

Safety Data Sheet

according to Regulation (EC) No 1907/2006

21224-26 PAN Indicator

Print date: 19.07.2015

Product code: 2122426

Page 1 of 9

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

1.1. Product identifier

21224-26 PAN Indicator

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

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.
Pacific Way
Salford Manchester M50 1DL - United Kingdom
Tel. +44 (0) 161 872 1487
e-Mail: info@hach-lange.co.uk

HACH LANGE Ltd.
Unit 1, Chestnut Road Western Industrial Estate
IRL-Dublin 12
Tel. +353 (0)1 4602522
e-Mail: info@hach-lange.ie

1.4. Emergency telephone number:

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Hazard categories:

Serious eye damage/eye irritation: Eye Dam. 1

Reproductive toxicity: Repr. 1B

Hazard Statements:

Causes serious eye damage.

May damage the unborn child. Suspected of damaging fertility.

2.2. Label elements

Hazardous components which must be listed on the label

N,N-dimethylformamide, dimethyl formamide

Triton X-114

Signal word:

Danger

Pictograms:



Hazard statements

H318

Causes serious eye damage.

H360Df

May damage the unborn child. Suspected of damaging fertility.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

21224-26 PAN Indicator

Print date: 19.07.2015

Product code: 2122426

Page 2 of 9

Precautionary statements

- P201 Obtain special instructions before use.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- 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+P313 IF exposed or concerned: Get medical advice/attention.
- P501 Dispose of contents/container to Disposal.

Additional advice on labelling

Classification according to European directive on classification of hazardous preparations 1999/45/EC.
 The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7732-18-5	Water			50-60%
	231-791-2			
68-12-2	N,N-dimethylformamide, dimethyl formamide			20-30 %
	200-679-5	616-001-00-X		
	Repr. 1B, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H360D *** H332 H312 H319			
631-61-8	Ammonium acetate			15-25%
	211-162-9			
9036-19-5	Triton X-114			5-15%
	-			
	Acute Tox. 5, Eye Dam. 1; H303 H318			

Full text of H and EUH phrases: see section 16.

Further Information

This product contains substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off all contaminated clothing immediately.
 Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air. Call a physician immediately.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Call a physician immediately.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

21224-26 PAN Indicator

Print date: 19.07.2015

Product code: 2122426

Page 3 of 9

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion

Ingest immediately about 350 ml (5 ml/kg body weight) of activated charcoal slurry. Note: To prepare activated charcoal slurry, mix thoroughly 50 g of activated charcoal in 400 ml (about 2 cups) water.

Never give anything by mouth to an unconscious person.

Induce vomiting immediately and call a physician.

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

In case of skin contact: Irritation and corrosion, Nausea, Vomiting

If inhaled: Harmful, Inhalation of mist causes irritation of respiratory system.

If swallowed: Nausea, Vomiting, Liver and kidney injuries may occur.

In case of eye contact irritant effects

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

The product itself does not burn.

Water, Carbon dioxide (CO₂), Alcohol-resistant foam Dry powder,

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

In the event of fire the following can be released: Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.

Do not breathe vapours, mist or gas.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Safety Data Sheet

according to Regulation (EC) No 1907/2006

21224-26 PAN Indicator

Print date: 19.07.2015

Product code: 2122426

Page 4 of 9

Advice on safe handling

Avoid contact with skin and eyes.
Do not breathe vapours or spray mist.

Further information on handling

Observe label precautions.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep away from heat and sources of ignition.
Keep at temperatures between 10 and 25 °C.

Advice on storage compatibility

Protect against Acids, Oxidizing agents, Alkali metals

Further information on storage conditions

Keep locked up or in an area accessible only to qualified or authorised persons.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
68-12-2	N,N-Dimethylformamide	5	15		TWA (8 h)	WEL
		10	30		STEL (15 min)	WEL

8.2. Exposure controls**Appropriate engineering controls**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Wash hands before breaks and at the end of workday.

Eye/face protection

Safety glasses with side-shields

Hand protection

Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

In case of full contact:

Glove material : butyl-rubber
Layer thickness: > 0,7 mm
Break through time: >480 min

In case of contact through splashing:

Glove material :Viton (R)
Layer thickness: > 0,7 mm
Break through time: >240 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374,

according to Regulation (EC) No 1907/2006

21224-26 PAN Indicator

Print date: 19.07.2015

Product code: 2122426

Page 5 of 9

contact the supplier of the CE approved gloves.

