

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

1.1. Product identifier

Product form	: Substance
Trade name	: N,N-Dimethylformamide 99.9% GLR
Chemical name	: N, N-dimethylformamide; dimethyl formamide
IUPAC name	: N,N-dimethylformamide
EC Index-No.	: 616-001-00-X
EC-No.	: 200-679-5
CAS-No.	: 68-12-2
REACH registration No.	: 01-2119475605-32
Product code	: DMFO-00P
Formula	: (CH ₃) ₂ NCHO

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

Relevant identified uses

Main use category	: Laboratory use
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1.3. Details of the supplier of the safety data sheet

Labbox Labware S.L.
Migjorn, 1
08338 Premia de Dalt, Barcelona
España
T +34 937 07 79 70, F +34 937 909 532
info@labbox.com, www.labbox.com

1.4. Emergency telephone number

Emergency number	: +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number. 24 hours a day, 7 days a week
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Country/Area	Organisation	Emergency number
United Kingdom	National Poisons Information Service (Belfast Centre). Royal Victoria Hospital. Grosvenor Road BT12 6BA Belfast.	0344 892 0111 Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Reproductive toxicity, Category 1B	H360D
Acute toxicity (inhal.), Category 4	H332
Acute toxicity (dermal), Category 4	H312
Serious eye damage/eye irritation, Category 2	H319
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

No additional information available

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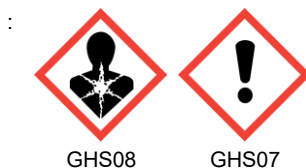
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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H360D - May damage the unborn child.
H332 - Harmful if inhaled.
H312 - Harmful in contact with skin.
H319 - Causes serious eye irritation.

Precautionary statements (CLP)

: P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Other hazards which do not result in classification

: Does not contain PBT and/or vPvB substances $\geq 0.1\%$ evaluated according to Annex XIII of REACH.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type

: Mono-constituent

Name	Product identifier	%
Dimethylformamide substance listed on REACH Candidate List (N,N-dimethylformamide)	CAS-No.: 68-12-2 EC-No.: 200-679-5 EC Index-No.: 616-001-00-X REACH-no: 01-2119475605-32	100

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: Get medical advice/attention if you feel unwell.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact

: Wash skin with plenty of water. Take off contaminated clothing. Get medical advice/attention.

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First-aid measures after eye contact	: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
First-aid measures after ingestion	: Obtain emergency medical attention.

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

Symptoms/effects after eye contact	: Causes serious eye irritation.
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4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: ABC-powder.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: fume.
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5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures	: Mechanically ventilate the spillage area. Only qualified personnel equipped with suitable protective equipment may intervene.
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For emergency responders

Protective equipment	: Equip cleanup crew with proper protection. Use personal protective equipment as required.
Emergency procedures	: Ventilate area. Stop leak if safe to do so.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. On land, sweep or shovel into suitable containers. Take up liquid spill into absorbent material.

6.4. Reference to other sections

See Section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin, eyes and clothing.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep container tightly closed.
Storage area	: Store away from heat. Store in a well-ventilated place.
Special rules on packaging	: Store in a closed container. Keep only in original container.

7.3. Specific end use(s)

Laboratory chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

N,N-Dimethylformamide 99.9% GLR (68-12-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	N,N Dimethylformamide
IOEL TWA	15 mg/m ³
	5 ppm
IOEL STEL	30 mg/m ³
	10 ppm
Remark	skin
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
France - Occupational Exposure Limits	
Local name	N,N-Diméthylformamide
VLEP 8h (OEL TWA)	15 mg/m ³ (ex Diméthylformamide)
	5 ppm (ex Diméthylformamide)
VLEP CT (OEL STEL)	30 mg/m ³ (ex Diméthylformamide)
	10 ppm (ex Diméthylformamide)
Remark	Valeurs réglementaires contraignantes; substance classée toxique pour la reproduction de catégorie 1b
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016)
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	N,N-Dimethylformamid
AGW (OEL TWA)	15 mg/m ³
	5 ppm
Peak exposure limitation factor	2(II)
Remark	EU,DFG,AGS,H, Z
Regulatory reference	TRGS900
Greece - Occupational Exposure Limits	
Local name	Διμεθυλο-φορμαμίδιο, N,N-
OEL TWA	15 mg/m ³
	5 ppm

