

## GINA Buffer B5

Version number: GHS 3.5  
Replaces version of: 2022-10-21 (GHS 2)

Revision: 2022-11-22

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

**1.1 Product identifier**

|                             |                        |
|-----------------------------|------------------------|
| Trade name                  | <b>GINA Buffer B5</b>  |
| Registration number (REACH) | not relevant (mixture) |
| Alternative number(s)       | M.00424                |

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

|                          |   |
|--------------------------|---|
| Relevant identified uses | professional use<br>laboratory and analytical use |
|--------------------------|---|

**1.3 Details of the supplier of the safety data sheet**

Cube Dx GmbH  
Westbahnstraße 55  
A-4300 St. Valentin  
Austria

Telephone: +43 (0)7435 58193 0  
e-mail: support@cubedx.com  
Website: <https://www.cubedx.com>

|                           |                    |
|---------------------------|--------------------|
| e-mail (competent person) | support@cubedx.com |
|---------------------------|--------------------|

**1.4 Emergency telephone number**

|                               |  |
|-------------------------------|--|
| Emergency information service | +43 (0)7435 58193 0<br>This number is only available during the following office hours: Mon - Thu 08:00 - 16:00, Fri 08:00 - 13:00 |
|-------------------------------|--|

### SECTION 2: Hazards identification

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 (CLP)

| Section | Hazard class     | Category | Hazard class and category | Hazard statement |
|---------|------------------|----------|---------------------------|------------------|
| 2.6     | flammable liquid | 2        | Flam. Liq. 2              | H225             |

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

**2.2 Label elements**

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- Signal word            danger

- Pictograms

GHS02



- Hazard statements

H225                      Highly flammable liquid and vapour.

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### - Precautionary statements

|                |  |
|----------------|--|
| P210           | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.         |
| P233           | Keep container tightly closed.   |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| P370+P378      | In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.                        |
| P403+P235      | Store in a well-ventilated place. Keep cool.   |
| P501           | Dispose of contents/container in accordance with local/regional/national/international regulations.    |

### 2.3 Other hazards

of no significance


## 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 GHS | Pictograms  |
|-------------------|---|-----------|----------------------------|---|
| ethanol           | CAS No<br>64-17-5<br><br>EC No<br>200-578-6<br><br>Index No<br>603-002-00-5<br><br>REACH Reg. No<br>01-2119457610-43-<br>xxxx | 75 - < 90 | Flam. Liq. 2 / H225        |  |

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.

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### 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, Carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media

Water jet

### 5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

### 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.

## 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

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

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### 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. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

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

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

Control of effects

Protect against external exposure, such as  
frost

- Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- 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.

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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

| Occupational exposure limit values (Workplace Exposure Limits) |               |         |            |           |                          |            |                           |                 |                                |          |          |
|--|---------------|---------|------------|-----------|--------------------------|------------|---------------------------|-----------------|--------------------------------|----------|----------|
| Country  | Name of agent | CAS No  | Identifier | TWA [ppm] | TWA [mg/m <sup>3</sup> ] | STEL [ppm] | STEL [mg/m <sup>3</sup> ] | Ceiling-C [ppm] | Ceiling-C [mg/m <sup>3</sup> ] | Notation | Source   |
| DE   | ethanol       | 64-17-5 | AGW        | 200       | 380                      | 800        | 1,520                     |                 |                                | Y        | TRGS 900 |

**Notation**

Ceiling-C  
STEL

ceiling value is a limit value above which exposure should not occur  
short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours  
time-weighted average (unless otherwise specified)

Y

a risk of developmental toxicity does not need to be expected if the occupational exposure limit value and the biological limit value (BGW) are adhered to

#### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

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 chemical properties

|                              |                |
|------------------------------|----------------|
| Physical state               | liquid         |
| Colour                       | not determined |
| Odour                        | characteristic |
| Melting point/freezing point | -97.8 °C       |

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|  |  |
|--|--|
| Boiling point or initial boiling point and boiling range | 64.7 °C at 1,013 hPa                                   |
| Flammability   | flammable liquid in accordance with GHS criteria       |
| Lower and upper explosion limit                          | not determined   |
| Flash point  | 9.7 °C at 1,013 hPa                                    |
| Auto-ignition temperature                                | 455 °C (auto-ignition temperature (liquids and gases)) |
| Decomposition temperature                                | not relevant   |
| pH (value)   | not determined   |
| Kinematic viscosity                                      | not determined   |
| Solubility(ies)  | not determined   |

Partition coefficient

|   |                                   |
|---|-----------------------------------|
| Partition coefficient n-octanol/water (log value) | this information is not available |
|---|-----------------------------------|

|                 |                    |
|-----------------|--------------------|
| Vapour pressure | 169.3 hPa at 25 °C |
|-----------------|--------------------|

Density and/or relative density

|                         |   |
|-------------------------|---|
| Density                 | not determined                                |
| Relative vapour density | information on this property is not available |

|                          |                       |
|--------------------------|-----------------------|
| Particle characteristics | not relevant (liquid) |
|--------------------------|-----------------------|

**9.2 Other information**

|  |                                    |
|--|------------------------------------|
| Information with regard to physical hazard classes | there is no additional information |
|--|------------------------------------|

Other safety characteristics

|                                      |  |
|--------------------------------------|--|
| Temperature class (EU, acc. to ATEX) | T1 (maximum permissible surface temperature on the equipment: 450°C) |
|--------------------------------------|--|

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### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains re-active substance(s). Risk of ignition.

