United Kingdom (en)

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)

N,N-Dimethylaceetamide (DMA) ROTISOLV® ≥99,99 %, Headspace Grade

article number: HN45

Version: **4.0 en** Replaces version of: 2022-12-16 Version: (3)

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

1.1 Product identifier

Identification of the substance	N,N-Dimethylaceetamide (DMA) ROTISOLV® ≥99,99 %, Headspace Grade		
Article number	HN45		
Index No (GB CLP)	616-011-00-4		
EC number	204-826-4		
CAS number	127-19-5		
Delevant identified uses of the substance or mix	ture and uses advised against		

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

Laboratory chemical Laboratory and analytical use

Uses advised against:

Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household). Food, drink and animal feedingstuffs.

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co. KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data Department Health, Safety and Environment sheet:

e-mail (competent person):

sicherheit@carlroth.de

1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	



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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.1D	Acute toxicity (dermal)	4	Acute Tox. 4	H312
3.1I	Acute toxicity (inhal.)	4	Acute Tox. 4	H332
3.3	3.3 Serious eye damage/eye irritation		Eye Irrit. 2	H319
3.7	Reproductive toxicity	1B	Repr. 1B	H360D

For full text of abbreviations: see SECTION 16

2.2 Label elements

Labelling

Signal word

Danger

Pictograms

GHS07, GHS08



Hazard statements

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

Precautionary statements

Precautionary statements - prevention

P280 Wear protective gloves/eye protection

Precautionary statements - response

P302+P352	IF ON SKIN: Wash with plenty of water
P308+P313	IF exposed or concerned: Get medical advice/attention

For professional users only

2.3 Other hazards

This material is combustible, but will not ignite readily.

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\ge 0,1\%$.

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3.1

SECTION 3: Composition/information on ingredients

Substances	
Name of substance	N,N-Dimethylaceetamide (DMA)
Molecular formula	C₄H ₉ NO
Molar mass	87,12 ^g / _{mol}
CAS No	127-19-5
EC No	204-826-4
Index No (GB CLP)	616-011-00-4

Substance of Very High Concern (SVHC)							
Name of substance CAS No EC No Listed in Remarks							
N,N-Dimethylaceetamide (DMA)	127-19-5	204-826-4	Candidate list	Repr. A57c			

Legend

Candidate Substances meeting the criteria referred to in Article 57 and for eventual inclusion in Annex XIV list

Repr. A57c Toxic for reproduction (article 57c)

Substance, Specific Conc. Limits, M-factors, ATE							
Specific Conc. Limits M-Factors ATE Exposure route							
1.100 ^{mg} / _{kg} dermal 11 ^{mg} / _l /4h inhalation: va							

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

4.2 Most important symptoms and effects, both acute and delayed

Irritation, Cough, Dyspnoea, Dizziness

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4.3 Indication of any immediate medical attention and special treatment needed none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings! water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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SECTION 7: Handling and storage

Precautions for safe handling 7.1

Provision of sufficient ventilation. Avoid exposure.

Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a dry place. Hygroscopic.

Incompatible substances or mixtures

Observe hints for combined storage.

Protect against external exposure, such as

humidity

Consideration of other advice:

Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

Control parameters 8.1

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Cou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
EU	N,N-dimethylacet- amide	127-19-5	IOELV	10	36	20	72			Н	2022/ 431/EU
GB	N,N-dimethylacet- amide	127-19-5	WEL	10	36	20	72				EH40/ 2005

Notation

Ceiling-C

STEL

Ceiling value is a limit value above which exposure should not occur Absorbed through the skin Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)



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Biological limit values										
Coun try	Name of agent	CAS No	Parameter	Nota tion	Identi- fier	Value	Material	Source		
GB	N,N-dimethylacet- amide	127-19-5	N-methylacetamide	crea	BMGV	100 mmol/ mol	urine	EH40/ 2005		

