

Date of compilation: 28.02.2020

Version: 0001

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name **anaPAGE Anti-Oxidant Solution
400-fold Concentrate**

Product number anam0038
Item code AO05/01
AO05001

Formulation APAO
Formulation number 01/20

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

Appropriate use:
The product is used for electrophoresis in analytical laboratories.

1.3 Details of the supplier of the safety data sheet

anamed Elektrophorese GmbH
Ringstraße 4
D-64401 Gross-Bieberau
Telephone: +49-6162-809840
e-mail-address of the competent person responsible for this Safety Data Sheet:
urban-finking.gefstoff@t-online.de

Technical contact:

anamed Elektrophorese GmbH
Frau Dr. Vera Kreis
Telephone +49-6162-809840
Fax +49-6162-8098420

1.4 Emergency telephone number

Poison Control Center Mainz (Giftinformationszentrum Mainz) or local poison centers
Telephone +49-6131 19 2 40

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Repr. 1B; H360D
Eye Irrit. 2; H319

Trade name:	anaPAGE Anti-Oxidant Solution 400-fold Concentrate		
Company/Undertaking:	anamed Elektrophorese GmbH		
	Ringstraße 4, D-64401 Gross-Bieberau		
Telephone:	+49-6162-809840		Date of compilation: 28.02.2020
Product number:	anam0038		

2.2 Label elements

Hazard pictogram(s):



Signal word(s):

Danger

Product identifier:

anaPAGE Anti-Oxidant Solution 400-fold Concentrate
contains N,N-dimethylformamide

Hazard statements:

H360D
H319May damage the unborn child.
Causes serious eye irritation.

Precautionary statements:

P201
P280

P305 + P351 + P338

P308 + P313
P405
P501Obtain special instructions before use.
Wear protective gloves/protective clothing/eye protection/
face protection.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do.
Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container at hazardous or special
waste collection point.

Supplemental hazard information:

EUH031

Contact with acids liberates toxic gas.

Demands on packaging:The packaging must be marked visibly, legibly and indelibly as follows:
Restricted to professional users.**Remark:**

According to Annex I section 1.5.2 of Regulation (EC) No 1272/2008, the hazard statements and the precautionary statements linked to the hazard category "Eye irritation of category 2" may be omitted from the label elements required by Article 17 where the contents of the package do not exceed 125 ml.

2.3 Other hazards

The product is classified as obviously hazardous to water.

The mixture does not contain any substances classified as PBT/vPvB in a concentration of 0.1% or more.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

REACH registration number:

- N,N-dimethylformamide:

01-2119475605-32-XXXX

3.2.1 Characterisation

Reagent (concentrate) to maintain reducing conditions during the electrophoresis for anaPAGE applications.

The product consists of an aqueous solution containing special substances.

3.2.2 Substances presenting a health/environmental hazard within the meaning of Regulation (EC) No 1272/2008

CAS No	EC No	Identification	% by weight	Classification
7631-90-5	231-548-0	sodium hydrogensulphite, aqueous solution	20 - < 25	Acute Tox. 4; H302 EUH031
68-12-2	200-679-5	N,N-dimethylformamide	8 - < 12	Flam. Liq. 3; H226 Acute Tox. 4; H312 Acute Tox. 4; H332 Eye Irrit. 2; H319 Repr. 1B; H360D

See subsection 2.2 for further details. Full text of the hazard statements see subsection 16.2.

3.2.3 Substances which are assigned Community workplace exposure limits and which are not already included under points 3.2.2 and 3.2.3 (see also Section 8.)

No substances.

3.2.4 Additional information

None.

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SECTION 4: First aid measures

4.1 *Description of first aid measures*

4.1.1 *General information*

Remove contaminated, soaked clothing immediately and dispose of safely.
In the immediate working surroundings emergency shower and eye wash must be installed.
Label their location conspicuously.

4.1.2 *In case of inhalation*

Remove the casualty into fresh air.
In the event of symptoms take medical treatment.

