according to Regulation (EC) No. 1907/2006 (REACH)



AESUB white / 35 ml / 400 ml

Version number: GHS 1.0 Date of compilation: 07.11.2019 SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 **Product identifier** AESUB white / 35 ml / 400 ml Trade name Registration number (REACH) not relevant (mixture) Other means of identification article number AESW006 (400ml) 1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses coating 1.3 Details of the supplier of the safety data sheet Scanningspray Vertiebs UG (haftungsbeschränkt) Gersdorffstr. 20a 44225 Dortmund Germany e-mail: info@scanningspray.de Website: www.scanningspray.de Competent person responsible for the safety data Max Ruhfus sheet e-mail (competent person) ruhfus@scanningspray.de 1.4 **Emergency telephone number** 24 Stunden Notrufnummer: Vergiftungs-Informations-Emergency information service Zentrale Freiburg +49 (0) 761 / 192 40 This number is only available during the following of-

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Cat- egory	Hazard class and category	Hazard state- ment
2.3	aerosols	Cat. 1	(Aerosol 1)	H222,H22 9

fice hours: Mon-Frí 00:00 - 00:00

Remarks

For full text of H-phrases: see SECTION 16.

Label elements Labelling according to Regulation (EC) No 1272/2008 (CLP) Signal word Danger Pictograms GHS02

2000



Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

2.2

according to Regulation (EC) No. 1907/2006 (REACH)



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Precautionary statements

Precautionary statements - prevention					
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.				
P211	Do not spray on an open flame or other ignition source.				
P251	Do not pierce or burn, even after use.				
Precautionary stater	nents - storage				

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3 Other hazards

There is no additional information.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Pictograms
butane	CAS No 106-97-8	50-<75	Flam. Gas 1 / H220 Press. Gas L / H280	
	EC No 203-448-7			• •
	REACH Reg. No 01-2119474691-32- xxxx			
ethanol	CAS No 64-17-5	10-<25	Flam. Liq. 2 / H225	
	EC No 200-578-6			•
	REACH Reg. No 01-2119457610-43- xxxx			
propane	CAS No 74-98-6	10-<25	Flam. Gas 1 / H220 Press. Gas L / H280	
	EC No 200-827-9			• •
	REACH Reg. No 01-2119486944-21- xxxx			
isobutane	CAS No 75-28-5	1-<5	Flam. Gas 1 / H220 Press. Gas L / H280	
	EC No 200-857-2			v v
	REACH Reg. No 01-2119485395-27- xxxx			

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For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed none

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media water spray, BC-powder Unsuitable extinguishing media water jet

5.2 Special hazards arising from the substance or mixture Hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

according to Regulation (EC) No. 1907/2006 (REACH)



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SECTION 6: Accidental release measures

 6.1 Personal precautions, protective equipment and emergency procedures For non-emergency personnel Remove persons to safety. For emergency responders Wear breathing apparatus if exposed to vapours/dust/spray/gases.
 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up Advice on how to contain a spill Covering of drains.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities Managing of associated risks

• Flammability hazards

Do not spray on an open flame or other ignition source. Protect from sunlight.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

according to Regulation (EC) No. 1907/2006 (REACH)



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

No information available.

Relevant DNELs/DMELs/PNECs and other threshold levels

• relevant DNELs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time
ethanol	64-17-5	DNEL	1.900 mg/m ³	human, inhalatory	worker (in- dustry)	acute - local effects
ethanol	64-17-5	DNEL	343 mg/kg	human, dermal	worker (in- dustry)	chronic - systemic ef- fects
ethanol	64-17-5	DNEL	950 mg/m ³	human, inhalatory	worker (in- dustry)	chronic - systemic ef- fects

• relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environ- mental com- partment	Exposure time
ethanol	64-17-5	PNEC	580 ^{mg} / _l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single in- stance)
ethanol	64-17-5	PNEC	2,75 ^{mg} / _l	aquatic organisms	water	intermittent release

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Personal protective equipment shall be used when the risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

Eye/face protection

Wear eye/face protection.

Skin protection

hand protection

Wear suitable gloves. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

[In case of inadequate ventilation] wear respiratory protection.



