Scanningspray Vertriebs UG (haftungsbeschränkt)
44225 Dortmund

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

1.1 Product identifier

Aesub white

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

1.2.1 Relevant uses

permanent surface preparation

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Scanningspray Vertriebs UG (haftungsbeschränkt)
Gersdorffstraße 20a
44225 Dortmund / GERMANY
Phone +49 178 203 58 58
Homepage www.scanningspray.de
E-mail info@scanningspray.de

Address enquiries to

Technical information info@aesub.com

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +49 (0)1761-19240 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Aerosol 1: H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.

2.2 Label elements

The product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2012)

Hazard pictograms

Signal word DANGER

Hazard statements

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

Precautionary statements

P210 Keep away from flames and hot surfaces. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
P501 Dispose of contents/container to in accordance with local/regional/national/ international regulation.

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance
50 - <75	Butane
	CAS: 106-97-8
10 - <25	Ethanol
	CAS: 64-17-5
10 - <25	Propane
	CAS: 74-98-6
1 - <5	iso-Butane
	CAS: 75-28-5
1 - <5	Ethane
	CAS: 74-84-0

Comment on component parts All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact When in contact with the skin, clean 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 Seek medical advice 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

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media foam, dry powder, water spray jet, carbon dioxide

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.
Bursting aerosols can be forcibly projected from a fire.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.
Use self-contained breathing apparatus.

Cool containers at risk with water spray jet.
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

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use breathing apparatus if exposed to vapors/aerosol.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.
Retain and dispose of contaminated wash water.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (f.ex. 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

Use only in well-ventilated areas.
Use solvent-resistant equipment.
Provide good room ventilation even at ground level (vapors are heavier than air).

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.
Vapors can form an explosive mixture with air.

Do not eat, drink, smoke or take drugs at work.
Take off contaminated clothing and wash before reuse.
Wash hands before breaks and after work.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.
Prevent penetration into the ground.

Do not store together with oxidizing agents.

Keep in a cool place, heat causes increase in pressure and risk of bursting.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °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 (US)

Substance
Butane
CAS: 106-97-8, EINECS/ELINCS: 203-448-7, EU-INDEX: 601-004-00-0, Reg-No.: 01-2119474691-32-XXXX
Long-term exposure: 800 ppm, 1900 mg/m³, NIOSH
Ethanol
CAS: 64-17-5, EINECS/ELINCS: 200-578-6, EU-INDEX: 603-002-00-5, Reg-No.: 01-2119457610-43-XXXX
Long-term exposure: 1000 ppm, 1900 mg/m³, OSHA, NIOSH
Propane
CAS: 74-98-6, EINECS/ELINCS: 200-827-9, EU-INDEX: 601-003-00-5, Reg-No.: 01-2119486944-21-XXXX
Long-term exposure: 1000 ppm, 1800 mg/m³, OSHA
iso-Butane
CAS: 75-28-5, EINECS/ELINCS: 200-857-2, EU-INDEX: 601-004-00-0, Reg-No.: 01-2119485395-27-XXXX
Long-term exposure: 1000 ppm, ACGIH 2011

DNEL

Substance
Ethanol, CAS: 64-17-5
Industrial, inhalative (vapor), Long-term - systemic effects: 950 mg/m³.
Industrial, dermal, Long-term - systemic effects: 343 mg/kg bw/d.
general population, oral, Long-term - systemic effects: 87 mg/kg bw/day.
general population, inhalative (vapor), Long-term - systemic effects: 114 mg/m³.
general population, dermal, Long-term - systemic effects: 206 mg/kg bw/d.
general population, oral, Long-term - systemic effects: 87 mg/kg bw/d.

PNEC

Substance
Ethanol, CAS: 64-17-5
soil, 0,63 mg/kg.
sediment (freshwater), 3,6 mg/kg.
seawater, 0,79 mg/l.
freshwater, 0,96 mg/l.
oral (food), 0,38 g/kg.
sediment (seawater), 2,9 mg/kg.
sewage treatment plants (STP), 580 mg/l.

8.2 Exposure controls

Additional advice on system design	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.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. 0,7 mm; Butyl rubber, >480 min (EN 374-1/-2/-3).
Skin protection	Solvent-resistant protective clothing (EN 340)
	Do not inhale gases/vapors/aerosols. Avoid contact with eyes and skin. 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.
Respiratory protection	Breathing apparatus in the event of high concentrations. Short term: filter apparatus, filter AX.
Thermal hazards	No information available.
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	aerosol
Color	various
Odor	characteristic
Odor threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability [°C]	not applicable
Lower explosion limit	2,5 Vol.-%
Upper explosion limit	15 Vol.-%
Oxidizing properties	no
Vapor pressure/gas pressure [kPa]	5,7 (20°C)
Density [g/ml]	No information available.
Bulk density [kg/m³]	not applicable
Solubility in water	insoluble
Partition coefficient [n-octanol/water]	No information available.
Viscosity	not applicable
Relative vapor density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Autoignition temperature [°C]	287
Decomposition temperature [°C]	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

10.4 Conditions to avoid

Strong heating.
See SECTION 7.2.

10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

No dangerous reactions known if used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
inhalative, Based on the information available, the classification criteria have not been fulfilled.:
dermal, Based on the information available, the classification criteria have not been fulfilled.:
oral, Based on the information available, the classification criteria have not been fulfilled.:

Substance
Butane, CAS: 106-97-8
LC50, inhalative, Rat: 658 mg/L (IUCLID).
Propane, CAS: 74-98-6
LC50, inhalative, Rat: > 1443 mg/l (15 min) (Lit.).
Ethanol, CAS: 64-17-5
LD50, dermal, Rabbit: > 2000 mg/kg (OECD 402).
LD50, oral, Rat: 10470 mg/kg (OECD 401).
LC50, inhalative, Rat: 117-125 mg/l/4h (OECD 403).
NOAEL, Rat: > 3000 mg/kg/d (24 month OECD 451).