4.1.3 *In case of contact with skin*

In case of contact with skin rinse thoroughly with plenty of water.
Take medical treatment immediately.

4.1.4 *In case of contact with eyes*

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist immediately.
Remove contact lenses, if present and easy to do.

4.1.5 *In case of ingestion*

If swallowed, rinse mouth with water (only if the person is conscious).
Do not induce vomiting.
Let water be swallowed in little sips (dilution effect).
Take medical treatment immediately.

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

N,N-dimethylformamide may be absorbed through the skin.
Health disorders such as Liver damage and damage to the digestive tract may occur.
Irritant effect on respiratory tract, gastrointestinal tract and skin.
Temporary symptoms such as nausea, vomiting, gastrointestinal complaints may occur.
Causes serious eye irritation.
Potential of reproductive toxicity based on animal evidence.

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

No information available. Treat symptomatically.

SECTION 5: Firefighting measures

5.1 *Extinguishing media*

5.1.1 *Suitable extinguishing media*

Carbon dioxide, dry extinguishing powder, water spray jet, alcohol-resistant foam.

5.1.2 *Unsuitable extinguishing media*

Full water jet.

5.2 *Special hazards arising from the substance or mixture*

In the event of fire the following can be released: sulphur oxides, carbon monoxide, carbon dioxide, nitrogen oxides.

5.3 *Advice for firefighters*

Wear self-contained breathing apparatus.
Wear suitable protective clothing to prevent contact with skin.
Do not inhale explosion and combustion gases.
Suppress gases/vapours/mists with water spray jet.
Cool endangered containers with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 *Personal precautions, protective equipment and emergency procedures*

6.1.1 *For non-emergency personnel*

Evacuate the hazard area. Warn the affected surrounding area. Keep away from unprotected people.
Use personal protective clothing when entering the hazard area.
Ensure adequate ventilation.
Use respiratory protection if exposed to vapours.
Avoid contact with product; absolutely avoid skin contact.

6.1.2 *For emergency responders*

For suitable fabric for personal protective clothing see Section 8.

6.2 *Environmental precautions*

Do not discharge into the drains, the aquatic environment and soil.

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- 6.3 Methods and material for containment and cleaning up**
 Pick up with suitable absorbent material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
 Dispose of absorbed material in accordance with the regulations.
 Send in suitable containers for recovery or disposal.
 Clean contaminated floors and objects thoroughly observing environmental regulations.
- 6.4 Reference to other sections**
 For personal protective equipment see also Section 8.
 For disposal considerations see also Section 13.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling**
- 7.1.1 Advice on safe handling**
 Handle and open container with care. Provide good room ventilation.
 Always close containers tightly after the removal of product. Keep containers upright.
 Avoid contact with product; absolutely avoid skin contact.
 Limitation of the hazardous substances encountered at the workplace with respect to the quantity required to continue with the activities.
 The product should be filled and transferred in tightly fitting systems with an adequate suctioning close to work place if possible.
 Avoid spillage. Only fill in labelled containers.
 Clean contaminated equipment before use in other work areas.
 Delimit hazard areas where workers are exposed or may be exposed to this product, and mount warning and safety signs according to Annex II Number 3.1 of Directive 92/58/EEC.
 Comply with the minimum standards in accordance with TRGS 500¹ and with the protective measures in accordance with TRGS 401¹.
- Inhalation:**
 In designing the work process the model solutions of the Control Guidance Sheets 100¹, La-101¹ and 110¹ must be taken into consideration in case of release of only small amounts of product (range of grams).
 In designing the work process the model solutions of the Control Guidance Sheet 200¹ must be additionally taken into consideration in case of release of medium up to large amounts of product (range of kilograms up to tons).
- Skin contact:**
 In designing the work process the model solutions of the Control Guidance Sheet 300¹ (closed system) must be taken into consideration regardless on the duration and the area of skin contact.
- 7.1.2 Advice on general occupational hygiene**
 Do not inhale vapours. Avoid contact with eyes.
 Absolutely avoid skin contact.
 At work do not eat, drink, smoke or take drugs. Food storage on workplace is forbidden.
 Remove contaminated, soaked clothing immediately and dispose of safely. Store work clothing separately.
 Used working clothes should not be worn outside the work area.
 Remove contaminated clothing before entering areas in which food is consumed.
 After worktime and before breaks the affected skin areas must be thoroughly cleaned.
 Provide washing facilities at the workplace.
 After work protect skin by using skin protective cream.
 Set out skin protection guidelines.
 In the immediate working surroundings emergency shower and eye wash must be installed.
 Label their location conspicuously.
- 7.2 Conditions for safe storage, including any incompatibilities**
- 7.2.1 Advice on protection against fire and explosion**
 None.
- 7.2.2 Requirements for storage rooms and vessels**
 Store locked up or accessible only to specialists or people who are authorised. Keep only in the original container.
 Containers must be labelled clearly and permanently.
 Keep container tightly closed. Keep in a cool place.
 Do not store in plastic containers.
 Do not store in containers made of copper and tin and of their alloys.
- 7.2.3 Advice on storage compatibility**
 Do not store with strong oxidising agents, strong reducing agents and acids.
 The information about joint storage given in Table 2 of TRGS 510¹ must be observed.
- 7.2.4 Further information on storage conditions**
 Protect from sunlight.
- 7.2.5 Storage class (for Germany only)**
 LGK 6.1D (Non-combustible toxic substances or substances with chronic effects) in accordance with TRGS 510¹.
- 7.3 Specific end use(s)**
 The product is only intended for the uses mentioned under subsection 1.2.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

