

MSE - DMEM Low Glucose w/ L-Glutamine w/o Sodium Bicarbonate w/ Sodium Pyruvate MSC0112P

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: MSE - DMEM Low Glucose w/ L-Glutamine w/o Sodium Bicarbonate w/ Sodium Pyruvate MSC0112P

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

Relevant uses: Used in biotechnology. For professional user/industrial user only. Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Medical Scientific Equipment SAS

4B rue du Vieux Bourg 49340 Nuaillé – France Phone : 00 33 2 41 64 73 41 info@mse-sas.fr www.mse-sas.com

1.4 Emergency telephone number: ORFILA: 01 45 42 59 59

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

The product is not classified as hazardous according to CLP Regulation (EC) No 1272/2008.

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Hazard statements:

Non-applicable

Precautionary statements:

Non-applicable

Supplementary information:

EUH210: Safety data sheet available on request

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

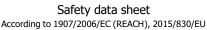
Chemical description: Mixture composed of inorganic substances

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification		Chemical name/Classification		Concentration
CAS: 10043-52-4 EC: 233-140-8	Calcium chloride(1	(ATP CLP00	1 - <2.5 %
Index: 017-013-00-2 REACH: 01-2119494219-28-XXXX	Regulation 1272/2008	Eye Irrit. 2: H319 - Warning	()	1- 2.5 %
CAS: 69847-45-6 EC: 274-152-3	Disodium L-tyrosinate ⁽¹⁾ Self-classi		Self-classified	
Index: Non-applicable	Regulation 1272/2008	Eye Irrit. 2: H319; Skin Irrit. 2: H315 – Warning	$\langle i \rangle$	1 - <2.5 %
REACH: 01-2120765348-44-XXXX	Regulation 12/2/2008	Lyc Int. 2. hold, Skin Int. 2. hold Warning		
	Regulation 1272/2000	which meet criteria laid down in Regulation (EU) No. 2015/830		1

To obtain more information on the hazards of the substances consult sections 8, 11, 12, 15 and 16.





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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

6.4 Reference to other sections:



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SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, handling and use.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

- A.- Technical measures for storage
 - Store in a cool, dry, well-ventilated location
- B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

Nuisance dust: Inhalable dust 10 mg/m3 // Respirable dust 4 mg/m3

DNEL (Workers):

		Short e	xposure	Long ex	kposure
Identification		Systemic	Local	Systemic	Local
Calcium chloride	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 10043-52-4	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 233-140-8	Inhalation	Non-applicable	10 mg/m ³	Non-applicable	5 mg/m ³

DNEL (General population):

		Short e	xposure	Long e	xposure
Identification		Systemic	Local	Systemic	Local
Calcium chloride	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 10043-52-4	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 233-140-8	Inhalation	Non-applicable	5 mg/m ³	Non-applicable	2,5 mg/m ³

PNEC:

Non-applicable

8.2 Exposure controls:

A.- General security and hygiene measures in the work place



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

As a preventative measure it is rec	commended to use basic Personal Protective Equipment, with the corresponding < <ce< th=""></ce<>
cleaning, maintenance, class of pr information see subsection 7.1. All information contained herein is	a recommendation which needs some specification from the labour risk prevention services an additional measures at its disposal.
The use of protection equipment w	ill be necessary if a mist forms or if the occupational exposure limits are exceeded.
C Specific protection for the hands	
Non-applicable	
D Ocular and facial protection	
Non-applicable	
E Body protection	
Non-applicable	
F Additional emergency measures	
It is not necessary to take addition	al emergency measures.
Environmental exposure controls:	
, 5	islation for the protection of the environment it is recommended to avoid environmental ntainer. For additional information see subsection 7.1.D
With regard to Directive 2010/75/EU, t	his product has the following characteristics:
V.O.C. (Supply):	0 % weight
V.O.C. density at 20 °C:	0 kg/m³ (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:	
Physical state at 20 °C:	Solid
Appearance:	Powdery
Colour:	Gold
Odour:	Not available
Odour threshold:	Non-applicable *
Volatility:	
Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 20 °C:	Non-applicable *
Vapour pressure at 50 °C:	Non-applicable *
Evaporation rate at 20 °C:	Non-applicable *
Product description:	
Density at 20 °C:	1894,7 kg/m³
Relative density at 20 °C:	1,895
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
*Not relevant due to the nature of the product, not prov	viding information property of its hazards.