Serious eye damage/irritation	Based on the information available, the classification criteria have not been fulfilled.
Skin corrosion/irritation	Based on the information available, the classification criteria have not been fulfilled.
Respiratory or skin sensitisation	Based on the information available, the classification criteria have not been fulfilled.
Specific target organ toxicity — single exposure	Based on the information available, the classification criteria have not been fulfilled.
Specific target organ toxicity — repeated exposure	Based on the information available, the classification criteria have not been fulfilled.
Mutagenicity	Based on the information available, the classification criteria have not been fulfilled.
Reproduction toxicity	Based on the information available, the classification criteria have not been fulfilled.
Carcinogenicity	Based on the information available, the classification criteria have not been fulfilled.
Aspiration hazard	Based on the information available, the classification criteria have not been fulfilled.
General remarks	Frequent persistent contact with the skin can cause skin irritation. 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. Toxicological data of complete product are not available. The determination of properties hazardous to health does not take the propellant or carrier material into account.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Ethanol, CAS: 64-17-5
LC50, (96h), Oncorhynchus mykiss: 13000 mg/l (OECD 203).
LC50, (48h), Daphnia magna: 12340 mg/l.
EC50, (72h), Algae: 275 mg/l (OECD 201).
EC50, (48h), Selenastrum capricornutum: 12900 mg/l (OECD 201).

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

not applicable

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

Ecotoxicological data are not available.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

RCRA Hazard Class (40CFR 261): Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

Product	Dispose of as hazardous waste. Coordinate disposal with the authorities if necessary.
Contaminated packaging	Uncontaminated packaging may be taken for recycling. Dispose full / partially emptied cartridges as hazardous waste in accordance with official regulations.
RCRA Hazard Class (40CFR 261)	Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

SECTION 14: Transport

14.1 UN number

Transport by land according to ADR/RID	1950
Inland navigation (ADN)	1950
Marine transport in accordance with IMDG	1950
Air transport in accordance with IATA	1950

14.2 UN proper shipping name

Transport by land according to ADR/RID	Aerosols
- Classification Code	5F
- Label	
- ADR LQ	1 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (D)
Inland navigation (ADN)	Aerosols
- Classification Code	5F
- Label	
Marine transport in accordance with IMDG	Aerosols
- EMS	F-D, S-U
- Label	
- IMDG LQ	1 l
Air transport in accordance with IATA	Aerosols, flammable
- Label	
DOT Road Shipment Information (49 CFR)	UN/NA 1950 Aerosols 2
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	2
Inland navigation (ADN)	2
Marine transport in accordance with IMDG	2.1
Air transport in accordance with IATA	2.1

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 Transport in bulk according to Annex II of MARPOL and the IBC Code

not determined

SECTION 15: Regulatory information

Observe employment restrictions for people	Observe employment restrictions for young people.

US Regulations

National regulations	29 CFR 1910.1200-HCS 2012, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65
- SARA, 302	This product does not contain any ingredients regulated under this list.
- SARA, 311	This product does not contain any ingredients regulated under this list.
- SARA, 313	This product does not contain any ingredients regulated under this list.
- CA Proposition 65	No components require labeling under California Proposition 65.
- TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.
- FDA	not applicable
American Conference of Governmental Industrial Hygienists - ACGIH	A4: Not classifiable as a human carcinogen.
International Agency for Research on Cancer IARC	Ingredients not listed.
National Toxicology Program - NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
HAP-VOC	91 %
Transport-regulations	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)
Other Right to Know Laws	

HMIS Ratings

HEALTH	**1**	1 - Slight Hazard
FLAMMABILITY	**3**	3 - Severe Hazard
PHYSICAL HAZARD	**1**	1 - Slight Hazard
PERSONAL PROTECTION	**B**	B - Safety Glasses and Gloves

NFPA Ratings

3	TOP, FLAMMABILITY: 3 - Severe Hazard
1 1	LEFT, HEALTH: 1 - Slight Hazard RIGHT, REACTIVITY: 1 - Slight Hazard
FLG	BOTTOM, SPECIAL NOTICE: FLG - Flammable Gas
Modified position	none

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H319 Causes serious eye irritation.
H225 Highly flammable liquid and vapor.
H280 Contains gas under pressure; may explode if heated.
H220 Extremely flammable gas.

16.2 Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists;
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;
CAS = Chemical Abstracts Service;
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;
CFR = Code of Federal Regulations;
CPR = Controlled Products Regulations;
DMEL = Derived Minimum Effect Level;
DNEL = Derived No Effect Level;
DOT = Department of Transportation;
EC50 = Median effective concentration;
EPA = Environmental Protection Agency;
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;
IARC = International Agency of Research on Cancer;
IATA = International Air Transport Association;
TSCA = Toxic Substance Control Act;
HMIS = Hazardous Materials Identification System;
NFPA = National Fire Protection Association;
NIOSH = National Institute for Occupational Safety and Health;
OSHA = Occupational Safety and Health Administration;
LC50 = Lethal concentration, 50%;
LD50 = Median lethal dose, 50%;
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;
SARA = Superfund Amendments and Reauthorization Act;
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 Aerosol 1: H222 Extremely flammable aerosol. (Bridging principle "Aerosols") H229 Pressurised container: May burst if heated. (Bridging principle "Aerosols")

Modified position none