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OEL STEL	30 mg/m ³
	10 ppm
Regulatory reference	Π.Δ. 12/2012
Italy - Occupational Exposure Limits	
Local name	N,N Dimetilformamide
OEL TWA	15 mg/m ³
	5 ppm
OEL STEL	30 mg/m ³
	10 ppm
Remark	pelle
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Portugal - Occupational Exposure Limits	
Local name	Dimetilformamida
OEL TWA	10 ppm
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	N,N Dimetilformamidă
OEL TWA	15 mg/m ³
	5 ppm
OEL STEL	30 mg/m ³
	10 ppm
Regulatory reference	Hotărârea nr. 584/2018
Spain - Occupational Exposure Limits	
Local name	N,N-Dimetilformamida
VLA-ED (OEL TWA)	15 mg/m ³
	5 ppm
VLA-EC (OEL STEL)	30 mg/m ³
	10 ppm
Remark	VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país), Vía dérmica (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante. Para más información véase el Apartado 5 de este documento), TR1B (Cuando las pruebas utilizadas para la clasificación procedan principalmente de datos en animales), VLB® (Agente químico que tiene Valor Límite Biológico específico en este documento).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2019. INSHT

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N,N-Dimethylformamide 99.9% GLR (68-12-2)	
Spain - Biological limit values	
BLV	40 mg/l Parámetro: N-Acetil-S-(N-metilcarbamoil) cisteína - Medio: Orina - Momento de muestreo: Principio de la última jornada de la semana laboral - Notas: S (Significa que el indicador biológico es un indicador de exposición al agente químico en cuestión, pero la interpretación cuantitativa de su medida es ambigua (semicuantitativa). Estos indicadores biológicos deben utilizarse como una prueba de selección (screening) cuando no se pueda realizar una prueba cuantitativa o usarse como prueba de confirmación, si la prueba cuantitativa no es específica y el origen del determinante es dudoso) 15 mg/l Parámetro: N-Metilformamida - Medio: Orina - Momento de muestreo: Final de la jornada laboral
United Kingdom - Occupational Exposure Limits	
Local name	N,N-Dimethylformamide
WEL TWA (OEL TWA)	15 mg/m ³
	5 ppm
WEL STEL (OEL STEL)	30 mg/m ³
	10 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

DNEL and PNEC

N,N-Dimethylformamide 99.9% GLR (68-12-2)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	26,3 mg/kg bodyweight/day
Acute - systemic effects, inhalation	30 mg/m ³
Acute - local effects, dermal	5900 µg/cm ²
Acute - local effects, inhalation	30 mg/m ³
Long-term - systemic effects, dermal	3,31 mg/kg bodyweight/day
Long-term - local effects, dermal	446 µg/cm ²
Long-term - systemic effects, inhalation	15 mg/m ³
Long-term - local effects, inhalation	15 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	15,8 mg/kg bodyweight/day
Acute - systemic effects, inhalation	30 mg/m ³
Acute - systemic effects, oral	5,94 mg/kg bodyweight/day
Acute - local effects, dermal	3550 µg/cm ²
Acute - local effects, inhalation	30 mg/m ³
Long-term - systemic effects, oral	1,98 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	15 mg/m ³
Long-term - systemic effects, dermal	1,98 mg/kg bodyweight/day
Long-term - local effects, dermal	267 µg/cm ²
Long-term - local effects, inhalation	15 mg/m ³

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N,N-Dimethylformamide 99.9% GLR (68-12-2)	
PNEC (Water)	
PNEC aqua (freshwater)	30 mg/l
PNEC aqua (marine water)	3 mg/l
PNEC aqua (intermittent, freshwater)	30 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	115,18 mg/kg dwt
PNEC sediment (marine water)	11,52 mg/kg dwt
PNEC (Soil)	
PNEC soil	56,97 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	123 mg/l

