1 Identification

- Product identifier
- Trade name: AP 85xx.2 NP/WNP; xx = 05 WNP blue, 10 NP black, 25 NP red, 30 NP green, 35 WNP green, 36 WNP light green, 90 NP gold, 91 NP copper, 92 NP red gold, 95 WNP gold
- · Article number: 100000004531
- · Relevant identified uses of the substance or mixture and uses advised against
- Currently no such applications are identified.

 Application of the substance / the mixture water based pigmented marking ink
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

DOKUMENTAL GmbH & Co KG Woellnerstraße 26 D-67065 Ludwigshafen Phone + 49 (0)621/37702 321 Fax + 49 (0)621/37702 391 www.dokumental.de

Information department:

Technical Service & Product Safety Tel.: +49-621-37702 390

E-Mail: msds@dokumental.de

Emergency telephone number:

24-hour-Emergency- Telephone-Number (GBK Contract ID: 94050): (001) 352 323 3500

2 Hazard(s) identification

Classification of the substance or mixture

Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- Label elements
- GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** none
- Signal word none
- · Hazard statements

H401 Toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

 $P501\ Dispose\ of\ contents/container\ in\ accordance\ with\ local/regional/national/international\ regulations.$

- Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 0Fire = Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 0Fire = 0Reactivity = 0

- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable
- vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- Mixture of the following substances, containing non-hazardous substances and colouring agents. **Description**: Mixture of the substances listed below with nonhazardous additions.

· Dangerous	components:	
7429-90-5	aluminium powder (stabilised)	5-<10%
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	0.1-<1%
3811-73-2	pyridine-2-thiol 1-oxide, sodium salt	<0.1%
· Additional	information: For the wording of the listed hazard phrases refer to section 16.	

(Contd. on page 2)

Trade name: AP 85xx.2 NP/WNP ; xx = 05 WNP blue, 10 NP black, 25 NP red, 30 NP green, 35 WNP green, 36 WNP light green, 90 NP gold, 91 NP copper, 92 NP red gold, 95 WNP gold

(Contd. of page 1)

4 First-aid measures

- Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed
- further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

· Protective	Action Criteria for Chemicals	
· PAC-1:		
25322-68-3	polyethylene glycol	30 mg/m³
· PAC-2:		
25322-68-3	polyethylene glycol	1,300 mg/m³
· PAC-3:		
25322-68-3	polyethylene glycol	7,700 mg/m³

7 Handling and storage

- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.

 Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Storage class: 12
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- Control parameters
- Components with limit values that require monitoring at the workplace:
 The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.
- Breathing equipment: Not required.

(Contd. on page 3)

Page 2 of 30

power your pen to OSHA HCS

Trade name: AP 85xx.2 NP/WNP ; xx = 05 WNP blue, 10 NP black, 25 NP red, 30 NP green, 35 WNP green, 36 WNP light green, 90 NP gold, 91 NP copper, 92 NP red gold, 95 WNP gold

(Contd. of page 2)

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

If only a short-term loading of the glove material by splashes is expected, tricoted gloves with

higher wearability for the better acceptance of the users are recommended.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Nitrile rubber, NBR

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

Information on basic physical and chemical prop	perties
General Information	
Appearance: Form:	Fluid
Color:	According to product specification
Odor:	Product specific
Odor threshold:	Not determined.
Important information on protection of health a	and
environment, and on safety.	-
pH-value at 20 °C (68 °F):	7.4-9.6
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 20 °C (68 °F):	23 hPa (17.251 mm Hg)
Density at 20 °C (68 °F):	1.2 g/cm³ (10 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic at 20 °C (68 °F):	8-10 mPas
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	5.3 %
Water:	63.7 %

(Contd. on page 4)

48/18/10/18 4/19/18/18/18/18 - \$1/18/48/18 RUSH META. to OSHA HCS

Trade name: AP 85xx.2 NP/WNP ; xx = 05 WNP blue, 10 NP black, 25 NP red, 30 NP green, 35 WNP green, 36 WNP light green, 90 NP gold, 91 NP copper, 92 NP red gold, 95 WNP gold

(Contd. of page 3)

Other information

The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications.

