

## SAFETY DATA SHEET

according to Work Health and Safety Regulations 2011

### FlashGel™ System

Version 4.0

Revision Date 16.04.2024

Print Date 27.04.2024

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : FlashGel™ System

Material number : 57032

### Manufacturer or supplier's details

Company : Capsugel Australia Pty Ltd.  
Suite 610, 12 Century Circuit,  
Norwest NSW 2153  
Australia

Lonza Ltd  
Muenchensteinerstrasse 38  
CH-4002 Basel  
Switzerland

Telephone : Tel +61 3 9550 0883

Telefax : Tel +61 3 9550 0890

E-mail address : sds@lonza.com

Emergency telephone number : +41 61 313 94 94 (24h)

### Recommended use of the chemical and restrictions on use

Recommended use : For research use only.

Restrictions on use : NOT FOR USE IN GMP MANUFACTURING, NOR HUMAN  
OR ANIMAL IN VIVO OR DIAGNOSTIC USE.

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Skin corrosion/irritation : Category 2

Serious eye damage/eye irritation : Category 2A

### GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.  
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ eye protection/ face protection.

## FlashGel™ System

### Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 Take off contaminated clothing.

### Other hazards which do not result in classification

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Tetrabutylammonium hydroxide	2052-49-5	>= 1 - < 3

## SECTION 4. FIRST AID MEASURES

- If inhaled : Move to fresh air.  
Consult a physician after significant exposure.  
If unconscious, place in recovery position and seek medical advice.  
Keep respiratory tract clear.  
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : After contact with skin, wash immediately with plenty of soap and water.  
If on clothes, remove clothes.  
In the case of skin irritation or allergic reactions see a physician.
- In case of eye contact : Rinse immediately with plenty of lukewarm water, also under the eyelids, for at least 15 minutes.  
Call a physician immediately.  
Remove contact lenses.  
Keep eye wide open while rinsing.  
Protect unharmed eye.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : No information available.
- Notes to physician : Treat symptomatically.

## FlashGel™ System

### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Heating or fire can release toxic gas.
Hazardous combustion products	: Nitrogen oxides (NOx) Carbon oxides (COx) Sulphur oxides (SOx)
Specific extinguishing methods	: Use a water spray to cool fully closed containers.
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Use respirator when performing operations involving potential exposure to vapour of the product.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: No special precautions required.
	Normal measures for preventive fire protection.
Advice on safe handling	: Do not breathe vapours/dust. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.
Hygiene measures	: Wash hands before breaks and at the end of workday. When using do not eat, drink or smoke. Avoid contact with skin, eyes and clothing.
Conditions for safe storage	: Observe label precautions. Keep container tightly closed. Keep in a well-ventilated place.

## FlashGel™ System

To maintain product quality, do not store in heat or direct sunlight.

Further information on storage stability : No decomposition if stored and applied as directed.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

**Engineering measures** : Use only in area provided with appropriate exhaust ventilation.

### Personal protective equipment

Respiratory protection : Respirator with a vapour filter (EN 141)

Hand protection

Material : Nitrile rubber

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Impervious gloves Break through time : > 480 min

Eye protection : Safety goggles

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place. Lightweight protective clothing

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : gel

Colour : clear

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : No data available

## FlashGel™ System

---

Flammability (liquids)	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: No data available
Water solubility	: soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: None known. Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	: Heat
Incompatible materials	: Oxidizing agents Strong acids and strong bases
Hazardous decomposition products	: No decomposition if used as directed.

---

## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: Remarks: No data available

### Skin corrosion/irritation

## FlashGel™ System

---

Remarks : No data available

### Serious eye damage/eye irritation

Remarks : No data available

### Respiratory or skin sensitisation

Remarks : No data available

### Germ cell mutagenicity

Genotoxicity in vitro : Remarks: No data available

### Carcinogenicity

Remarks : No data available

### Reproductive toxicity

Effects on fertility : Remarks: No data available

### STOT - single exposure

Remarks : No data available

### STOT - repeated exposure

Remarks : No data available

### Aspiration toxicity

No aspiration toxicity classification

### Further information

Remarks : No data available

---

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Toxicity to fish :  
Remarks: No data available

### Persistence and degradability

Biodegradability : Remarks: No data available

### Bioaccumulative potential

Bioaccumulation : Remarks: No data available

### Mobility in soil

Distribution among environmental compartments : Remarks: No data available

### Other adverse effects

Additional ecological information : No data available

## FlashGel™ System

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

- |                        |   |   |
|------------------------|---|---|
| Waste from residues    | : | Dispose of contents/container in accordance with local regulation.<br>Contact waste disposal services.<br>Do not dispose of waste into sewer. |
| Contaminated packaging | : | Dispose of as unused product.<br>Do not re-use empty containers.  |

### SECTION 14. TRANSPORT INFORMATION

#### IATA

Not dangerous goods

- |                        |   |                |
|------------------------|---|----------------|
| UN number              | : | Not applicable |
| Proper shipping name   | : | Not applicable |
| Transport hazard class | : | Not applicable |
| Packing group          | : | Not applicable |

#### IMDG

Not dangerous goods

- |                            |   |                      |
|----------------------------|---|----------------------|
| UN number                  | : | Not applicable       |
| Proper shipping name       | : | Not applicable       |
| Transport hazard class(es) | : | Not applicable       |
| Packing group              | : | Not applicable       |
| Environmental hazards      | : | Marine pollutant: no |

#### ADR

Not dangerous goods

- |                        |   |                |
|------------------------|---|----------------|
| UN number              | : | Not applicable |
| Proper shipping name   | : | Not applicable |
| Transport hazard class | : | Not applicable |
| Packing group          | : | Not applicable |
| Environmental hazards  | : | no             |

#### RID

Not dangerous goods

- |                        |   |                |
|------------------------|---|----------------|
| UN number              | : | Not applicable |
| Proper shipping name   | : | Not applicable |
| Transport hazard class | : | Not applicable |
| Packing group          | : | Not applicable |
| Environmental hazards  | : | no             |

Special precautions for user : none

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable

## FlashGel™ System

### SECTION 15. REGULATORY INFORMATION

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

**Therapeutic Goods (Poisons Standard) Instrument**

Not applicable

### SECTION 16. OTHER INFORMATION

Revision Date : 16.04.2024

Date format : dd.mm.yyyy

#### Full text of other abbreviations

AIIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

AU / EN