CAS number	Identification	Limit values	Remarks
68-12-2	N,N,-dimethylformamide	5 ml/m ³ - 15 mg/m ³ (8 h) indicative occupational exposure limit value 10 ml/m ³ - 30 mg/m ³ (short term) indicative occupational exposure limit value 10 ml/m ³ - 30 mg/m ³ 10 ml/m ³ - 30 mg/m ³ 10 ml/m ³ - 30 mg/m ³ 20 ml/m ³ - 60 mg/m ³ 15 ml/m ³ - 45 mg/m ³ 20 ml/m ³ - 61 mg/m ³ Biological limit value 35 mg/l Parameter: N-methylformamide plus N-hydroxymethyl-N- methylformamide Test material: urine	EU-limit value according to Directive 2009/161/EC Different national limit values: 8 hours Denmark Estonia United Kingdom Different national limit values: short term Denmark Estonia United Kingdom Germany (TRGS 903)

DNEL values

Additional limit values for N,N-dimethylformamide in accordance with the registration dossier:

worker, long-term exposition: inhalation, systemic effect:	15 mg/m ³
worker, acute: inhalation, systemic effect:	30 mg/m ³
worker, long-term exposition: inhalation, local effect:	15 mg/m ³
worker, acute: inhalation, local effect:	30 mg/m ³
worker, long-term exposition: dermal, systemic effect:	3.31 mg/kg _{bw} /d
worker, acute: dermal, systemic effect:	26.3 mg/kg _{bw} /d
worker, long-term exposition: dermal, local effect:	0.466 mg/cm ²
general population, long-term exposition: inhalation, systemic effect:	15 mg/m ³
general population, acute: inhalation, systemic effect:	30 mg/m ³
general population, long-term exposition: inhalation, local effect:	15 mg/m ³
general population, acute: inhalation, local effect:	30 mg/m ³
general population, long-term exposition: dermal, systemic effect:	1.98 mg/kg _{bw} /d
general population, acute: dermal, systemic effect:	15.8 mg/kg _{bw} /d
general population, long-term exposition: dermal, local effect:	0.267 mg/cm ²
general population, long-term exposition: oral, systemic effect:	1.98 mg/kg _{bw} /d
general population, acute: oral, systemic effect:	5.94 mg/kg _{bw} /d