Notation

crea Creatinine

Human health values

Relevant DNE	Relevant DNELs and other threshold levels										
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time							
DNEL	120 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects							
DNEL	11 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic effects							
DNEL	42 mg/kg bw/ day	human, dermal	worker (industry)	acute - systemic effects							
DNEL	36 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects							

Environmental values

Relevant PNECs and other threshold levels					
End- point	Threshold level	Organism	Environmental com- partment	Exposure time	
PNEC	2,27 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single instance)	
PNEC	0,438 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)	
PNEC	0,15 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single instance)	
PNEC	200 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)	
PNEC	0,05 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)	
PNEC	0,5 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)	
PNEC	5 ^{mg} /l	aquatic organisms	water	intermittent release	

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

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Skin protection



hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a consider-able reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

NBR (Nitrile rubber)

material thickness

>0,11 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	characteristic
Melting point/freezing point	-20 °C (ECHA)
Boiling point or initial boiling point and boiling range	166 °C at 1.013 hPa (ECHA)
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	1,8 vol% (LEL) - 11,5 vol% (UEL)



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-		
	Flash point	64 °C at 1.013 hPa (ECHA)
	Auto-ignition temperature	345 °C at 1.011 hPa (ECHA)
	Decomposition temperature	not relevant
	pH (value)	4 (in aqueous solution: 200 ^g / _l , 20 °C)
	Kinematic viscosity	not determined
	Dynamic viscosity	0,92 mPa s at 25 °C
	Solubility(ies)	
	Water solubility	>1.000 ^g / _l at 20 °C (ECHA)
	Partition coefficient	
	Partition coefficient n-octanol/water (log value):	-0,77 (25 °C) (ECHA)
	Soil organic carbon/water (log KOC)	1,46 (ECHA)
	Vapour pressure	2 hPa at 21,7 °C
	Density and (as seleting density)	
	Density and/or relative density	
	Density	0,94 ^g / _{cm³} at 20 °C (ECHA)
	Relative vapour density	3,01 (air = 1)
	Particle characteristics	not relevant (liquid)
	Other safety parameters	
	Oxidising properties	none
	Other information	
	Information with regard to physical hazard	hazard classes acc. to GHS
	classes:	(physical hazards): not relevant
	Other safety characteristics:	
	Miscibility	completely miscible with water
	Refractive index	1,438

SECTION 10: Stability and reactivity

10.1 Reactivity

9.2

This material is not reactive under normal ambient conditions.

If heated

Vapours may form explosive mixtures with air.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

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10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser, Halogenated hydrocarbons, Nitrate

- **10.4 Conditions to avoid** Protect from moisture. Keep away from heat.
- **10.5 Incompatible materials** different plastic
- **10.6 Hazardous decomposition products** Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Harmful in contact with skin. Harmful if inhaled.

GHS of the United Nations, annex 4. May be harmful if swallowed.

Acute toxicity						
Exposure route	Endpoint	Value	Species	Method	Source	
oral	LD50	4.300 ^{mg} / _{kg}	rat		TOXNET	
dermal	LD50	2.240 ^{mg} / _{kg}	rabbit		TOXNET	

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

May damage the unborn child.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.



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Symptoms related to the physical, chemical and toxicological characteristics

If swallowed

vomiting, nausea

• If in eyes

Causes serious eye irritation

• If inhaled

irritant effects, cough, Dyspnoea, dizziness

• If on skin

Frequently or prolonged contact with skin may cause dermal irritation

Other information

Other adverse effects: Liver and kidney damage

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\ge 0,1\%$.

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)					
Endpoint	Value	Species	Source	Exposure time	
LC50	>500 ^{mg} / _l	fish	ECHA	96 h	
EC50	>500 ^{mg} / _l	aquatic invertebrates	ECHA	48 h	
ErC50	>500 ^{mg} / _l	algae	ECHA	72 h	

12.2 Persistence and degradability

Theoretical Oxygen Demand (without nitrification): 1,836 $^{\rm mg}/_{\rm mg}$ Theoretical Oxygen Demand (with nitrification): 2,571 $^{\rm mg}/_{\rm mg}$ Theoretical Carbon Dioxide: 2,021 $^{\rm mg}/_{\rm mg}$

Biodegradation

The substance is readily biodegradable.