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protection equipment

Personal protective equipment:

ISO 374-1. Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Chemical goggles or face shield

Eye protection			
Type	Field of application	Characteristics	Standard
Face shield	Droplet		EN 166, EN 167, EN 168

Skin protection

Skin and body protection:

Wear suitable protective clothing

Skin and body protection	
Type	Standard
Protective clothing	EN 1149-1, EN 1149-2, EN 1149-3, EN 13034, EN ISO 13982-1, EN ISO 6529, EN ISO 6530, EN 464

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Hand protection:

protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Category III, Disposable gloves			0.062 mm	6 (> 480 minutes)	EN 420

Other skin protection

Materials for protective clothing:

Wear foot protection

Other skin protection Materials for protective clothing		
Condition	Material	Standard
		EN ISO 13287, EN ISO 20345, EN 13832-1

Respiratory protection

Respiratory protection:

Wear appropriate mask

Respiratory protection			
Device	Filter type	Condition	Standard
filtering face piece	with filter for vapors/gases		EN 405

Environmental exposure controls

Other information:

Do not eat, drink or smoke during use. Wash hands with water as a precaution.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Transparent.
Molecular mass	: 73,1 g/mol
Odour	: Amine-like.
Odour threshold	: Not available
Melting point	: -61 °C
Freezing point	: Not available
Boiling point	: 152 – 153 °C
Flammability	: Not available
Lower explosion limit	: 2,2 Vol-%
Upper explosion limit	: 16 Vol-%
Flash point	: 57,5 °C Atm. press.: 1013,25 hPa
Auto-ignition temperature	: 410 °C
Decomposition temperature	: Not available
pH	: 7 20°C
Viscosity, kinematic	: 0,903 – 0,907 mm²/s
Viscosity, dynamic	: 0,86 cP
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: -0,85
Vapour pressure	: 377 Pa 20°C

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Vapour pressure at 50°C	: 23 hPa
Density	: 948 – 952 kg/m³ 20°C
Relative density	: 0,948 – 0,952 20°C
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

Other safety characteristics

VOC content	: 100 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable in use and storage conditions as recommended in item 7.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Heat.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Harmful in contact with skin.
Acute toxicity (inhalation)	: Harmful if inhaled.

N,N-Dimethylformamide 99.9% GLR (68-12-2)	
LD50 oral rat	3010 mg/kg bodyweight Animal: rat, 95% CL: 2480 - 3650
LD50 dermal rat	> 3,16 mg/kg
LC50 Inhalation - Rat	> 5,85 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation	: Not classified pH: 7 20°C
Serious eye damage/irritation	: Causes serious eye irritation. pH: 7 20°C
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

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N,N-Dimethylformamide 99.9% GLR (68-12-2)	
LOAEL (oral, rat, 90 days)	475 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
NOAEL (oral, rat, 90 days)	238 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

Aspiration hazard : Not classified

N,N-Dimethylformamide 99.9% GLR (68-12-2)	
Viscosity, kinematic	0,903 – 0,907 mm²/s

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The product does not meet the criteria due to its endocrine-disrupting properties.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

N,N-Dimethylformamide 99.9% GLR (68-12-2)	
LC50 - Fish [1]	7100 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	3000 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1500 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

N,N-Dimethylformamide 99.9% GLR (68-12-2)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

N,N-Dimethylformamide 99.9% GLR (68-12-2)	
Partition coefficient n-octanol/water (Log Pow)	-0,85
Bioaccumulative potential	Low.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

N,N-Dimethylformamide 99.9% GLR (68-12-2)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

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12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Other adverse effects : Do not discharge into drains or rivers.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Must follow special treatment according to local regulation.
European List of Waste (LoW, EC 2000/532) : 14 06 03* - other solvents and solvent mixtures
HP Code : HP3 - "Flammable:"
– flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
– flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.
HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.
HP10 - "Toxic for reproduction:" waste which has adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR) : UN 2265
UN-No. (IMDG) : UN 2265
UN-No. (IATA) : UN 2265
UN-No. (ADN) : UN 2265
UN-No. (RID) : UN 2265