DNEL values

Additional limit values sodium hydrogensulphite in accordance with the registration dossier:

worker, long-term exposition: inhalation, systemic effect:	246 mg/m ³
general population, long-term exposition: inhalation, systemic effect:	73 mg/m ³
general population, long-term exposition: oral, systemic effect:	9.5 mg/kg _{bw} /d

PNEC values

Additional limit values for N,N-dimethylformamide in accordance with the registration dossier:

aquatic, fresh water:	30 mg/l
aquatic, marine water:	3 mg/l
aquatic, intermittent release:	30 mg/l
aquatic, sewage treatment plant:	123 mg/l
sediment, fresh water:	115.18 mg/ kg _{bw}
Sediment, Meerwasser:	11.52 mg/ kg _{bw}
soil environment:	56.97 mg/ kg _{bw}

Additional limit values sodium hydrogensulphite in accordance with the registration dossier:

aquatic, fresh water:	1.09 mg/l
aquatic, marine water:	0.11 mg/l
aquatic, sewage treatment plant:	10.71 mg/l

The methods for measuring chemical agents in workplace atmosphere must meet the general requirements of EN 482 and EN 689.

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8.2 Exposure controls**8.2.1 Appropriate engineering controls**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See also subsection 7.1. The effectiveness of suitable protective measures must be controlled. Suitable assessment methods are described in the German TRGS 402¹.

Additional information on plant design:

If activities involving hazardous substances that are carcinogenic, mutagenic and toxic to reproduction of category 1 or 2 are performed in a working area, the air extracted there shall not be returned to the working area. This shall not apply if the air has been adequately decontaminated of such substances using processes or devices recognised by the authorities or the statutory accident insurance institutions. The air shall then be conducted or cleaned in such a way that hazardous substances that are carcinogenic, mutagenic and toxic to reproduction do not pass into the breathing air of other workers.

8.2.2 Individual protection measures, such as personal protective equipment

Personal protective equipment needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer/supplier of the personal protective equipment.

8.2.2.1 Eye/face protection

Tightly fitting safety glasses in accordance with EN 166 (i.e. safety glasses with side shields).

8.2.2.2 Skin protection**Hand protection:**

In case of operations where skin contact is possible, wear suitable protective gloves.

Chemical protective gloves needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Information on appropriate protective gloves is currently not available. In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

The protective gloves to be used must comply with the specifications of the standard EN 374.

Body protection:

Closed work clothing.

If handling large amounts of product and in case of increased risk, chemical protective clothing must be worn.

8.2.2.3 Respiratory protection

With correct and proper use, and adequate ventilation of the working place, respiratory protection is not required.

In case of inadequate ventilation, and in case of formation of vapours/aerosols, wear respiratory protection.

Information on appropriate respirator protection is currently not available.

The limitations in wearing time according to the the DGUV Regel 112-190² (rule of the German employers' liability insurance association) for the use of respirators have to be observed.

8.2.2.4 Thermal hazards

Not relevant.

8.2.3 Environmental exposure controls

See Section 6.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	colourless
Odour:	odorless
Odour threshold:	not relevant
pH (as supplied):	not determined
pH (of an aqueous solution):	not determined
Melting point/freezing point (°C):	not determined
Boiling point and boiling range (°C):	not determined
Flash point (°C), closed cup:	not relevant
Evaporation rate:	no data available
Flammability (solid, gas):	not relevant
Upper flammability or explosive limit:	not relevant
Lower flammability or explosive limit:	not relevant
Vapour pressure (20°C) (mbar):	no data available
Vapour density (20°C):	no data available
Density (g/cm ³):	not determined
Relative density:	not determined
Solubility in water:	miscible
Soluble in:	not determined
Partition coefficient: n-octanol/water:	- 0.85(25°C) (N,N-dimethylformamide) (registration dossier)
Auto-ignition temperature (°C):	no data available
Decomposition temperature (°C):	no data available
Viscosity:	no data available
Explosive properties:	not explosive
Oxidising properties:	not relevant

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9.2 Other information

None.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No data available for the mixture.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Contact of sodium hydrogensulphite with acids liberates sulphur dioxide.
Violent reaction with strong oxidising agents and strong reducing agents with heat evolution.
Violent heat evolution in contact with chlorine.

