1. Identification

Product identifier
VITA AKZENT Plus Glaze SPRAY, Plus Glaze LT Spray

Further trade names
VITA AKZENT Plus FLUOGLAZE LT SPRAY

Recommended use of the chemical and restrictions on use

Use of the substance/mixture
Use as laboratory reagent

Details of the supplier of the safety data sheet
Company name: VITA Zahnfabrik H. Rauter GmbH & Co. KG
Post-office box: 1338
79704 Bad Säckingen
Telephone: +49(0)7761-562-0
Fax: +49(0)7761-562-299
E-mail: info@vita-zahnfabrik.com
Internet: www.vita-zahnfabrik.com

Emergency phone number: +49-(0)761-19240

Further Information
medical device

2. Hazard(s) identification

Classification of the chemical
29 CFR Part 1910.1200
Gases under pressure: Compressed gas

Label elements
29 CFR Part 1910.1200
Signal word: Danger

Pictograms:

Extremely flammable aerosol
Contains gas under pressure; may explode if heated

Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Protect from sunlight. Store in a well-ventilated place.
Do not expose to temperatures exceeding 50 °C/122 °F.

Hazard statements

3. Composition/information on ingredients

Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td>75 %</td>
</tr>
<tr>
<td>64-17-5</td>
<td>ethanol, ethyl alcohol</td>
<td>6 %</td>
</tr>
</tbody>
</table>

4. First-aid measures

Description of first aid measures

After contact with eyes
Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion
Rinse mouth immediately and drink plenty of water.

Most important symptoms and effects, both acute and delayed
No information available.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media
Water.

Specific hazards arising from the chemical
Extremely flammable aerosol. Flammable. Vapors may form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

Special protective equipment and precautions for fire-fighters
In case of fire: Wear self-contained breathing apparatus.

Additional information
Use water spray/stream to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Remove all sources of ignition.

Environmental precautions
Do not allow uncontrolled discharge of product into the environment. Danger of explosion

Methods and material for containment and cleaning up
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections
Safe handling: see section 7
Personal protection equipment (PPE): see section 8
Disposal: see section 13

7. Handling and storage

Precautions for safe handling
Advice on safe handling
Do not pierce or burn, even after use.

Advice on protection against fire and explosion
Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapors may form explosive mixtures with air.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility
Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

8. Exposure controls/personal protection

Control parameters

Exposure limits

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>TWA (8 h)</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol (Ethanol)</td>
<td>1000</td>
<td>1900</td>
<td>TWA (8 h)</td>
<td>PEL</td>
<td></td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol</td>
<td>1000</td>
<td>1900</td>
<td>TWA (8 h)</td>
<td>REL</td>
<td></td>
</tr>
<tr>
<td>75-28-5</td>
<td>Isobutane</td>
<td>800</td>
<td>1900</td>
<td>TWA (8 h)</td>
<td>REL</td>
<td></td>
</tr>
</tbody>
</table>

Exposure controls

Protective and hygiene measures
Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection
Wear eye protection/face protection.

Hand protection
Recommended glove articles KCL Dermatril PNBR (Nitrile rubber) When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. 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.

Skin protection
Wear suitable protective clothing.

Respiratory protection
Provide adequate ventilation.

9. Physical and chemical properties

Information on basic physical and chemical properties

- Physical state: Aerosol
- Color: whitish
- Odor: characteristic
- pH-Value: not determined
Changes in the physical state

Melting point/freezing point: not determined
Initial boiling point and boiling range: -11 °C
Flash point: -60 °C

Flammability
Solid: not applicable
Gas: not applicable

Lower explosion limits: 1.8 vol. %
Upper explosion limits: 8.5 vol. %

Auto-ignition temperature
Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties
Not oxidising.

Vapor pressure: <=1100 hPa
(at 50 °C)
Density: 0.64000 g/cm³
Water solubility: No

Solubility in other solvents
not determined

Partition coefficient: not determined
Vapor density: not determined
Evaporation rate: not determined

Other information
Solid content: 0.0 %

10. Stability and reactivity

Reactivity
Extremely flammable aerosol. Explosive.

