

SAFETY DATA SHEET

(In accordance with COMMISSION REGULATION (EU) No 830/2015)

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

Product identifier

Product code S11494
Product name SYBR® Gold nucleic acid gel stain
Chemical Name Not Applicable
REACH registration number No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

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

Relevant identified uses For research use only
Use Description Code SU22 - Public domain (administration, education, entertainment, services, craftsmen), PROC15 - Use as a laboratory reagent, PC21 - Laboratory chemicals, SU24 - Scientific research and development
Uses advised against Not for consumer use.

Details of the supplier of the safety data sheet

Manufacturer/Supplier
LIFE TECHNOLOGIES EUROPE BV
KWARTSWEG 2
2665 NN BLEISWIJK
NETHERLANDS
31-(0)180 392 400
Email: MSDS@lifetech.com

24 hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC Within the USA + Canada: 1-800-424-9300 and +1 703-527-3887
Outside the USA + Canada: +1 703-741-5970

Country specific Emergency Number (if available):

CHEMTREC Ireland (Dublin) +(353)-19014670 (Greeting Language: English and Irish)
CHEMTREC UK (London) +(44)-870-8200418 (Greeting Language: English)

Classification of the substance or mixture

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

Physical hazards

Not Hazardous

Health hazards

Not Hazardous

Environmental Hazards

Not Hazardous

Additional information

Not Applicable

Label elements

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

Hazard pictograms

No Pictogram

Signal word

None

Hazard Statements

Not Applicable

Precautionary Statements

Prevention

Not Applicable

Response

Not Applicable

Storage

Not Applicable

Disposal

Not Applicable

Other hazards

Not Applicable

SECTION 3: Composition/information on ingredients

| Component | CAS-No. | EINECS-No. | Weight percent | REACH registration number | Classification according to Regulation (EC) No 1272/2008 [CLP] |
|-------------------------------------|---------|------------|----------------|---------------------------|----------------------------------------------------------------|
| SYBR Gold (<0.1) | - | Not Listed | <0.1 | - | Not classified |
| Dimethyl sulfoxide 67-68-5 (95-100) | 67-68-5 | 200-664-3 | 95-100 | - | Not classified |

SECTION 4: First aid measures

Description of first aid measures

| | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Skin contact | Rinse with plenty of water. Immediate medical attention is not required. |
| Eye contact | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. |
| INGESTION | Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice. |
| Inhalation | Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary. |
| Notes to Physician | Treat symptomatically. |

Most important symptoms and effects, both acute and delayed

None

Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

Extinguishing media

| | |
|---------------------------------------|---------------------------------------------------------------------|
| Suitable Extinguishing Media | Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical. |
| Unsuitable Extinguishing Media | No information available. |

Special hazards arising from the substance or mixture Not Known.

Advice for fire-fighters Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use personal protection equipment. See Section 8 for more detail.

Environmental precautions

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

Control parameters

| Chemical Name | EU OEL (TWA) | EU OEL (STEL) | EU Skin Notation |
|-------------------------------|--------------|---------------|------------------|
| SYBR Gold | None | None | None |
| Dimethyl sulfoxide 67-68-5 | None | None | None |

| Chemical Name | Austria | Belgium (TWA) | Denmark (TWA) | Finland OEL (TWA) |
|-------------------------------|---------------------------------|---------------|---------------------------------|-------------------|
| SYBR Gold | None | None | None | None |
| Dimethyl sulfoxide 67-68-5 | 50 ppm 160 mg/m ³ | None | 50 ppm 160 mg/m ³ | None |

| Chemical Name | France OEL (VME) | Germany OEL (TWA) | Ireland (TWA) | Italy OEL (TWA) |
|-------------------------------|------------------|---------------------------------------------------------------------|---------------|-----------------|
| SYBR Gold | None | None | None | None |
| Dimethyl sulfoxide 67-68-5 | None | 50 ppm exposure factor 2 160 mg/m ³ exposure factor 2 | None | None |

| Chemical Name | Sweden - Occupational Exposure Limits - TLVs (LLVs) | Netherlands OEL (MAC) | Spain OEL (TWA) | United Kingdom |
|-------------------------------|-----------------------------------------------------|-----------------------|-----------------|----------------|
| SYBR Gold | None | None | None | None |
| Dimethyl sulfoxide 67-68-5 | 50 ppm LLV; 150 mg/m ³ LLV | None | None | None |

| Chemical Name | European Union | France OEL (VME) | Germany OEL (TWA) |
|-------------------------------|----------------|------------------|---------------------------------------------------------------------|
| SYBR Gold | None | None | None |
| Dimethyl sulfoxide 67-68-5 | None | None | 50 ppm exposure factor 2 160 mg/m ³ exposure factor 2 |

| Chemical Name | Italy OEL (TWA) | Portugal | Netherlands OEL (MAC) | Finland OEL (TWA) |
|-------------------------------|-----------------|----------|-----------------------|-------------------|
| SYBR Gold | None | None | None | None |
| Dimethyl sulfoxide 67-68-5 | None | None | None | None |

| Chemical Name | Austria | Denmark | Poland | Switzerland |
|-------------------------------|---------------------------------|---------|--------|-------------|
| SYBR Gold | None | None | None | None |
| Dimethyl sulfoxide 67-68-5 | 50 ppm 160 mg/m ³ | None | None | None |

| Chemical Name | Ireland | Norway | Lithuania OEL (TWA) | Spain OEL (TWA) |
|-------------------------------|---------|--------|---------------------------------|-----------------|
| SYBR Gold | None | None | None | None |
| Dimethyl sulfoxide 67-68-5 | None | None | 50 ppm 150 mg/m ³ | None |