10.4 Conditions to avoid

When used as intended, no hazardous reactions known.

10.5 Incompatible materials

Corrosive to plastics.
Incompatible materials: copper, tin and their alloys.

10.6 Hazardous decomposition products

When used as intended, no hazardous decomposition products known.
Hazardous decomposition products in contact with acids: sulphur dioxide.
For hazardous combustion products see subsection 5.2.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

The mixture has not been tested.

11.1.1 Acute toxicity

LD50 rat, oral	(mg/kg)	3010	(N,N-dimethylformamide)	(registration dossier)
		1540	(sodium hydrogensulphite)	(OECD Test Guideline 401)
LD50 rat, dermal	(mg/kg)	> 3160	(N,N-dimethylformamide)	(OECD Test Guideline 402)
		> 2000	(sodium hydrogensulphite)	(OECD Test Guideline 402)
LC50 rat, inhalation	(mg/l/4h)	> 5.85	(N,N-dimethylformamide)	(OECD Test Guideline 403)
		> 5.5	(sodium hydrogensulphite)	(OECD Test Guideline 403)

11.1.2 Skin corrosion/irritation

Irritant effect on skin (rabbit)	Not irritating	(N,N-dimethylformamide)	(OECD Test Guideline 404)
	Not irritating	(sodium hydrogensulphite)	(OECD Test Guideline 404)

11.1.3 Serious eye damage/irritation

Irritant effect on eyes (rabbit)	Eye irritation	(N,N-dimethylformamide)	(OECD Test Guideline 405)
	Not irritating	(sodium hydrogensulphite)	(OECD Test Guideline 405)

11.1.4 Respiratory or skin sensitisation

Skin sensitisation (mouse)	Not sensitising	(N,N-dimethylformamide)	(OECD Test Guideline 406)
Skin sensitisation (mouse)	Not sensitising	(sodium hydrogensulphite)	(OECD Test Guideline 429)

11.1.5 Germ cell mutagenicity

The mixture does not contain substances classified as germ cell mutagens.

11.1.6 Carcinogenicity

The mixture does not contain substances classified as carcinogenic.

11.1.7 Reproductive toxicity

The mixture is classified as toxic for the reproduction of the category Repr. 1B in accordance with annex VI of Regulation (EC) No 1272/2008 in the current version.

11.1.8 Specific target organ toxicity (STOT)-single exposure

The mixture does not contain substances classified as being a specific target organ toxicant after single exposure.

11.1.9 Specific target organ toxicity (STOT)-repeated exposure

The mixture does not contain substances classified as being a specific target organ toxicant after repeated exposure.
N,N-dimethylformamide may be absorbed through the skin.
Health disorders such as Liver damage and damage to the digestive tract may occur.
Irritant effect on respiratory tract, gastrointestinal tract and skin.
Temporary symptoms such as nausea, vomiting, gastrointestinal complaints may occur.
Causes serious eye irritation.

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11.1.12 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Potential of reproductive toxicity based on animal evidence.
 N,N-dimethylformamide may be absorbed through the skin.
 Health disorders such as Liver damage and damage to the digestive tract may occur.
 Irritant effect on respiratory tract, gastrointestinal tract and skin.
 Temporary symptoms such as nausea, vomiting, gastrointestinal complaints may occur.
 Causes serious eye irritation.

