

Printing date 05/02/2019

Reviewed on 05/02/2019

Identificati	on
Product iden	ifier
Trade name:	ZymoBIOMICS Spike-in Control II (Low Microbial Load)
	er: D6321 & D6321-10 f the substance / the mixture Laboratory Reagent
<i>Manufacture</i> Zymo Researd 17062 Murph Irvine, CA 92 USA	ch Corp. y Ave. 614 679-1190 or 1-888-882-9682
	lepartment: Product safety department
	<i>lephone number:</i> l business hours (8 am to 5 pm Pacific Standard Time): +1 (949) 679 1190
	of the substance or mixture S07
GH Acute Tox. 4	S07 H302 Harmful if swallowed.
Acute Tox. 4 Skin Irrit. 2	S07 H302 Harmful if swallowed. H315 Causes skin irritation.
Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2B	 S07 H302 Harmful if swallowed. H315 Causes skin irritation. H320 Causes eye irritation.
Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2B Label element GHS label ele Hazard pictor Signal word Hazard stater	S07 H302 Harmful if swallowed. H315 Causes skin irritation. H320 Causes eye irritation. ts ments The product is classified and labeled according to the Globally Harmonized System (GHS). grams GHS07 Warning ments
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Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2B Label elemen GHS label elemen GHS label elemen Hazard pictor Signal word H Hazard stater Harmful if sw Causes skin a Precautionar If medical ad Keep out of re Read label be Wash thoroug Do not eat, dr Wear protecti If swallowed: Rinse mouth. If on skin: Wa	S07 H302 Harmful if swallowed. H315 Causes skin irritation. H320 Causes eye irritation. ts ts tments The product is classified and labeled according to the Globally Harmonized System (GHS). trans GHS07 Varning ments allowed. allowed. ad eye irritation. ts statements tice is needed, have product container or label at hand. tach of children. fore use. hly after handling. ink or smoke when using this product. ve gloves.

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(Contd. of page 1) If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If eye irritation persists: Get medical advice/attention. Dispose of contents/container in accordance with local/regional/national/international regulations. · Classification system: · NFPA ratings (scale 0 - 4) Health = 1Fire = 0Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH 1 Health = 10 Fire = 0FIRE **REACTIVITY** Reactivity = 0· Other hazards · Results of PBT and vPvB assessment · *PBT*: Not applicable. · vPvB: Not applicable. 3 Composition/information on ingredients

· Chemical characterization: Mixtures

- *Description:* This product is a proprietary solution.
- · Dangerous components: Void

4 First-aid measures

- · Description of first aid measures
- · 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. Then consult a doctor.
- After swallowing: Do not induce vomiting; immediately call for medical help.
- Information for doctor:
- · 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.

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5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:

Not considered a fire hazard. Use extinguishing media appropriate surrounding fire conditions.

- Use fire fighting measures that suit the environment.
- · Advice for firefighters
- · Protective equipment: Wear protective clothing.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Wear protective clothing.

- · Environmental precautions: Dilute with plenty of 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

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:

None of the ingredients is listed.

• PAC-2:

None of the ingredients is listed.

· PAC-3:

None of the ingredients is listed.

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · 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: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- Specific end use(s) Laboratory reagent

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

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· Control parameters

• Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Breathing equipment: Not required.
- · Protection of hands: Use appropiate gloves. Avoid contact with skin.
- · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. • *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: Avoid contact with eyes.
- · Body protection:

Avoid contact with eyes, skin, and clothing. Wash throughly after handling. Remove contaminated clothing and wash before use. Avoid ingestion and inhalation.

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information

· Appearance:	
Form:	Liquid
Color:	Colorless
· Odor:	No information available
· Odor threshold:	Not determined.
· pH-value:	5.0-7.0
• Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
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		(Contd. of page
Explosion limits:		
Lower:	Not Applicable	
Upper:	Not Applicable	
Vapor pressure:	Not determined.	
Density:	Not determined.	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with	h	
Water:	Fully miscible.	
Partition coefficient (n-octar	nol/water): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
Solids content:	0.0 %	

10 Stability and reactivity

· Reactivity Strong oxidizing agents and acids.

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions Strong oxidizing agents and acids.
- · Conditions to avoid Strong oxidizing agents and acids.
- · Incompatible materials: Strong oxidizing agents and acids.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- on the eye: Irritating to eyes.
- · Sensitization: No sensitizing effects known.

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[·] Chemical stability



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• Additional toxicological information:

· 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.

12 Ecological information

· Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · *Bioaccumulative potential* No further relevant information available.
- · Mobility in soil No further relevant information available.
- $\cdot \textit{Additional ecological information:}$
- · General notes: Not known to be hazardous to water.
- · 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:

Dispose of contents in accordance with local/regional/national, and international recommendations.

- · Uncleaned packagings:
- · Recommendation:

Dispose of container in acoordance with local/regional/national and international recommendations. • *Recommended cleansing agent:* Water, if necessary with cleansing agents.

· UN-Number · DOT, ADN, IMDG, IATA	Not dangerous goods. not regulated	
· UN proper shipping name · DOT, ADN, IMDG, IATA	Not dangerous goods. not regulated	

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· Transport hazard class(es)	Not dangerous goods.
· DOT, ADN, IMDG, IATA · Class	not regulated
· Packing group · DOT, IMDG, IATA	Not dangerous goods. not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	r Not applicable.
· UN ''Model Regulation'':	not regulated

15 Regulatory information

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

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· 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.

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

None of the ingredients is listed.

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(Contd. of page 7) · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms GHS07 · Signal word Warning · Hazard statements Harmful if swallowed. Causes skin and eye irritation. · Precautionary statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of water. Specific treatment (see on this label). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If eye irritation persists: Get medical advice/attention. Dispose of contents/container in accordance with local/regional/national/international regulations. · 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: Zymo Research Corp. Safety Department 17062 Murphy Ave. Irvine, CA 92614 USA Phone: 1-949-679-1190 or 1-888-882-9682 · Contact: sds@zymoresearch.com · Date of preparation / last revision 05/02/2019 / -· Abbreviations and acronyms: 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) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic

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vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Acute Tox. 4: Acute toxicity – Category 4 Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B

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