Process of degradability				
Process	Degradation rate	Time		
biotic/abiotic	>90 %	28 d		
oxygen depletion	8,7 %	1 d		

12.3 **Bioaccumulative potential**

Does not significantly accumulate in organisms.



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n-octanol/water (log KOW)	-0,77 (25 °C) (ECHA)
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12.4 Mobility in soil

Henry's law constant	0,001 ^{Pa m³} / _{mol} at 25 °C (ECHA)
The Organic Carbon normalised adsorption coefficient	1,46 (ECHA)

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Properties of waste which render it hazardous

- HP 4 irritant skin irritation and eye damage
- HP 6 acute toxicityHP 10 toxic for reproduction

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

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SECTION 14: Transport information

- 14.1 UN number or ID number
- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards

not subject to transport regulations

not assigned

none

not assigned

non-environmentally hazardous acc. to the dangerous goods regulations

- **14.6** Special precautions for user There is no additional information.
- **14.7** Maritime transport in bulk according to IMO instruments The cargo is not intended to be carried in bulk.
- 14.8 Information for each of the UN Model Regulations

International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Seveso Directive

2012/18/EU (Seveso III)					
Νο	No Dangerous substance/hazard categories Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements				
	not assigned				

Deco-Paint Directive

VOC content	100 %
VOC content	940 ^g /l

Industrial Emissions Directive (IED)

VOC content	100 %
VOC content	940 ^g /l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed



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Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Γ

Water Framework Directive (WFD)

List of pollutants (WFD)					
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks	
N,N-Dimethylaceetamide (DMA)	Substances and preparations, or the breakdown products of such, which have been proved to pos- sess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine- related functions in or via the aquatic environment		a)		

Legend

a) Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

not listed

Regulation on drug precursors

not listed

Regulation on substances that deplete the ozone layer (ODS)

not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

Regulation on persistent organic pollutants (POP)

not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

Substance of Very High Concern (SVHC) acc. to GB REACH and HSE			
Name of substance	CAS No	Listed in	Remarks
N,N-Dimethylaceetamide (DMA)	127-19-5	Candidate list	Repr. A57c

Legend

Candidate Substances meeting the criteria referred to in Article 57 and for eventual inclusion in Annex XIV

list Repr. A57c Toxic for reproduction (Article 57c)

Restrictions according to GB REACH, Annex 17

angerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
N,N-Dimethylaceetamide (DMA)	N,N-dimethylacetamide (DMAC)	127-19-5	72
N,N-Dimethylaceetamide (DMA)	this product meets the criteria for classi- fication in accordance with Regulation No 1272/2008/EC		3



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Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	Νο
N,N-Dimethylaceetamide (DMA)	toxic for reproduction		30

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

Legend

AIIC	Australian Inventory of Industrial Chemicals
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.



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SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.	yes
15.1	VOC content: 100 % 940 ^g /l	VOC content: 100 %	yes
15.1		VOC content: 940 ^g / _l	yes
15.1		National inventories: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2022/431/EU	Directive (EU) 2022/431 of the European Parliament and of the Council of 9 March 2022 amending Direct- ive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or muta- gens at work
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identi- fier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GB CLP	The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended)
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions
HSE	Health and Safety Executive

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Abbr.	Descriptions of used abbreviations
ΙΑΤΑ	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	Reproductive toxicity
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
UEL	Upper explosion limit (UEL)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

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



acc. to Regulation (EC) No. 1907/2006 (REACH)



N,N-Dimethylaceetamide (DMA) ROTISOLV® ≥99,99 %, Headspace Grade

article number: HN45

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.