

Safety Data Sheet

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
Classification according to Regulation (EC) No. 1272/2008 [CLP]

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product code	NP0002
Product name	NuPAGE® MES SDS Running Buffer (20X)
Unique Formula Identifier (UFI)	Not Applicable
Chemical Name	Not Applicable
REACH registration number	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 substance or mixture and uses advised against

Relevant identified uses	For research use only
Use Description Code	SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen), PROC15 - Use as laboratory reagent, PC21 - Laboratory chemicals, SU24 - Scientific research and development
Uses advised against	Not for consumer use.

Details of the supplier of the safety data sheet

Manufacturer / Supplier

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Emergency telephone number

Revision number 9
Product code NP0002

Revision date 23-Mar-2022
Product name NuPAGE® MES SDS Running Buffer (20X)

24 hour Emergency Response for Hazardous Materials Within the USA + Canada: 1-800-424-9300 and
[or Dangerous Goods] Incident. Spill, Leak, Fire, 1-703-527-3887
Exposure, or Accident. Call CHEMTREC Outside the USA + Canada: 1-703-741-5970

Country Specific Emergency Number (if available):

CHEMTREC Ireland (Dublin) +(353)-19014670 (Greeting Language: English and Irish)
CHEMTREC UK (London) +(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

No Pictogram

Signal Word

None

Hazard Statements

Not Applicable

Precautionary Statements

Prevention

Not Applicable

Response

Not Applicable

Storage

Not Applicable

Disposal

Not Applicable

Other hazards

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Contains a known or suspected endocrine disruptor

SECTION 3: Composition/information on ingredients

Mixtures

Chemical Name	CAS No	EINECS-No.	Weight-%	REACH registration number	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Dimethylformamide	68-12-2	200-679-5	0.01-0.09	-	Flam. Liq. 3 - H226Tox. 4 - H312Tox. 4 - H3321B - H360
Sodium lauryl sulfate	151-21-3	205-788-1	1-3	-	Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412

Chemical Name	Specific concentration limit (SCL)	M-Factor	Acute Toxicity Estimate
Dimethylformamide	-	-	-
Sodium lauryl sulfate	-	-	-

SECTION 4: First aid measures

Description of first aid measures

Skin contact	Rinse skin with 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. Continue rinsing.
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

Not Applicable

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

No data

Advice for firefighters

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 information

Environmental precautions

Prevent product from entering drains. Do not allow material to contaminate ground water system.

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)

For research use only.

SECTION 8: Exposure controls/personal protection

Control parameters

Chemical Name	EU OEL (TWA)	EU OEL (STEL)	EU Skin Notation
Dimethylformamide 68-12-2	None	None	None
Sodium lauryl sulfate 151-21-3	None	None	None

Chemical Name	Austria	Belgium (TWA)	Czech Republic
Dimethylformamide 68-12-2	5 ppm 15 mg/m ³	5 ppm 15 mg/m ³	15 mg/m ³ TWA 30 mg/m ³ Ceiling (toxic for reproduction, listed under 148) Irritant Potential for cutaneous absorption Potential chronic health effects
Sodium lauryl sulfate 151-21-3	None	None	None

Chemical Name	Denmark (TWA)	Finland OEL (TWA)	France OEL (VME)
Dimethylformamide 68-12-2	5 ppm 15 mg/m ³	None	5 ppm 15 mg/m ³
Sodium lauryl sulfate 151-21-3	None	None	None

Chemical Name	Germany OEL (TWA)	Ireland (TWA)	Italy OEL (TWA)
Dimethylformamide 68-12-2	5 ppm exposure factor 2 15 mg/m ³ exposure factor 2	5 ppm 15 mg/m ³	5 ppm 15 mg/m ³
Sodium lauryl sulfate 151-21-3	None	None	None

Chemical Name	Lithuania OEL (TWA)	Netherlands OEL (MAC)	Norway
Dimethylformamide 68-12-2	5 ppm 15 mg/m ³	15 mg/m ³	5 ppm TWA 15 mg/m ³ TWA 10 ppm STEL 30 mg/m ³ STEL
Sodium lauryl sulfate 151-21-3	None	None	None

Chemical Name	Poland	Portugal	Spain OEL (TWA)
Dimethylformamide 68-12-2	15 mg/m ³ TWA Skin Notation 30 mg/m ³ STEL	10 ppm TWA 30 mg/m ³ TWA 10 ppm STEL 30 mg/m ³ STEL skin - potential for cutaneous exposure A4 - Not Classifiable as a Human Carcinogen	5 ppm 15 mg/m ³
Sodium lauryl sulfate 151-21-3	None	None	None

Chemical Name	Sweden - Occupational Exposure Limits - TLVs (LLVs)	Switzerland	United Kingdom
Dimethylformamide 68-12-2	5 ppm TLV NGV; 15 mg/m ³ TLV NGV	10 ppm STEL 30 mg/m ³ STEL 5 ppm TWA 15 mg/m ³ TWA	5 ppm TWA; 15 mg/m ³ TWA
Sodium lauryl sulfate 151-21-3	None	None	None

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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

Prevent product from entering drains. Do not allow material to contaminate ground water system.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	liquid	
Colour	No data	
Odour	No data	
Molecular Weight	No data	
Melting point / melting range	°C No data	°F No data
Boiling point / boiling range	°C No data	°F No data
Flammability (solid, gas)	No data	
Lower explosion limit	No data	
Upper explosion limit	No data	
Flash point	°C No data	°F No data
Autoignition Temperature	°C No data	°F No data
Decomposition temperature	°C No data	°F No data
pH	6-8	
Evaporation rate	No data	
Viscosity	No data	
Solubility	No data	
Partition coefficient: n-octanol/water	No data	
Vapour Pressure	No data	
Specific gravity	No data	
Relative density	No data	
Vapour density	No data	
Explosive properties	No data	
Oxidising properties	No data	
Particle characteristics	No data	

Other information

Information with regards to physical hazard classes

No information available

Other safety characteristics

No information available

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	None under normal processing.
Incompatible materials	Strong acids. Oxidising agent. Potassium. Isocyanates. Ammonia. Bases.
Hazardous decomposition products	Carbon oxides.