10 Stability and reactivity

- Reactivity No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect. Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

- NTP (National Toxicology Program)
 - None of the ingredients is listed.
- OSHA-Ca (Occupational Safety & Health Administration)
 - None of the ingredients is listed.

12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- Ecotoxical effects:
- Remark: Harmful to fish
- Additional ecological information:
- General notes:

Water hazard class 2 (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Harmful to aquatic organisms

Results of PBT and vPvB assessment

- PBT: Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

(Contd. on page 5)

48/18/10/18 4/19/10/19/18 -48/16/48 BRUSH META OSHA HCS

Trade name: AP 85xx.2 NP/WNP ; xx = 05 WNP blue, 10 NP black, 25 NP red, 30 NP green, 35 WNP green, 36 WNP light green, 90 NP gold, 91 NP copper, 92 NP red gold, 95 WNP gold

· Recommended cleansing agent: Water, if necessary with cleansing agents.

(Contd. of page 4)

14 Transport information	
· UN-Number · DOT, ADR, ADN, IMDG, IATA	not applicable
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	not applicable
· Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class	not applicable
· Packing group · DOT, ADR, IMDG, IATA	not applicable
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	II of Not applicable.
· UN "Model Regulation":	not applicable

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
- Section 355 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All components have the value ACTIVE

- · Hazardous Air Pollutants
- None of the ingredients is listed.
- Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- DSL/NDSL (Canada) All ingredients are listed
- Cancerogenity categories
- EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

None of the ingredients is listed.

MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

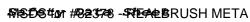
None of the ingredients is listed.

- GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms none
 Signal word none
- · Hazard statements

- H401 Toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects.
- · Precautionary statements

P273 Avoid release to the environment. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 6)



Trade name: AP 85xx.2 NP/WNP ; xx = 05 WNP blue, 10 NP black, 25 NP red, 30 NP green, 35 WNP green, 36 WNP light green, 90 NP gold, 91 NP copper, 92 NP red gold, 95 WNP gold

(Contd. of page 5)

- · National regulations:
- Technical instructions (air):

Class	Share in %
NK	5-<10

- Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Contact:
- Date of preparation / last revision 03/09/2023

Date of preparation / last revision 03/09/2023

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DDT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

VPVB: very Persistent and very Bioaccumulative

NTOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

FEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2

Aquatic Acute 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

* Data compared to the previous version altered.

· * Data compared to the previous version altered.



1 Identification

- Product identifier
- Trade name: AP 8547.2 WNP pink
- **Article number:** 100000004665
- \cdot Relevant identified uses of the substance or mixture and uses advised against
- Currently no such applications are identified.

 Application of the substance / the mixture water based pigmented marking ink
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

DOKUMENTAL GmbH & Co KG Woellnerstraße 26

www.dokumental.de

· Information department:

Technical Service & Product Safety Tel.: +49-621-37702 390

E-Mail: msds@dokumental.de Emergency telephone number:

24-hour-Emergency- Telephone-Number (GBK Contract ID: 94050): (001) 352 323 3500

2 Hazard(s) identification

Classification of the substance or mixture



GHS05 Corrosion

H318 Causes serious eye damage. Eye Damage 1



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

H401 Toxic to aquatic life. Aquatic Acute 2

- Label elements
 - GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





- · Signal word Danger
- Hazard-determining components of labeling:
- C.I. Pigment Red 169
- Hazard statements

H318 Causes serious eye damage.

