

Reviewed on 08/11/2016

1 Identification

- · Product identifier
- · Trade name: 10X Ham's F10 without L-Glutamine, without Sodium Bicarbonate, with 12.4 mg/L Phenol Red
- · Article number: 14400, 1440049
- · Application of the substance / the mixture For Research Use Only
- · Details of the supplier of the safety data sheet

• Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com

· Information department: Quality Control Department

• Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)

Health = 0Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTHImage: OIFIREImage: OFire = 0REACTIVITYImage: O

- · 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 substances listed below with nonhazardous additions. Mixture: consisting of the following components.

· Dangerous components: Void

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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: Flush eyes with running water as a precaution.
- After swallowing: If symptoms persist consult doctor.
- 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.

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.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
- Environmental precautions: 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

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities
- · Storage: 2-8 °C
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage conditions:
- *Specific end use(s) No further relevant information available.*

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• Additional informati	on about design of technical systems: No further data; see Section 7.
Control parameters	
Components with lin	nit values that require monitoring at the workplace:
The product does not the workplace.	t contain any relevant quantities of materials with critical values that have to be monitored a
	on: The lists that were valid during the creation were used as basis.
Exposure controls	
Personal protective e	equipment:
General protective a	nd hygienic measures:
	ary measures for handling chemicals should be followed.
Breathing equipmen	
Protection of hands:	
	as to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests	no recommendation to the glove material can be given for the product the preparation/ th
chemical mixture.	
Selection of the glove	e material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves	
The selection of the s	uitable gloves does not only depend on the material, but also on further marks of quality an turer to manufacturer. As the product is a preparation of several substances, the resistance o
	n not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of	
	ough time has to be found out by the manufacturer of the protective gloves and has to b
	gles recommended during refilling.
Eye protection: Gog	
Physical and che	mical properties
· Information on basi	c physical and chemical properties
· General Information	
Appearance:	

· Appearance:		
Form:	Solution	
Color:	Orange	
· Odor:	Indeterminate	
· Odor threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition		
Boiling point/Boiling range:	100 °C (212 °F)	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:		
Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	See section 10	
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Explosion limits:		
Lower:	Not Applicable	
Upper:	Not Applicable	
Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)	
Density:	Not Applicable	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with	Not Determined	
Water:	Insoluble.	
Partition coefficient (n-octanol/wate	e r): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	0.0 %	
Water:	90.3 %	
VOC content:	0.0 g/l / 0.00 lb/gl	
• Other information	No further relevant information available.	

10 Stability and reactivity

· Reactivity No further relevant information available.

- · 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:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritant and potentially harmful
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

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.

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- \cdot 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.
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (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:* Can not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- Recommendation: Discard must be made according to official regulations.

14 Transport information

· UN-Number		
· DOT, ADR, ADN, IMDG, IATA	Not regulated	
· UN proper shipping name		
· DOT, ADR, ADN, IMDG, IATA	Not regulated	
· Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA		
· Class	Not regulated	
· Packing group		
· DOT, ADR, IMDG, IATA	Not regulated	
· Environmental hazards:		
• Marine pollutant:	No	
· Special precautions for user	Not applicable.	
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Not regulated

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· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation":

15 Regulatory information

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

· Section 355	Section 355 (extremely hazardous substances):		
None of the	None of the ingredients is listed.		
· Section 313	· Section 313 (Specific toxic chemical listings):		
None of the	None of the ingredients is listed.		
· TSCA (Toxi	c Substances Control Act):		
7647-14-5	Sodium Chloride		
50-99-7	D-(+)-Dextrose, Anhydrous		
7447-40-7	Potassium Chloride		
1119-34-2	L-Arginine Hydrochloride		
	Sodium Phosphate Dibasic Anhydrous, USP		
113-24-6	Pyruvic acid sodium salt		
	Potassium Phosphate Monobasic Anhydrous		
	magnesium sulphate		
	Calcium Chloride		
	L-Lysine Monohydrochloride		
	L-Glutamic Acid, free acid		
	L-Aspartic Acid		
	L-Leucine		
	Phenol Red Sodium Salt		
	L-Proline		
-	· Proposition 65		
	· Chemicals known to cause cancer:		
None of the	None of the ingredients is listed.		
· Chemicals k	Chemicals known to cause reproductive toxicity for females:		
None of the	None of the ingredients is listed.		
· Chemicals k	Chemicals known to cause reproductive toxicity for males:		
None of the	None of the ingredients is listed.		
· Chemicals k	Chemicals known to cause developmental toxicity:		
None of the	None of the ingredients is listed.		
· Carcinogen	Carcinogenic categories		
· EPA (Envir	· EPA (Environmental Protection Agency)		
None of the	None of the ingredients is listed.		
· TLV (Thres	TLV (Threshold Limit Value established by ACGIH)		
	None of the ingredients is listed.		
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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements Void

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

· 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: Quality Control Dept.

· Date of preparation / last revision 08/11/2016 / -

· 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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

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