If heated:

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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

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

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.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

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### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## 11.2 Information on other hazards

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

### Biodegradation

The relevant substances of the mixture are readily biodegradable.

### 12.2 Persistence and degradability

Data are not available.

### 12.3 Bioaccumulative potential

Data are not available.

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Data are not available.

### 12.6 Endocrine disrupting properties

None of the ingredients are listed.

### 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Waste treatment-relevant information

Solvent reclamation/regeneration.

#### 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.



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**SECTION 14: Transport information**

**14.1 UN number or ID number**

|             |         |
|-------------|---------|
| ADR/RID/ADN | UN 1170 |
| IMDG-Code   | UN 1170 |
| ICAO-TI     | UN 1170 |

**14.2 UN proper shipping name**

|             |         |
|-------------|---------|
| ADR/RID/ADN | ETHANOL |
| IMDG-Code   | ETHANOL |
| ICAO-TI     | Ethanol |

**14.3 Transport hazard class(es)**

|             |   |
|-------------|---|
| ADR/RID/ADN | 3 |
| IMDG-Code   | 3 |
| ICAO-TI     | 3 |

**14.4 Packing group**

|             |    |
|-------------|----|
| ADR/RID/ADN | II |
| IMDG-Code   | II |
| ICAO-TI     | II |

**14.5 Environmental hazards**

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 Maritime transport in bulk according to IMO instruments**

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) - Additional information**

|                     |    |
|---------------------|----|
| Classification code | F1 |
| Danger label(s)     | 3  |



|                               |          |
|-------------------------------|----------|
| Special provisions (SP)       | 144, 601 |
| Excepted quantities (EQ)      | E2       |
| Limited quantities (LQ)       | 1 L      |
| Transport category (TC)       | 2        |
| Tunnel restriction code (TRC) | D/E      |
| Hazard identification No      | 33       |

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### International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant -  
Danger label(s) 3



Special provisions (SP) 144  
Excepted quantities (EQ) E2  
Limited quantities (LQ) 1 L  
EmS F-E, S-D  
Stowage category A

### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s) 3



Special provisions (SP) A3, A58, A180  
Excepted quantities (EQ) E2  
Limited quantities (LQ) 1 L

## 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)

#### Restrictions according to REACH, Annex XVII

| Dangerous substances with restrictions (REACH, Annex XVII) |  |    |
|--|--|----|
| Name of substance  | Name acc. to inventory   | No |
| GINA Buffer B5   | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC | 3  |
| ethanol  | flammable / pyrophoric   | 40 |

#### List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

#### Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

#### Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

#### Water Framework Directive (WFD)

none of the ingredients are listed

#### Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

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### 15.2 Chemical Safety Assessment

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

### SECTION 16: Other information

#### Indication of changes (revised safety data sheet)

| Section | Former entry (text/value) | Actual entry (text/value)  | Safety-relevant |
|---------|---------------------------|--|-----------------|
| 15.1    |                           | Dangerous substances with restrictions (REACH, Annex XVII):<br>change in the listing (table) | yes             |

#### 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 relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)   |
| ADR/RID/ADN | Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN)   |
| AGW         | Workplace exposure limit  |
| CAS         | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)  |
| Ceiling-C   | Ceiling value   |
| CLP         | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures  |
| DGR         | Dangerous Goods Regulations (see IATA/DGR)  |
| 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  |
| Flam. Liq.  | Flammable liquid  |
| GHS         | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations   |
| IATA        | International Air Transport Association   |
| IATA/DGR    | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |
| ICAO        | International Civil Aviation Organization   |
| ICAO-TI     | Technical instructions for the safe transport of dangerous goods by air   |
| IMDG        | International Maritime Dangerous Goods Code   |
| IMDG-Code   | International Maritime Dangerous Goods Code   |
| index No    | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008  |
| NLP         | No-Longer Polymer   |

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| Abbr.    | Descriptions of used abbreviations  |
|----------|---|
| PBT      | Persistent, Bioaccumulative and Toxic   |
| ppm      | Parts per million   |
| REACH    | Registration, Evaluation, Authorisation and Restriction of Chemicals  |
| RID      | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail) |
| STEL     | Short-term exposure limit   |
| SVHC     | Substance of Very High Concern  |
| TRGS 900 | Arbeitsplatzgrenzwerte (TRGS 900)   |
| TWA      | Time-weighted average   |
| vPvB     | Very Persistent and very Bioaccumulative  |

### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### 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 section 2 and 3)

| Code | Text                                |
|------|-------------------------------------|
| H225 | Highly flammable liquid and vapour. |

### Disclaimer

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