Engineering measures Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal protection equipment

Respiratory protection In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

| | |
|----------------------------------------|-----------------------------------------------------------------------------|
| Hand Protection | Wear suitable gloves. Glove material: Compatible chemical-resistant gloves. |
| Eye protection | Tight sealing safety goggles. |
| Skin and body protection | Wear suitable protective clothing. |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. |
| Environmental exposure controls | No special environmental precautions required. |

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | | |
|---------------------------------------------------|--------------------------------|--------------------------------|
| Appearance | Liquid | |
| Odour | no data available | |
| pH | 6-8 | |
| Melting point / melting range | °C 18 - 19 | °F 64.4 - 66.2 |
| Boiling point / boiling range | °C 188 - 190 | °F 370 - 374 |
| Flash point | °C 87 - 89 | °F 188.6 - 192.2 |
| Autoignition temperature | °C 214 - 216 | °F 417.2 - 420.8 |
| Decomposition temperature | °C Mixture has not been tested | °F Mixture has not been tested |
| Evaporation rate | No data available | |
| Flammability (solid, gas) | No data available | |
| Upper explosion limit | 61% - 64% | |
| Lower explosion limit | 2.4% - 2.8% | |
| Vapour Pressure | Mixture has not been tested | |
| Relative density | Mixture has not been tested | |
| Specific gravity | No data available | |
| Solubility | no data available | |
| Partition coefficient: n-octanol/water | No data available | |
| Explosive properties | Mixture has not been tested | |
| OTHER INFORMATION | No data available | |

SECTION 10: Stability and reactivity

| | |
|-------------------------------------------|-------------------------------------------|
| Reactivity | None known. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | Hazardous reaction has not been reported. |
| Conditions to Avoid | No information available. |
| Incompatible Materials | Strong acids. Strong oxidising agents. |
| Hazardous decomposition products | No data available. |

SECTION 11: Toxicological information

Information on toxicological effects

| Chemical Name | LD50 (oral, rat/mouse) | LD50 (dermal, rat/rabbit) | LC50 (inhalation, rat/mouse) |
|--------------------|------------------------|---------------------------|------------------------------|
| SYBR Gold | No data available | No data available | No data available |
| Dimethyl sulfoxide | 14500 mg/kg Oral LD50 | >40000 mg/kg bw | >5000 mg/l |

Principal Routes of Exposure, Potential health effects

| | |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Irritation | Mild skin irritant, Mild eye irritation, Components of the product may be absorbed into the body through the skin |
| Corrosivity | Conclusive but not sufficient for classification |
| Sensitisation | Conclusive but not sufficient for classification |
| STOT - Single Exposure | Conclusive but not sufficient for classification |
| STOT - Repeated Exposure | Conclusive but not sufficient for classification |
| Carcinogenicity | Conclusive but not sufficient for classification |
| Mutagenicity | Conclusive but not sufficient for classification |
| Reproductive toxicity | Conclusive but not sufficient for classification |
| Aspiration Hazard | Conclusive but not sufficient for classification |

SECTION 12: Ecological information

Toxicity

The environmental impact of this product has not been fully investigated.

| Chemical Name | Freshwater Algae Data | Water Flea Data | Freshwater Fish Species Data | Microtox Data | log Pow |
|---------------------------|----------------------------------------------------|---------------------------------------|------------------------------|-------------------|-------------------|
| SYBR Gold | No data available | No data available | No data available | No data available | No data available |
| Dimethyl sulfoxide | Skeletonema costatum EC5012350 - 25500 mg/L (96 h) | Daphnia species EC50=7000 mg/L (24 h) | No data available | No data available | logPow-2.03 |

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Results of PBT and vPvB assessment

No information available.

Other adverse effects No information available.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations.

UN Number Not Applicable

UN proper shipping name Not Applicable

Transport hazard class(es) Not Applicable

Packing group Not Applicable

Environmental Hazards Not Applicable

Special precautions for user Not Applicable

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

Not Applicable.

SECTION 15: Regulatory information

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

Substances of Very High Concern

None.

Restricted substances under EC 1907/2006, Annex XVII

None.

Substances listed under Annex I of Regulation (EC) No 689/2008

None.

Restricted substances under Annex V of Regulation (EC) No 689/2008

None.

Substances under Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

None.

German Water hazard classes (Wassergefährdungsklassen)

| Chemical Name | Weight percent | Germany - Water Classification (VwVwS) - Annex 1 | Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes | Germany - Water Classification (VwVwS) - Annex 3 |
|--------------------|----------------|--------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------|
| Dimethyl sulfoxide | 95-100 | | | hazard class 1 - low hazard to waters |

Other International Inventories

| Chemical Name | EINECS (European Union) | ELINCS (European List of Notified Chemical Substances) | ENCS (Japan) | PICCS (Philippines) |
|--------------------|-------------------------|--------------------------------------------------------|--------------|---------------------|
| SYBR Gold | - | - | - | - |
| Dimethyl sulfoxide | Listed | - | Listed | Listed |

| Chemical Name | AICS (Australia) | South Korea (KECL) | Canada (DSL) | NDSL |
|--------------------|------------------|--------------------|--------------|------|
| SYBR Gold | - | - | - | - |
| Dimethyl sulfoxide | Listed | Listed | Listed | - |

Chemical Safety Assessment

No Chemical safety assessment has been carried out.

SECTION 16: Other information

Reason for revision Update according to Commission Regulation (EU) No 830/2015
Revision number 9
Revision date 12-Sep-2017

References

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"