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Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1	Information on basic physical and chemica	Il properties
	Appearance	
	Physical state	aerosol (spray aerosol)
	Colour	various
	Odour	characteristic
	Other physical and chemical parameters	
	pH (value)	not determined
	Melting point/freezing point	not determined
	Initial boiling point and boiling range	-161,5 °C at 1.013 hPa
	Flash point	12 °C
	Evaporation rate	not determined
	Flammability (solid, gas)	Flammable aerosol in accordance with GHS criteria
	Explosive limits	
	 lower explosion limit (LEL) 	2,5 vol%
	 upper explosion limit (UEL) 	15 vol%
	Vapour pressure	57,26 hPa at 19,6 °C
	Density	not determined
	Relative density	Information on this property is not available.
	Solubility(ies)	not determined
	Partition coefficient	
	n-octanol/water (log KOW)	This information is not available.
	Auto-ignition temperature	$287^{\circ}\mathrm{C}$ (auto-ignition temperature (liquids and gases))
	Viscosity	not relevant (aerosol)
	Explosive properties	none
	Oxidising properties	none
9.2	Other information	
	Solvent content	21,56 %
	Solid content	9,2 %
	propellant content	69,24 %

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s): risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Do not spray on an open flame or other ignition source. - Keep away from heat.



according to Regulation (EC) No. 1907/2006 (REACH)



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Hints to prevent fire or explosion

Protect from sunlight.

Physical stresses which might result in a hazardous situation and have to be avoided strong shocks

10.5 Incompatible materials

oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
butane	106-97-8	LC50	27,98 ^{mg} / _l	fish	96 h
butane	106-97-8	EC50	7,71 ^{mg} / _l	algae	96 h
ethanol	64-17-5	LC50	14,2 ^g / _l	fish	96 h

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Name of substance	CAS No	Endpoint	Value	Species	Exposure time
ethanol	64-17-5	EC50	12,9 ^g / _l	fish	96 h
propane	74-98-6	LC50	27,98 ^{mg} / _l	fish	96 h
propane	74-98-6	EC50	7,71 ^{mg} / _l	algae	96 h
isobutane	75-28-5	LC50	49,9 ^{mg} / _l	fish	96 h
isobutane	75-28-5	EC50	19,37 ^{mg} / _l	algae	96 h

Aquatic toxicity (chronic)

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
ethanol	64-17-5	LC50	>0,08 ^{mg} / _l	fish	42 d
ethanol	64-17-5	EC50	22,6 ^g / _l	algae	10 d
ethanol	64-17-5	ErC50	675 ^{mg} / _l	algae	4 d

12.2 Persistence and degradability Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
ethanol	64-17-5	oxygen depletion	74 %	5 d

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
butane	106-97-8		1,09 (pH value: 7, 20 °C)	
ethanol	64-17-5		-0,35 (pH value: 7,4, 24 °C)	
propane	74-98-6		1,09 (pH value: 7, 20 °C)	
isobutane	75-28-5		1,09 (pH value: 7, 20 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

according to Regulation (EC) No. 1907/2006 (REACH)



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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets. Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information				
14.1	UN number	1950		
14.2	UN proper shipping name	AEROSOLS		
14.3	Transport hazard class(es) Class Subsidiary risk(s)	2 (gases) (aerosol) 2.1 (flammability)		
14.4	Packing group	not assigned to a packing group		
14.5	Environmental hazards	NONE (non-environmentally hazardous acc. to the dangerous goods regulations)		
14.6	Special precautions for user			

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)UN number1950Proper shipping nameAEROSOLSClass2Classification code5FDanger label(s)2.1



Special provisions (SP)	190, 327, 344, 625
Excepted quantities (EQ)	EO
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	D



according to Regulation (EC) No. 1907/2006 (REACH)

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Version number: GHS 1.0 Date of compilation: 07.11.2019 • International Maritime Dangerous Goods Code (IMDG) **UN** number 1950 Proper shipping name **AEROSOLS** Class 2.1 Danger label(s) 2.1 Special provisions (SP) 63, 190, 277, 327, 344, 381, 959 Excepted quantities (EQ) E0 Limited quantities (LQ) 1 L F-D, S-U EmS Stowage category International Civil Aviation Organization (ICAO-IATA/DGR) **UN** number 1950 Proper shipping name Aerosols, flammable Class 2.1 Danger label(s) 2.1 Special provisions (SP) A145, A167 Excepted quantities (EQ) E0 Limited quantities (LQ) 30 kg

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

• Directive 75/324/EEC relating to aerosol dispensers

Classification of the gas/aerosol	Extremely flammable
Labelling	Pressurized container: may burst if heated Keep away from heat, hot surfaces, sparks, open flames and other ig- nition sources. No smoking Do not pierce or burn, even after use Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

15.2 Chemical Safety Assessment

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

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)



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SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	= EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
ΙΑΤΑ	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethal- ity during a specified time interval
log KOW	n-Octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
Press. Gas	Gas under pressure

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Abbr.	Descriptions of used abbreviations
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concern- ing the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)

Classification procedure

Physical and chemical properties: The classification is based on tested mixture. Health hazards/environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.

Specific end use(s)

Coating

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.