Chemical stability
The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions
No known hazardous reactions.

Conditions to avoid
Danger of explosion. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapors may form explosive mixtures with air. Risk of explosion by shock, friction, fire or other sources of ignition. Remove all sources of ignition. Keep away from heat. Ignition hazard.

Incompatible materials
Protect against: Contact with air/oxygen.

Hazardous decomposition products
No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects
Acute toxicity
Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>ethanol, ethyl alcohol</td>
<td>oral</td>
<td>LD50 6200 mg/kg</td>
<td>Rat</td>
<td>IUCLID</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) vapour</td>
<td>LC50 95.6 mg/l</td>
<td>Rat</td>
<td>RTECS</td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Based on available data, the classification criteria are not met.

Sensitizing effects
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure
Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure
Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): No ingredient of this mixture is listed.
Carcinogenicity (IARC): Ethanol in alcoholic beverages (CAS 64-17-5) is listed in group 1.
Carcinogenicity (NTP): No ingredient of this mixture is listed.

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

12. Ecological information

Ecotoxicity
The product is not: Ecotoxic.

Persistence and degradability
The product has not been tested.

Bioaccumulative potential
The product has not been tested.

Mobility in soil
The product has not been tested.

Other adverse effects
No information available.

Further information
Avoid release to the environment.

13. Disposal considerations

Waste treatment methods

Advice on disposal
Dispose of waste according to applicable legislation. Waste requires monitoring. Handle contaminated packages in the same way as the substance itself.

Contaminated packaging
Completely emptied packages can be recycled.

14. Transport information
Marine transport (IMDG)

<table>
<thead>
<tr>
<th>UN number:</th>
<th>UN 1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name:</td>
<td>AEROSOLS</td>
</tr>
<tr>
<td>Transport hazard class(es):</td>
<td>2.1</td>
</tr>
<tr>
<td>Packing group:</td>
<td>-</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>2.1</td>
</tr>
</tbody>
</table>

- Limited quantity: 1000 mL
- Excepted quantity: E0
- EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

<table>
<thead>
<tr>
<th>UN number:</th>
<th>UN 1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name:</td>
<td>AEROSOLS, flammable</td>
</tr>
<tr>
<td>Transport hazard class(es):</td>
<td>2.1</td>
</tr>
<tr>
<td>Packing group:</td>
<td>-</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>2.1</td>
</tr>
</tbody>
</table>

- Limited quantity Passenger: 30 kg G
- Passenger LQ: Y203
- Excepted quantity: E0
- IATA-packing instructions - Passenger: 203
- IATA-max. quantity - Passenger: 75 kg
- IATA-packing instructions - Cargo: 203
- IATA-max. quantity - Cargo: 150 kg

Environmental hazards

- ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user

- Warning: Flammable gases.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- not applicable

15. Regulatory information

U.S. Regulations

National regulatory information
- SARA Section 311/312 Hazards:
  - Isobutane (75-28-5): Fire hazard
  - Ethanol, ethyl alcohol (64-17-5): Fire hazard
- Clean Air Act Section 112(r):
  - Isobutane (75-28-5): Threshold quantities = 10,000 lbs.

State Regulations
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)
  - This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
## 16. Other information

<table>
<thead>
<tr>
<th>Revision date:</th>
<th>23.02.2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision No:</td>
<td>2</td>
</tr>
</tbody>
</table>

### Abbreviations and acronyms

- **ADR**: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- **IMDG**: International Maritime Code for Dangerous Goods
- **IATA**: International Air Transport Association
- **GHS**: Globally Harmonized System of Classification and Labelling of Chemicals
- **EINECS**: European Inventory of Existing Commercial Chemical Substances
- **ELINCS**: European List of Notified Chemical Substances
- **CAS**: Chemical Abstracts Service
- **LC50**: Lethal concentration, 50%
- **LD50**: Lethal dose, 50%

### Other data

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*