ABSCHNITT 12: Umweltbezogene Angaben**12.1 Toxicity****Aquatic toxicity**

96 h LC50	(fish)	7100 mg/l	(Lepomis macrochirus; bluegill sunfish) (N,N-dimethylformamide) (EPA 660/3-75-009)
		147 – 215 mg/l	(Oncorhynchus mykiss; rainbow trout) (sodium hydrogensulphite) (registration dossier)
NOEC 34 d	(fish)	≥ 316 mg/l	(Danio rerio; zebrafish) (sodium hydrogensulphite) (OECD Test Guideline 210)
48 h EC50	(daphnia)	13100 mg/l	(Daphnia magna) (N,N-dimethylformamide) (OECD Test Guideline 202)
		62.5 mg/l	(Daphnia magna) (sodium hydrogensulphite) (OECD Test Guideline 202)
NOEC 21 d	(daphnia)	1500 mg/l	(Daphnia magna) (N,N-dimethylformamide) (IUCLID)
		> 10 mg/l	(Daphnia magna) (sodium hydrogensulphite) (OECD Test Guideline 211)
72 h EC50	(algae)	> 100 mg/l	(Pseudokirchneriella subcapitata) (sodium hydrogensulphite) (OECD Test Guideline 201)

Behaviour in sewage works:

Treat by state-of-the-art technology before discharging into drains.

12.2 Persistence and degradability

The product has not been tested.

N,N-dimethylformamide:

biodegradation 100%/21 d (EU method C.4-8); readily biodegradable.

Chemical oxygen demand (COD) No data available.

Biochemical oxygen demand (BOD₅) No data available.

TOD No data available.

AOX-hint Not to apply.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water: - 0.835 (25°C) (N,N-dimethylformamide (registration dossier))

Bioaccumulation is not to be expected.

12.4 Mobility in soil

The product has not been tested.

12.5 Results of PBT and vPvB assessment

The mixture does not contain any substances classified as PBT/vPvB in a concentration of 0.1% or more.

12.6 Other adverse effects

Ozone depletion potential No data available.

Photochemical ozone creation potential No data available.

Global warming potential No data available.

The product is classified as obviously hazardous to water.

Contains according to the formulation following heavy metals and compounds of EC-Directives 2006/11/EC and 80/68/EEC:

None.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Waste disposal according to official state regulations.

Consult the local waste disposal expert about waste disposal.

Sewage disposal must be avoided.

Disposal operations/recovery operations according to Directive 2008/98/EC

Disposal operations: D 9 Physico-chemical treatment

Recovery operations: R 3 Recycling/reclamation of organic substances which are not used as solvents

Properties of waste which render it hazardous in accordance with Annex III of Directive 2008/98/EC

HP 7: Carcinogenic

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13.1.1 Product / unused product

Waste disposal corresponding to European Waste Catalogue. Wastes must be classified with respect to their origin and depending on different processing steps. The waste codes mentioned as follows are only constituted as our recommendations. Referring to the particular case they should be completed or revised.

EC waste code: 16 05 08
Waste notation: Discarded organic chemicals consisting or containing hazardous substances

13.1.2 Contaminated packaging

Recommendation: Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Recommended cleansing agent: Water

Packaging that cannot be cleaned:

EC waste code: 15 01 10
Waste notation: Packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information**14.1 UN number**

No dangerous good in accordance with the UN Model Regulations (ADR/RID/ADN/IMDG/ICAO/IATA).

14.2 UN proper shipping name

Not relevant.

14.3 Transport hazard class(es)

Not relevant.

14.4 Packing group

Not relevant.

14.5 Environmental hazards

Not relevant.

14.6 Special precautions for user

Not relevant.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not relevant.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1 Information regarding relevant Union safety, health and environmental provisions**

- Regulation (EC) No 1907/2006: N,N-dimethylformamide is included in the candidate list of the European Chemical Agency⁴ in accordance with Article 59 paragraph 10.

