



Hain Lifescience GmbH
Hardwiesenstr. 1
72147 Nehren
Deutschland
www.hain-lifescience.de

SAFETY DATA SHEET: BSDS05

Language	EN
Revision No.:	1
Date:	2018-08-14

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

1.1.1 Component Name	1.1.2 Code
Capture Buffer (Component Number 5.03)	Kit Components: Bullet BUGS'n BEADS™, Product code 2.09.04

The information included in this safety data sheet exclusively refers to the components mentioned in point 1.1.1

Chemical denomination

Solution containing citric acid

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

Laboratory reagents for in vitro diagnostics

1.3 Details of the supplier of the safety data sheet

Manufacturer:

Hain Lifescience GmbH
Hardwiesenstr. 1
72147 Nehren
Deutschland
Tel: +49 (0) 74 73- 94 51- 0
www.hain-lifescience.de

Responsible Person:

msds@hain-lifescience.de

1.4 Emergency telephone number

European emergency number: 112

United Kingdom of Great Britain and Northern Ireland

National Poisons Information Service (Birmingham Unit)

City Hospital

Dudley Rd

Birmingham

National Poisons Information Service Edinburgh

Scottish Poisons Information Bureau

Royal Infirmary

51 Little France Crescent

Edinburgh

Emergency number: 999

Telephone number: +44 121 507 4123

Emergency telephone number: 844 892 0111

Fax: +44 121 507 55 88 **E-mail:** mail@npis.org

Telephone number: +44 131 242 1383

Emergency telephone number: 844 892 0111

Fax: +44 131 242 13 87 **E-mail:** spib@luht.scot.nhs.uk

Ireland

Poisons Information Centre of Ireland

Beaumont Hospital

PO Box 1297

Dublin

Emergency number: 999

Telephone number: +353 1 809 25 66

Emergency telephone number:

+353 1 837 9964 (medical professionals)

+353 1 809 2166 (public)

Fax: +353 1 836 84 76 **E-mail:** npicdublin@beaumont.ie

The Netherlands

National Poisons Information Centre, The Netherlands

University Medical Centre Utrecht

Postbus 85500

Utrecht

Telephone number: +31 88 755 85 61

Emergency telephone number: +31 30 274 88 88

Fax: +31 30 254 15 11 **E-mail:** nvic@umcutrecht.nl

Malta

Mater Dei Hospital

Msida MSD 2090

MALTA

Telephone number: 2545-0000

Fax: 2545 4154 **E-mail:** mdh@gov.mt

Australia



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NSW Poisons Information Centre
Childrens Hospital Westmead
Hawkesbury Road
Sydney

Telephone number: +61 2 9845 3969
Emergency telephone number: 131126 (national calls)
Fax: +61 2 9845 3597 **E-mail:** www.poisonsinfo.nsw.gov.au

South Africa

Tygerberg Poison Information Centre
Division of Pharmacology, Department of Medicine
Faculty of Health Sciences
Tygerberg Campus
Stellenbosch University
Tygerberg

Telephone number: +27 21 938 95 96
Emergency telephone number: +27 21 931 6129
Fax: +27 21 938 91 22 **E-mail:** caw@sun.ac.za

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet


REGULATION (EC) No 1272/2008

Serious eye damage Category 1 H318

2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

REGULATION (EC) No 1272/2008	
SIGNAL WORD:	Danger
SYMBOLS / PICTOGRAMS:	 GHS05
HAZARD STATEMENTS:	H318 Causes Serious Eye Damage
PRECAUTIONARY STATEMENTS:	P280 Wear protective gloves / protective clothing / eye protection / face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTRE or doctor/physician.

2.3 Other hazards

Information not available

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

N.A. for mixture



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3.2 Mixtures

Contains: Citric Acid

CAS No.	CE No.	Index No.	Concentration	Classification Reg. 1272/2008 (pure substance)
77-92-9	201-069-1	-	5-9%	Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335

Refer to §16 for complete text of risk phrases, hazard indication and class.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2 Most important symptoms and effects, both acute and delayed

For symptoms and effects caused by the contained substances, see chap. 11.

4.3 Indication of any immediate medical attention and special treatment needed

Information not available.

SECTION 5 FIREFIGHTING MEASURES

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3 Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

FOR LIQUID PRODUCTS:



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Block the leakage if there is no hazard.

6.2 Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up

FOR LIQUID PRODUCTS: Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2 Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3 Specific end uses

The mixtures are intended specifically for in vitro use, for the examination of samples of human origin. Handle in accordance with good laboratory practice, while also considering the risks deriving from the materials under analysis.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Information not available

8.2 Exposure controls

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration. Personal protection equipment must comply with the rules in force indicated below.