14.2. UN proper shipping name

Proper Shipping Name (ADR) : N,N-DIMETHYLFORMAMIDE
Proper Shipping Name (IMDG) : N,N-DIMETHYLFORMAMIDE
Proper Shipping Name (IATA) : n,n-Dimethylformamide
Proper Shipping Name (ADN) : N,N-DIMETHYLFORMAMIDE
Proper Shipping Name (RID) : N,N-DIMETHYLFORMAMIDE
Transport document description (ADR) (ADR) : UN 2265 N,N-DIMETHYLFORMAMIDE, 3, III, (D/E)
Transport document description (IMDG) : UN 2265 N,N-DIMETHYLFORMAMIDE, 3, III (58°C c.c.)
Transport document description (IATA) : UN 2265 n,n-Dimethylformamide, 3, III
Transport document description (ADN) : UN 2265 N,N-DIMETHYLFORMAMIDE, 3, III
Transport document description (RID) : UN 2265 N,N-DIMETHYLFORMAMIDE, 3, III

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14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3
:



IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3
:



IATA

Transport hazard class(es) (IATA) : 3
Danger labels (IATA) : 3
:



ADN

Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3
:



RID

Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3
:



14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Other information : No supplementary information available

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14.6. Special precautions for user

Overland transport

Classification code (ADR)	: F1
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T2
Portable tank and bulk container special provisions (ADR)	: TP2
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	:



Tunnel restriction code (ADR)	: D/E
EAC code	: •2Y

Transport by sea

Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP2
Stowage category (IMDG)	: A
Flash point (IMDG)	: 58°C c.c.
Properties and observations (IMDG)	: Colourless liquid. Flashpoint: 58°C c.c. Explosive limits: 2.2% to 16%. Miscible with water. May react violently with oxidizing materials.

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
ERG code (IATA)	: 3L

Inland waterway transport

Classification code (ADN)	: F1
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: F1
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T2

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Portable tank and bulk container special provisions (RID) : TP2
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3.	N,N-Dimethylformamide 99.9% GLR
3(a)	N,N-Dimethylformamide 99.9% GLR
3(b)	N,N-Dimethylformamide 99.9% GLR
30.	N,N-Dimethylformamide 99.9% GLR
40.	N,N-Dimethylformamide 99.9% GLR

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Listed on the REACH Candidate List: N,N-dimethylformamide

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Council Regulation (EC) for the control of dual-use items

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

VOC Directive (2004/42)

VOC content : 100 %

Explosives Precursors Regulation (EU 2019/1148)

Not listed on the Explosives Precursors list (EU)

Drug Precursors Regulation (EC 273/2004)

Not listed on the Drug Precursors list (EU)

National regulations

Denmark

Class for fire hazard : Class III-1
Store unit : 50 liter
Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

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Danish National Regulations

- : Young people below the age of 18 years are not allowed to use the product
- Pregnant/breastfeeding women working with the product must not be in direct contact with it.
- If an employee is pregnant or breastfeeding and the person in question uses or is exposed to this product at work, the employer must always carry out a risk assessment of the work. The assessment must both deal with the dangerousness of the impact and its strength and duration. The employer's decision that a pregnant or lactating woman can perform a specific work task must therefore be made in the context of her specific working conditions. See also WEA-Guideline A.1.8-7 on the working environment of pregnant and breastfeeding workers. The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal
- Listed or contains substance(s) on the Denmark - Indicative list of organic solvents present in Annex 3.4.1 of the WEA Guidance C.O.1-1: N,N-Dimethylformamide (68-12-2)

France

Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

- Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV; ID No. 83).
- Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).
- VOC content : 100 %

Netherlands

- SZW-lijst van kankerverwekkende stoffen : The substance is not listed
- SZW-lijst van mutagene stoffen : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Ontwikkeling : Dimethylformamide is listed

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Poland

Polish National Regulations

: Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)
Regulation of the Minister of Health of 25 August 2015 on the method of marking places, pipelines, and containers and tanks used for storing or containing hazardous substances or hazardous mixtures (J.o.L. 2015, item 1368 as amended)

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H360D	May damage the unborn child.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.