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SECT	ION 9: PHYSICAL AND CHEMICAL PROPERTIES	(continued)	
	Kinematic viscosity at 40 °C:	Non-applicable	*
	Concentration:	Non-applicable	*
	pH:	6 - 6,6	
	Vapour density at 20 °C:	Non-applicable	*
	Partition coefficient n-octanol/water 20 °C:	Non-applicable	*
	Solubility in water at 20 °C:	Non-applicable	*
	Solubility properties:	Non-applicable	*
	Decomposition temperature:	Non-applicable	*
	Melting point/freezing point:	Non-applicable	*
	Explosive properties:	Non-applicable	*
	Oxidising properties:	Non-applicable	*
	Flammability:		
	Flash Point:	Non-applicable	9
	Flammability (solid, gas):	Non-applicable	*
	Autoignition temperature:	480 °C	
	Lower flammability limit:	Non-applicable	*
	Upper flammability limit:	Non-applicable	*
	Explosive:		
	Lower explosive limit:	Non-applicable	*
	Upper explosive limit:	Non-applicable	*
9.2	Other information:		
	Surface tension at 20 °C:	Non-applicable	*
	Refraction index:	Non-applicable	*
	*Not relevant due to the nature of the product, not providing inform	nation property of its	s haz

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

ſ	Acids	Water	Oxidising materials	Combustible materials	Others
	Avoid strong acids	Not applicable	Not applicable	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION



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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.
- B- Inhalation (acute effect):
 - Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for skin contact. For more information see section 3.
 - Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
 - IARC: Non-applicable
 - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- E- Sensitizing effects:
 - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
 - Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- F- Specific target organ toxicity (STOT) single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acut	e toxicity	Genus
Calcium chloride	LD50 oral	2301 mg/kg	Rat
CAS: 10043-52-4	LD50 dermal	5100 mg/kg	Rabbit
EC: 233-140-8	LC50 inhalation	Non-applicable	



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SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

12.2

Identification		Acute toxicity	Species	Genus		
Calcium chloride	LC50	4630 mg/L (96 h)	Pimephales promelas	Fish		
CAS: 10043-52-4	EC50	2400 mg/L (48 h)	Daphnia magna	Crustacean		
EC: 233-140-8	EC50	27000 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae		
Persistence and degradability:						
Not available						
Bioaccumulative potential:						

12.3 Bioaccumulative potent

Not available 12.4 Mobility in soil:

Not available

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 03 04	inorganic wastes other than those mentioned in 16 03 03	Non dangerous

Type of waste (Regulation (EU) No 1357/2014):

Non-applicable

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

Revised:

With regard to ADR 2019 and RID 2019:



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SECTION 14: TRANSPORT INFORMATION (continued)

14 1	UN number:	Non-applicable
	UN proper shipping name:	Non-applicable
	Transport hazard class(es):	Non-applicable
14.5	Labels:	Non-applicable
14.4	Packing group:	Non-applicable
	Environmental hazards:	No
-	Special precautions for user	
2.110	Special regulations:	Non-applicable
	Tunnel restriction code:	Non-applicable
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable
Transpo	rt of dangerous goods by sea:	
With rega	ard to IMDG 38-16:	
14.1	UN number:	Non-applicable
14.2	UN proper shipping name:	Non-applicable
	Transport hazard class(es):	Non-applicable
	Labels:	Non-applicable
14.4	Packing group:	Non-applicable
	Environmental hazards:	No
14.6	Special precautions for user	
	Special regulations:	Non-applicable
	EmS Codes:	
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
	Segregation group:	Non-applicable
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable
Transpo	rt of dangerous goods by air:	
With rega	ard to IATA/ICAO 2019:	
14.1	UN number:	Non-applicable
14.2	UN proper shipping name:	Non-applicable
14.3	Transport hazard class(es):	Non-applicable
	Labels:	Non-applicable
14.4	Packing group:	Non-applicable
	Environmental hazards:	No
14.6	Special precautions for user	
	Physico-Chemical properties:	see section 9
14.7	Transport in bulk according	Non-applicable
	to Annex II of Marpol and the IBC Code:	

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable



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SECTION 15: REGULATORY INFORMATION (continued)

Seveso III:

Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.: Non-applicable

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Eye Irrit. 2: H319 - Causes serious eye irritation

Skin Irrit. 2: H315 - Causes skin irritation

Classification procedure:

Non-applicable

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road IMDG: International maritime dangerous goods code IATA: International Air Transport Association ICAO: International Civil Aviation Organisation COD: Chemical Oxygen Demand BOD5: 5-day biochemical oxygen demand BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration 50 EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient

Revised:

Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for us this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.