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SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethylformamide	= 2800 mg/kg (Rat)	= 1100 mg/kg(Rat)	>5.85mg/L(Rat)
Sodium lauryl sulfate	= 1288 mg/kg (Rat)	= 200 mg/kg(Rabbit)	>3900mg/m ³ (Rat)

Principal Routes of Exposure

Skin corrosion/irritation	Data are conclusive but insufficient for classification
Serious eye damage/irritation	Data are conclusive but insufficient for classification
Respiratory or skin sensitisation	Data are conclusive but insufficient for classification
Specific target organ toxicity (STOT) – single exposure	Data are conclusive but insufficient for classification
Specific target organ toxicity (STOT) – repeated exposure	Data are conclusive but insufficient for classification
Carcinogenicity	Data are conclusive but insufficient for classification
Germ cell mutagenicity	Data are conclusive but insufficient for classification
Reproductive Toxicity	Data are conclusive but insufficient for classification
Aspiration Hazard	Data are conclusive but insufficient for classification

Information on other hazards

Endocrine disrupting properties

Contains a known or suspected endocrine disruptor

Other information

No information available

SECTION 12: Ecological information

Toxicity

Hazardous to the Aquatic Environment.

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Microtox Data	log Pow
Dimethylformamide	Desmodesmus subspicatus EC50>500 mg/L (96 h)	Daphnia magna EC50=6800 - 13900 mg/L (48 h) Daphnia magna EC50=8485 mg/L (48 h) Daphnia magna EC50=7500 mg/L (48 h)	No data available	No data available	logPow-1.028
Sodium lauryl sulfate	Pseudokirchneriella subcapitata EC50=53.59 - 15.6 mg/L (96 h) Pseudokirchneriella subcapitata EC50=117 mg/L (96 h) Desmodesmus subspicatus EC50=30 - 100 mg/L (96 h) Desmodesmus subspicatus EC50=53 mg/L (72 h)	Daphnia magna EC50=1.8 mg/L (48 h)	No data available	No data available	logPow1.6

Persistence and degradability Inherently biodegradable.

Bioaccumulative potential Material does not bioaccumulate.

Mobility in soil No information available.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Endocrine disrupting properties

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Chemical Name	EU - Endocrine Disrupters Candidate List
Dimethylformamide	Group III Chemical

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 accordance with 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. Do not empty into drains. Do not dispose of waste into sewer.

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations

UN number or ID number	Not Applicable
UN proper shipping name	Not Applicable
Transport hazard class(es)	Not Applicable
Packing group	Not Applicable

Environmental hazards

Not Applicable

Special precautions for user

Not Applicable

Maritime transport in bulk according to IMO instruments

Not Applicable.

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture**Substances of Very High Concern**

Chemical Name	Weight-%	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances for Eventual Inclusion in Annex XIV
Dimethylformamide	0.01-0.09	Reason for inclusion Toxic for reproduction, Article 57c

Substance subject to authorisation per REACH Annex XIV

None

Restricted substances under EC 1907/2006, Annex XVII

Chemical Name	Weight-%	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Dimethylformamide	0.01-0.09	Use restricted. See item 72. Use restricted. See item 30. Use restricted. See item 75. Use restricted. See item 76.

Regulation (EC) No 649/2012 (Rotterdam Convention - export/import of dangerous chemicals)

None

Regulation (EU) No 2019/1021 (Stockholm Convention – persistent organic pollutants)

None

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EU - Substances Depleting the Ozone layer (1005/2009)

None

German Water hazard classes (Wassergefährdungsklassen)

Chemical Name	Weight-%	Water hazard class (WGK)
Dimethylformamide	0.01-0.09	hazard class 2 - obviously hazardous to water
Sodium lauryl sulfate	1-3	hazard class 2 - obviously hazardous to water

Other International Inventories

Chemical Name	EINECS (European Union)	ELINCS (European List of Notified Chemical Substances)	ENCS (Japan)	PICCS (Philippines)
Dimethylformamide	Listed	-	Listed	Listed
Sodium lauryl sulfate	Listed	-	Listed	Listed

Chemical Name	AICS (Australia)	South Korea (KECL)	Canada (DSL)	NDSL
Dimethylformamide	Listed	Listed	Listed	-
Sodium lauryl sulfate	Listed	Listed	Listed	-

Chemical safety assessment

No Chemical safety assessment has been carried out.

Reason for revision Update according to Commission Regulation EU No. 2020/878
Revision number 9
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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

Abbreviations and acronyms**TWA** - Time-Weighted Average**OELs** - Occupational Exposure Limits**STEL** - Short Term Exposure Limit**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**KECL** - Korean Existing and Evaluated Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**NZIoC** - New Zealand Inventory of Chemicals**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**CEPA** - Canadian Environmental Protection Act**EPA** - Environmental Protection Agency**OSHA** - Occupational Safety and Health Administration of the US Department of Labour**IATA** - International Air Transport Association**DOT** - Department of Transportation**IMDG** - International Maritime Dangerous Goods**ACGIH** - American Conference of Governmental Industrial Hygienists**NIOSH** - National Institute for Occupational Safety and Health**AIHA** - American Industrial Hygiene Association**HMIS** - Department of Defense Hazardous Materials Information System**NTP** - National Toxicology Program**IARC** - International Agency for Research on Cancer

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006

"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"

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