

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 Product name | 89900 RIPA Buffer |
| Chemical Name REACH registration number | Not Applicable 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 s | substance or mixture and uses advised against |
| Relevant identified uses Use Description Code Uses advised against | Use as a laboratory reagent, for scientific research and development Not Available Not for consumer use. |
| Details of the supplier of the saf | ety data sheet |
| Manufacturer/Supplier LIFE TECHNOLOGIES EUROPI KWARTSWEG 2 2665 NN BLEISWIJK NETHERLANDS 31-(0)180 392 400 Email: MSDS@lifetech.com | E BV Thermo Fisher Scientific Pierce Biotechnology P.O. Box 117 Rockford, IL 61105 United States 1.815.968.0747 or 1.800.874.3723 |
| 24 hour Emergency Response fo [or Dangerous Goods] Incident. Exposure, or Accident. Call CHE | |
| Country Specific Emergency Nu CHEMTREC Ireland (Dublin) CHEMTREC UK (London) | Imber (if available): +(353)-19014670 (Greeting Language: English and Irish) +(44)-870-8200418 (Greeting Language: English) |

SECTION 2: Hazards identification

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 None

Signal word None

Hazard Statements Not Applicable

EU Specific 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

The product contains no substances which at their given concentration, are considered to be hazardous to health.

| Component | CAS-No. | EINECS-No. | Weight percent | REACH registration number | Classification according to Regulation (EC) No 1272/2008 [CLP] |
|---------------------------------------------|-----------|------------|----------------|------------------------------|-------------------------------------------------------------------------|
| Nonylphenol ethoxylates 9016-45-9(0.1-1) | 9016-45-9 | 500-024-6 | 0.1-1 | 01-2119945987-15-X XXX | Skin Irrit. 2 - H315Irrit. 2 - H319Chronic 2 - H411 |

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

Indication of any immediate medical attention and special treatment needed None.

SECTION 5: Firefighting measures

Extinguishing media

Suitable Extinguishing Media Unsuitable Extinguishing Media Water spray. Carbon dioxide (CO2). Foam. Dry chemical. 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

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

Environmental precautions

No special environmental precautions required.

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)

Use as a laboratory reagent, for scientific research and development.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure Limits

Contains no substances with occupational exposure limit values.

| Chemic | al Name | EU OEL (TWA) | EU OEL (STEL) | EU Skin Notation |
|--------------------------------------|-----------------------------------------------------------|-----------------------|-----------------------|-------------------|
| | l ethoxylates)-45-9 | None | None | None |
| | | | | |
| Chemical Name | Austria | Belgium (TWA) | Denmark (TWA) | Finland OEL (TWA) |
| Nonylphenol ethoxylates 9016-45-9 | None | None | None | None |
| | | | | |
| Chemical Name | France OEL (VME) | Germany OEL (TWA) | Ireland (TWA) | Italy OEL (TWA) |
| Nonylphenol ethoxylates 9016-45-9 | None | None | None | None |
| | | | | |
| Chemical Name | Sweden - Occupational Exposure Limits - TLVs (LLVs) | Netherlands OEL (MAC) | Spain OEL (TWA) | United Kingdom |
| Nonylphenol ethoxylates 9016-45-9 | None | None | None | None |
| | | | | |
| | al Name | European Union | France OEL (VME) | Germany OEL (TWA) |
| | l ethoxylates 6-45-9 | None | None | None |
| Chemical Name | Italy OEL (TWA) | Portugal | Netherlands OEL (MAC) | Finland OEL (TWA) |

| Chemical Name | Italy OEL (TWA) | Portugal | Netherlands OEL (MAC) | Finland OEL (TWA) |
|-------------------------|-----------------|----------|-----------------------|-------------------|
| Nonylphenol ethoxylates | None | None | None | None |
| 9016-45-9 | | | | |

| Chemical Name | Austria | Denmark | Poland | Switzerland |
|--------------------------------------|---------|---------|--------|-------------|
| Nonylphenol ethoxylates 9016-45-9 | None | None | None | None |

| Chemical Name | Ireland | Norway | Lithuania OEL (TWA) | Spain OEL (TWA) |
|-------------------------|---------|--------|---------------------|-----------------|
| Nonylphenol ethoxylates | None | None | None | None |
| 9016-45-9 | | | | |

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.

Information on basic physical and chemical properties

| Appearance Odour pH | Liquid no data available 6-8 |
|-------------------------------|------------------------------------|
| Melting point / melting range | °C Mixture has not been tested |
| Boiling point / boiling range | °C Mixture has not been tested |
| Flash point | °C Mixture has not been tested |
| Autoignition temperature | °C Mixture has not been tested |
| Decomposition temperature | °C Mixture has not been tested |
| Evaporation rate | No data available |
| Flammability (solid, gas) | No data available |
| Upper explosion limit | Mixture has not been tested |
| Lower explosion limit | Mixture has not been tested |
| 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: | No data available |
| n-octanol/water | |
| Explosive properties | Mixture has not been tested |
| | |

- °F Mixture has not been tested

| | 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 | No dangerous reaction known under conditions of normal use. |
| Hazardous decomposition products | No data available. |

OTHER INFORMATION No data available.

SECTION 11: Toxicological information

Information on toxicological effects

To the best of our knowledge, the chemical, physical, biological, and toxicological properties of this product have not been thoroughly investigated.

| Chemical Name | LD50 (oral,rat/mouse) | LD50 (dermal,rat/rabbit) | LC50 (inhalation,rat/mouse) |
|-------------------------|---------------------------------|--------------------------|-----------------------------|
| Nonylphenol ethoxylates | = 1310 mg/kg (Rat) = 2590 mg/kg | No data available | No data available |
| | (Rat) | | |

Principal Routes of Exposure, Potential health effects

| Irritation | Conclusive but not sufficient for classification |
|--------------------------|--------------------------------------------------|
| 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 |
|-------------------------|--------------------------|-------------------|---------------------------------|-------------------|-------------------|
| Nonylphenol ethoxylates | No data available | No data available | No data available | No data available | No data available |

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 according to 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 regulated in the meaning of transport regulations.

UN Number UN proper shipping name Transport hazard class(es) Packing group Not Applicable Not Applicable Not Applicable 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

| Chemical Name | Weight percent | EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances |
|-------------------------|----------------|------------------------------------------------------------------------------------|
| Nonylphenol ethoxylates | 0.1-1 | Use restricted. See item 46[b]. |
| | | Use restricted. See item 46a. |

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 | 3 1 | Classification (VwVwS) - | Classification (VwVwS) - | Germany - Water Classification (VwVwS) - Annex 3 |
|-------------------------|------------|--------------------------|----------------------------|--------------------------------------------------------|
| Nonylphenol ethoxylates | 0.1-1 | | hazard class 2 - hazard to | hazard class 2 - hazard to |
| | | | waters | waters |

Other International Inventories

| Chemical Name | EINECS (European Union) | ELINCS (European List of Notified Chemical Substances) | ENCS (Japan) | PICCS (Philippines) |
|-------------------------|----------------------------|-----------------------------------------------------------------|--------------|---------------------|
| Nonylphenol ethoxylates | - | - | Listed | Listed |

| Chemical Name | AICS (Australia) | South Korea (KECL) | Canada (DSL) | NDSL |
|-------------------------|------------------|-----------------------|--------------|------|
| Nonylphenol ethoxylates | 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 | 4 |
| Revision date | 21-Nov-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]:

Not classified

"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"