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Provide adequate ventilation.

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	red
Odour:	ammoniacal

Test method

pH-Value (at 20 °C):	8
----------------------	---

Changes in the physical state

Melting point:	no data available
Initial boiling point and boiling range:	101 °C
Sublimation point:	no data available
Softening point:	no data available
Pour point:	no data available
:	no data available
Flash point:	> 93 °C

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

not applicable

Lower explosion limits:	no data available
Upper explosion limits:	no data available
Ignition temperature:	no data available

Auto-ignition temperature

Solid:	no data available
Gas:	no data available

Decomposition temperature:	no data available
----------------------------	-------------------

Oxidizing properties

no data available

Vapour pressure:	no data available
Vapour pressure:	no data available
Density (at 20 °C):	1,044 g/cm³
Bulk density:	no data available
Water solubility:	miscible

Solubility in other solvents

Acids : miscible

Partition coefficient:	no data available
------------------------	-------------------

21224-26 PAN Indicator

Print date: 19.07.2015

Product code: 2122426

Page 6 of 9

Viscosity / dynamic:	no data available
Viscosity / kinematic:	no data available
Flow time:	no data available
Vapour density:	no data available
Evaporation rate:	no data available
Solvent separation test:	no data available
Solvent content:	no data available

9.2. Other information

Solid content:	no data available
----------------	-------------------

no data available

SECTION 10: Stability and reactivity
10.1. Reactivity

Reactivity Hazard: Oxidizing agents, Nitric acid, Alkali metals

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

nitrogen oxides (NOx), Carbon monoxide, Carbon dioxide (CO2)

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Toxicokinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

No data is available on the product itself.

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
68-12-2	N,N-dimethylformamide, dimethyl formamide				
	dermal	ATE	1100 mg/kg		
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		
9036-19-5	Triton X-114				
	oral	ATE	2500 mg/kg		

Irritation and corrosivity

H318 - Causes serious eye damage.

Carcinogenic/mutagenic/toxic effects for reproduction

May cause harm to the unborn child.

according to Regulation (EC) No 1907/2006

21224-26 PAN Indicator

Print date: 19.07.2015

Product code: 2122426

Page 7 of 9

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information
12.1. Toxicity

No data is available on the product itself.

CAS No	Chemical name				
	Aquatic toxicity	Method	Dose	[h] [d]	Species
631-61-8	Ammonium acetate				
	Acute fish toxicity	LC50	238 mg/l	96 h	
9036-19-5	Triton X-114				
	Acute fish toxicity	LC50	4-8,9 mg/l	96 h	Pimephales promelas (fathead minnow)
	Acute crustacea toxicity	EC50	18-26 mg/l	48 h	Daphnia magna (Water flea)

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No data is available on the product itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
68-12-2	N,N-dimethylformamide, dimethyl formamide	0,85

12.4. Mobility in soil

No data is available on the product itself.

12.5. Results of PBT and vPvB assessment

No data is available on the product itself.

12.6. Other adverse effects

No data is available on the product itself.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Advice on disposal

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of contaminated packaging

Safety Data Sheet

according to Regulation (EC) No 1907/2006

21224-26 PAN Indicator

Print date: 19.07.2015

Product code: 2122426

Page 8 of 9

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Contaminated packaging

Dispose of as unused product.
The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

Not subject to transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not subject to transport regulations.

Air transport (ICAO)

Other applicable information (air transport)

Not subject to transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not relevant

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D): 2 - water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Revision: 26.05.2015
Safety datasheet sections which have been updated: 2, 11
Revision: 27.7.2014
Safety datasheet sections which have been updated: 4-16

Relevant H- and EUH-phrases (Number and full text)

H303 May be harmful if swallowed.
H312 Harmful in contact with skin.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

21224-26 PAN Indicator

Print date: 19.07.2015

Product code: 2122426

Page 9 of 9

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H360D	May damage the unborn child.
H360Df	May damage the unborn child. Suspected of damaging fertility.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)