- Conditions of restriction in accordance with Regulation (EC) No 1907/2006: Annex XVII: No 3, No 30 and No 72
- Observe employment restrictions under the law for the protection of young people at work (94/33/EC).
- Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
- Observe Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

15.1.2 Information regarding national laws/national measures that may be relevant (for Germany only)

Restriction of occupation: Law for the protection of expectant and nursing mothers and Youth Employment Protection Act must be observed

Major-accident Ordinance: Not relevant

Fire and explosion hazards: Not relevant

Regulation on clean air (TA Luft): Number 5.2.7.1.3 substances toxic for the reproduction

Water hazard class: WGK 2– obviously hazardous to water (deduction of the WGK according to Annex 1 No 5.2 AwSV)³

The German Ordinance on facilities for handling substances that are hazardous to water (AwSV) has to be observed

German Ordinance on Hazardous Substances

(in accordance with EC-Directive 98/24/EC):

Banned Chemicals Ordinance:

Articles 6, 7, 8, 9, 10, 14, 16, 18 must be observed
The mixture is subject to this Ordinance.

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(continued from 15.1.2 Information regarding national laws/national measures that may be relevant (for Germany only))

Regulation on Occupational Medical Prevention (ArbMedVV):	Annex, Part 1 (1): Obligatory prophylaxis: The employer shall arrange occupational medical prophylaxis for workers conducting activities with exposure to dimethylformamide, if the occupational exposure limit value is exceeded.
Technical Rules for Hazardous Substances ¹ :	TRGS 400, 401, 500, 510, 555, 600, 900, 903
Rules of the employers' liability insurance association ² :	DGUV Regel 112-189, 112-190, 112-192, 112-195
Classification in accordance with the easy-to-use workplace control scheme for hazardous substances of the Federal Institute for Occupational Safety and Health, version 2.2, 2014 ⁵ :	inhalation: hazard group C skin contact: hazard group HE
In accordance with Article 16e of the German Chemicals Act there is an obligation to notify the product at the Federal Institute of Risk Assessment (BfR).	

15.2 **Chemical safety assessment**

No chemical safety assessment has been carried out for a substance in the product.

SECTION 16: Other information

16.1 Keeping (restrictions)	Article 8 (5), (6) and (7) German Ordinance on Hazardous Substances (for Germany only)
Supply	University (college, academy), industry consumer
16.2 Full text of the hazard statements referred to under subsection 2.1 and point 3.2.2 of the Safety Data Sheet	
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H360D	May damage the unborn child.
EUH031	Contact with acids liberates toxic gas.
16.3 Key to abbreviations and acronyms used in the safety data sheet	
ADN:	Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ADR:	Accord européen relatif au transport international des marchandises dangereuses par route
AOX:	adsorbable organically bound halogens
AwSV:	Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances that are hazardous to water)
DNEL:	Derived No-Effect Level
EPA:	Environmental Protection Agency
ICAO/IATA:	International Civil Aviation Organisation/International Air Transport Association-Dangerous Goods Regulations
IMDG-Code:	International Maritime Dangerous Goods-Code
IUCLID:	International Uniform Chemical Information Database
KBwS:	Commission for the Evaluation of substances hazardous to waters (Kommission Bewertung wassergefährdende Stoffe)
LGK:	Lagerklasse (storage class)
PBT:	persistent, bioaccumulative and toxic
PNEC:	Predicted No-Effect Concentration
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer
RTECS:	Registry of Toxic Effects of Chemical Substances
TRGS:	Technische Regeln für Gefahrstoffe (Technical Rules for Hazardous Substances)
vPvB:	very persistent and very bioaccumulative
16.4 Literature references and sources for data	
¹	http://www.baua.de
²	http://www.arbeitssicherheit.de
³	http://www.umweltbundesamt.de
⁴	http://echa.europa.eu/chem_data/candidate_list_table_en.asp
⁵	http://www.baua.de/emkg

Trade name:	anaPAGE Anti-Oxidant Solution 400-fold Concentrate	
Company/Undertaking:	anamed Elektrophorese GmbH Ringstraße 4, D-64401 Gross-Bieberau	
Telephone:	+49-6162-809840	Date of compilation: 28.02.2020
Product number:	anam0038	

16.5 Method used for the classification of the mixture

The classification was undertaken in accordance with the classification criteria of Annex I of Regulation (EC) No 1272/2008.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.