HAND PROTECTION

The use of resistant protective gloves for chemical and biological agents is recommended.

EYE PROTECTION

Wear protective goggles

BODY PROTECTION

Wear an apron or a lab coat.

RESPIRATORY PROTECTION

Not required for the quantity present in the products.

In an emergency (e.g.: unintentional release of the substance) respiratory protection must be worn. Consider the maximum period for wear.

Respiratory protection: Particle filter P2 or P3, colour code white.

Use insulating device for concentrations above the usage limits for filter devices, for oxygen concentrations below 17% volume, or in circumstances which are unclear.

An emergency eye washing and shower system must be provided.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by IVD processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.



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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Information for the pure substance: Citric Acid

PROPERTY	DATA
APPEARANCE:	Liquid
ODOR:	Odourless
ODOR THRESHOLD:	Not available
PH:	1,7
MELTING POINT/FREEZING POINT	153 °C
INITIAL BOILING POINT AND BOILING RANGE	The substance decomposes when heated (see decomposition temperature).
FLASH POINT:	>60°C
EVAPORATION RATE	Not available
FLAMMABILITY (SOLID, GAS):	Not available
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:	Upper explosion limit: 8,0 vol. %
VAPOR PRESSURE:	Not available
VAPOR DENSITY:	Not available
RELATIVE DENSITY:	1,665 g/cm ³ (18°C)
SOLUBILITY(IES):	750 g/l (20°C) in water
PARTITION COEFFICIENT (N-OCTANOL/WATER):	log Kow: -1,57
AUTO-IGNITION TEMPERATURE:	Not available
DECOMPOSITION TEMPERATURE:	175 °C
VISCOSITY:	Not available
EXPLOSIVE PROPERTIES:	Not available
OXIDIZING PROPERTIES:	Not available

9.2 Other information

VOC (Directive 1999/13/EC): 0
VOC (volatile carbon): 0
Hazardous chemical reactions:

The pure substance can react dangerously with:
oxidizing agents
bases
reducing agents
metals.

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2 Chemical stability

The product is stable in normal conditions of use and storage.

10.3 Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.



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10.4 Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5 Incompatible materials

Information not available.

10.6 Hazardous decomposition products

Information not available.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

CITRIC ACID

LD50 (Oral). 3000 mg/kg Rat

LD50 (Dermal). 382 mg/kg Rat Intraperitoneal

SECTION 12 ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

12.1 Toxicity

CITRIC ACID

EC50 (48h). 160000 µg/l Green or European Shore Crab, *Carcinus maenas*

12.2 Persistence and degradability

Information not available.

12.3 Bioaccumulative potential

Information not available.

12.4 Mobility in soil

Information not available.

12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6 Other adverse effects

Information not available.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14 TRANSPORT INFORMATION

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.



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SECTION 15 REGULATORY INFORMATION

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

Seveso category. None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product Point. 3

Substances in Candidate List (Art. 59 REACH).
None.

Substances subject to authorisation (Annex XIV REACH).
None.

Substances subject to exportation reporting pursuant to (EC) Reg. 689/2008:
None.

Substances subject to the Rotterdam Convention:
None.

Substances subject to the Stockholm Convention:
None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

	This procedure derives from S19g para. 5 of the German "Water Law" (Wasserhaushaltsgesetz, WHG) dated 1 March 2010, in conjunction with the administrative directive governing substances hazardous to water.	
Germany. Substance No: 57	Water Hazard Class	WGK 1

15.2 Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16 OTHER INFORMATION

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Eye Dam. 1	Serious eye damage, category 1
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H318	Causes serious eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%



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- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as Reach Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation.

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. The Merck Index. - 10th Edition
9. Handling Chemical Safety
10. Niosh - Registry of Toxic Effects of Chemical Substances
11. INRS - Fiche Toxicologique (toxicological sheet)
12. Patty - Industrial Hygiene and Toxicology
13. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
14. ECHA website

All information is correct, to the best of our knowledge, on the date of issue of the data sheet. It is provided for information purposes only, however, and does not constitute a guarantee.

Procedures for use: see instructions in the package. Do not use the product for any purpose other than that for which it is intended.

Judgments as to the suitability of information herein for the purchaser's purposes are necessarily the purchaser's responsibility.

Although reasonable care has been taken in the preparation of such information, the company extends no warranties, makes no representations and assumes no responsibility as to accuracy or suitability of such information for application to purchaser's intended purposes and accepts no responsibility for any injury, loss or damage deriving from improper use of the product.

The product is employed under its users' control and it is their responsibility to comply with the correct operating procedures indicated, as well as to observe proper laboratory hygiene.