

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/03/2015

Reviewed on 12/24/2014

1 Identification

- **Product identifier**
- **Trade name:** iQ™ SYBR Green Supermix
- **Catalog or product number:**
1708880, 1708882, 1708880S, 1708885, 10003253, 1725006, 1708884, 4206381, 4206531, 4206382, 1708886, 8006699, 1708880AP, 1708882AP, 1708884AP, 1708885AP, 1708886AP, 1708887AP, 1725982, 1725982AP, 4206384, 1725006CUST
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Life Science Group
2000 Alfred Nobel Drive
Hercules, California 94547
(510)741-1000
- **Information department:**
Technical services, customer support
lsg_techserv_us@bio-rad.com
- **Emergency telephone number:**
1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.
510-741-1000

2 Hazard(s) identification

- **Classification of the substance or mixture**
Eye Dam. 1 H318 Causes serious eye damage.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** not applicable
- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.
- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**

GHS05
- **Signal word** Danger
- **Hazard-determining components of labeling:**
Proprietary Non Ionic Detergent

(Contd. on page 2)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/03/2015

Reviewed on 12/24/2014

Trade name: iQ™ SYBR Green Supermix

(Contd. of page 1)

· **Hazard statements**

H318 Causes serious eye damage.

· **Precautionary statements**

P280 Wear 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 center/doctor.

· **Additional information:** Contact with acids may cause release of toxic gases· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.* **3 Composition/information on ingredients**· **Chemical characterization: Mixtures**· **Description:** Mixture of the substances listed below with non-hazardous additions.· **Listing of dangerous and non-hazardous components:**

	Proprietary carbohydrate		10-20%
56-81-5	glycerol		5-10%
67-68-5	dimethyl sulfoxide		5-10%
	Proprietary Non Ionic Detergent	Xi R41	2.5-5%
7732-18-5	water		50-100%

· **Additional information** For the wording of the listed risk phrases refer to section 15.* **4 First-aid measures**· **Description of first aid measures**· **General information** No special measures required.· **After inhalation** Supply fresh air; consult doctor in case of complaints.· **After skin contact** Generally the product does not irritate the skin.· **After eye contact** Rinse opened eye for several minutes under running water.· **After swallowing** Induce vomiting and call for medical help.· **Most important symptoms and effects, both acute and delayed** No further relevant information available.· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.* **5 Fire-fighting measures**· **Extinguishing media**· **Suitable extinguishing agents**

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards arising from the substance or mixture** No further relevant information available.· **Advice for firefighters**· **Protective equipment:** No special measures required.

USA

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/03/2015

Reviewed on 12/24/2014

Trade name: iQ™ SYBR Green Supermix

(Contd. of page 2)

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and storage

- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· Components with limit values that require monitoring at the workplace:	
56-81-5 glycerol	
PEL ()	15* 5** mg/m ³ *total dust **respirable fraction
TLV ()	10* ppm *Mist
67-68-5 dimethyl sulfoxide	
WEEL ()	250 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment**

- **General protective and hygienic measures** The usual precautionary measures for handling chemicals should be followed.

- **Breathing equipment:** Not required.

- **Protection of hands:** Protective gloves.

- **Material of gloves** Synthetic gloves

(Contd. on page 4)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/03/2015

Reviewed on 12/24/2014

Trade name: iQ™ SYBR Green Supermix

(Contd. of page 3)

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Safety glasses

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Color:	Colorless
Odor:	Odorless
Odour threshold:	Not determined.

- **pH-value at 20 °C:** 8.4

- **Change in condition**

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	undetermined

- **Flash point:** Not applicable

- **Flammability (solid, gaseous)** Not applicable.

- **Ignition temperature:** 270 °C

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	0.9 Vol %
Upper:	Not determined.

- **Vapor pressure at 20 °C:** 23 hPa

- **Density:** Not determined

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with**

Water: Fully miscible

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

dynamic:	Not determined.
kinematic:	Not determined.

- **Solvent content:**

Organic solvents:	10.0 %
Water:	55.0 %

Solids content: 35.0 %

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/03/2015

Reviewed on 12/24/2014

Trade name: iQ™ SYBR Green Supermix

(Contd. of page 4)

· **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values for hazardous components per OSHA criteria:**

Proprietary carbohydrate

Oral LD50 29700 mg/kg (rat)

67-68-5 dimethyl sulfoxide

Oral LD50 14500 mg/kg (rat)

- **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:**

Strong caustic effect.

Irritant effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Target organs:** Not applicable.

USA

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/03/2015

Reviewed on 12/24/2014

Trade name: iQ™ SYBR Green Supermix

(Contd. of page 5)

* 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

* 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Hand over to hazardous waste disposers.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

* 14 Transport information

- | | |
|--|--|
| · UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications. |

(Contd. on page 7)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/03/2015

Reviewed on 12/24/2014

Trade name: iQ™ SYBR Green Supermix

(Contd. of page 6)

· UN "Model Regulation":

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* 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)

· Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

· Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

56-81-5	glycerol
67-68-5	dimethyl sulfoxide
7447-40-7	potassium chloride
77-86-1	Tris(hydroxymethyl)aminomethane
7786-30-3	Magnesium Chloride
518-47-8	disodium 2-(3-oxo-6-oxidoxanthen-9-yl)benzoate
7732-18-5	water

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· National regulations

· Technical instructions (air):

Class	Share in %
NK	10-20

- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Environmental Health and Safety.

(Contd. on page 8)

- USA -

Safety Data Sheet
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Trade name: iQ™ SYBR Green Supermix

(Contd. of page 7)

· Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· Date of preparation / last revision 02/03/2015 / -**· 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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

· * Data compared to the previous version altered.