritating		Rabbit

Serious eye damage/irritation

Based on available data the classification criteria are not met.

decanedioic acid, disodium salt

Route of exposure	Result	Time of exposure	Species
Eye	Irritating		

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ethanediol

Route of exposure	Result	Time of exposure	Species
Eye	Not irritating		Rabbit

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

decanedioic acid, disodium salt

Route of exposure	Result	Time of exposure	Species	Sex
Skin	Sensitizing			

ethanediol

Route of exposure	Result	Time of exposure	Species	Sex
Dermal	Negative		Guinea-pig (<i>Cavia aperea f. porcellus</i>)	

Germ cell mutagenicity

Based on available data the classification criteria are not met.

decanedioic acid, disodium salt

Result	Method	Time of exposure	Specific target organ	Species	Sex
Negative	in vitro				
Negative	in vivo				

ethanediol

Result	Method	Time of exposure	Specific target organ	Species	Sex
Negative	OECD 471				

Carcinogenicity

Based on available data the classification criteria are not met.

ethanediol

Route of exposure	Parameter	Value	Time of exposure	Result	Species	Sex
Oral			2 year	Negative	Mouse	

Reproductive toxicity

Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

ethanediol

Route of exposure	Parameter	Value	Specific target organ	Result	Species	Sex
Oral		>10-100 mg/kg	Kidney			

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Repeated dose toxicity

decanedioic acid, disodium salt

Route of exposure	Parameter	Result	Method	Value	Time of exposure	Species	Sex
Oral	NOAEL	Systemic effects		1000 mg/kg bw/day		Rat (<i>Rattus norvegicus</i>)	

ethanediol

Route of exposure	Parameter	Result	Method	Value	Time of exposure	Species	Sex
Oral	NOAEL			150 mg/kg	2 year	Rat (<i>Rattus norvegicus</i>)	
Dermal	NOAEL		OECD 410	2200-4400 mg/kg	4 week	Dog	

Aspiration hazard

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. Based on available data the classification criteria are not met.

11.2. Information on other hazards

not available

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Data for the mixture are not available.

ethanediol

Parameter	Method	Value	Time of exposure	Species	Environment
LC ₅₀		72860 mg/l	96 hour	Fishes (<i>Pimephales promelas</i>)	
EC ₅₀	OECD 202	>100 mg/l	48 hour	Daphnia (<i>Daphnia magna</i>)	
EC ₅₀		6500-13000 mg/l	96 hour	Algae (<i>Pseudokirchneriella subcapitata</i>)	

Chronic toxicity

ethanediol

Parameter	Value	Time of exposure	Species	Environment
NOEC	15380 mg/l	7 day	Fishes (<i>Pimephales promelas</i>)	
NOEC	8590 mg/l	7 day	Daphnia (<i>Ceriodaphnia dubia</i>)	

12.2. Persistence and degradability

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Biodegradability

ethanediol

Parameter	Method	Value	Time of exposure	Environment	Result
	OECD 301A	90-100 %	10 day		Easily biodegradable

Data not available.

12.3. Bioaccumulative potential

ethanediol

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
BCF	10		Fishes (Leuciscus idus)		
Log Pow	-1.93				

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

not available

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

16 01 14 antifreeze fluids containing hazardous substances *

Packaging waste type code

15 01 10 packaging containing residues of or contaminated by hazardous substances *

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information

14.1. UN number or ID number

Not subject to ADR

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

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14.5. Environmental hazards

No

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not available

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

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

Guidelines for safe handling used in the safety data sheet

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.
P264	Wash hands and exposed parts of the body thoroughly after handling.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of contents/container to by handing over to the person authorized to dispose of waste or by returning to the supplier.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC ₅₀	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients

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ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log K _{ow}	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
STOT RE	Specific target organ toxicity - repeated exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

Version 2.0 replaces the SDS version from 09.03.2020. The changes were made in sections 2 and 16.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.