H401 Toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P280 Wear 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. Immediately call a poison center/doctor. P310

P391 Collect spillage

P501 ${\it Dispose of contents/container in accordance with local/regional/national/international}$

regulations. · Classification system:

· NFPA ratings (scale 0 - 4)



Health = 3Fire = 0Reactivity = 0

(Contd. on page 2)



Trade name: AP 8547.2 WNP pink

HMIS-ratings (scale 0 - 4)

(Contd. of page 1)



Health = *3Fire = 0Reactivity = 0

- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable
- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Mixture of the following substances, containing non-hazardous substances and colouring agents. Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous c	omponents:	
7429-90-5	aluminium powder (stabilised)	5-<10%
	C.I. Pigment Red 169	5-<10%
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	0.1-<1%
3811-73-2	pyridine-2-thiol 1-oxide, sodium salt	<0.1%
2 4 4 4 4 4 4 4 4 7	1-6	

· Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system. Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Protective Action Criteria for Chemicals

· PAC-1:

None of the ingredients is listed.

PAC-2:

None of the ingredients is listed.

PAC-3:

None of the ingredients is listed.

(Contd. on page 3)



Trade name: AP 8547.2 WNP pink

7 Handling and storage

- Handling:
- Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

- formation of aerosols.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles. Storage class: 12
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.

Avoid contact with the eyes. Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the

preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

only a short term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Nitrile rubber, NBR

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

(Contd. on page 4)

Trade name: AP 8547.2 WNP pink

(Contd. of page 3)

Information on basic physical and chemica	al properties
General Information	ar properties
Appearance:	
Form:	Fluid
Color:	According to product specification
Odor:	Product specific
Odor threshold:	Not determined.
pH-value at 20 °C (68 °F):	8
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 20 °C (68 °F):	23 hPa (17.251 mm Hg)
Density at 20 °C (68 °F):	1.1 g/cm³ (9.2 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic at 20 °C (68 °F):	9 mPas
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	5.2 %
Water:	63.1 %
Solids content:	8.2 %
Other information	The physical and chemical properties given in
	Section 9.1 are rough data only, which are
	partially derived from the component's data of the
	mixture. These data are no binding product specifications.

10 Stability and reactivity

- Reactivity No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.

 Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.

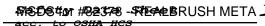
 Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.

Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

(Contd. on page 5)



power vour pen

Trade name: AP 8547.2 WNP pink

(Contd. of page 4)

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

- NTP (National Toxicology Program)
 - None of the ingredients is listed.
- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available.
- Ecotoxical effects:
- Remark: Toxic for fish
- Additional ecological information:
- General notes:

Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.

- Toxic for aquatic organisms
- Results of PBT and vPvB assessment PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation:
- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information			
· UN-Number			
· DOT, ADR, IMDG, IATA	UN3082		
· UN proper shipping name			
· DOT	Environmentally hazardous substance, liquid, n.o.s. (xanthene dye, red, 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol)		
· ADR	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (xanthene dye, red, 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol)		
· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (xanthene dye, red, 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol), MARINE POLLUTANT		
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (xanthene dye, red, 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol)		

- · Transport hazard class(es)
- DOT. IMDG. IATA





9 Miscellaneous dangerous substances and articles Class

(Contd. on page 6)



Trade name: AP 8547.2 WNP pink

Label	(Contd. of pag
	<i>y</i>
ADR	
Class Label	9 (M6) Miscellaneous dangerous substances and articles 9
Packing group	
DOT, ADR, IMDG, IATA	III
Environmental hazards:	Product contains environmentally hazardous substances: xanthene dye, red
Marine pollutant:	Yes (DOT) Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
Special precautions for user	Warning: Miscellaneous dangerous substances and articl
Hazard identification number (Kemler code):	
EMS Number:	F-A, $S-F$
Stowage Category	A
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 450 L
Para alba	On cargo aircraft only: 450 L
Remarks:	Special marking with the symbol (fish and tree).
ADR	
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
IMDG	211 1 12 P1 1111 P11 19 91 -111 III
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (XANTHENE DYE, RED, 2-(2-HEPTADEC-8-ENYL-2-IMIDAZOLIN-1-YL)ETHANOL), 9, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Section 355 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

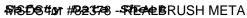
None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

DSL/NDSL (Canada) All ingredients are listed

(Contd. on page 7)



Trade name: AP 8547.2 WNP pink

(Contd. of page 6)

- Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value)

None of the ingredients is listed.

MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).

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· Hazard pictograms





GHS05

GHS09

- · Signal word Danger
- · Hazard-determining components of labeling:
- C.I. Pigment Red 169
- Hazard statements

H318 Causes serious eye damage. H401 Toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Avoid release to the environment.

P280 Wear 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.
Immediately call a poison center/doctor. P310

Collect spillage.
Dispose of contents/container in accordance with local/regional/national/international P501

regulations.

- · National regulations:
- · Technical instructions (air):

Class	Share in %
NK	5-<10

- · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Contact:
- Date of preparation / last revision 06/01/2023
- Abbreviations and acronyms:

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ELINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
PBT: Persistent, Bioaccumulative and Toxic
VPVB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
REL: Recommended Exposure Limit
Eye Damage 1: Serious eye damage/eye irritation - Category 1
Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2
** Nata commarted to the previous version altered.

* Data compared to the previous version altered.



1 Identification

- Product identifier
- Trade name: AP 8548.2 WNP violet
- **Article number:** 100000004720
- \cdot Relevant identified uses of the substance or mixture and uses advised against
- Currently no such applications are identified.

 Application of the substance / the mixture water based pigmented marking ink
- Details of the supplier of the safety data sheet

Manufacturer/Supplier:

DOKUMENTAL GmbH & Co KG Woellnerstraße 26

www.dokumental.de

· Information department:

Technical Service & Product Safety Tel.: +49-621-37702 390

E-Mail: msds@dokumental.de

Emergency telephone number: 24-hour-Emergency- Telephone-Number (GBK Contract ID: 94050): (001) 352 323 3500

2 Hazard(s) identification

Classification of the substance or mixture

Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 3 $\,$ H412 Harmful to aquatic life with long lasting effects.

- Label elements
- GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms none
- · Signal word none · Hazard statements
- - H401 Toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

- Precautionary statements
 P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- NFPA ratings (scale 0 4)



Health = 0FireReactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 0Reactivity = 0

- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

- Mixture of the following substances, containing non-hazardous substances and colouring agents.
- Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous	components:	
7429-90-5	aluminium powder (stabilised)	5-<10%
95-38-5	2-(2-heptadec-8-eny1-2-imidazolin-1-yl)ethanol	0.1-<1%
3811-73-2	pyridine-2-thiol 1-oxide, sodium salt	<0.1%
52-51-7	bronopol (INN)	<0.1%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

(Contd. on page 2)



4 First-aid measures

- Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed ${\it No}$ further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective clothing.

• Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system. Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation. Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:

None of the ingredients is listed.

PAC-2:

None of the ingredients is listed.

PAC-3:

None of the ingredients is listed.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

formation of aerosols

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles. Storage class: 10

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information: The lists that were valid during the creation were used as basis.

(Contd. on page 3)



(Contd. of page 2)

- · Exposure controls
- Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the

preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Nitrile rubber, NBR

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

Physical and chemical properties		
· Information on basic physical and chemical properties		
General Information	•	
Appearance:		
Form:	Fluid	
Color:	According to product specification	
Odor:	Product specific	
Odor threshold:	Not determined.	
Important information on protection of health	and	
environment, and on safety.	=	
pH-value at 20 °C (68 °F):	8.6	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	>100 °C (>212 °F)	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.251 mm Hg)	
Density at 20 °C (68 °F):	1.1 g/cm³ (9.2 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/water):	Not determined.	
Viscosity:		
Dynamic at 20 °C (68 °F):	10.4 mPas	
Kinematic:	Not determined.	

(Contd. on page 4)



	(Contd. of page 3
· Solvent content: Organic solvents: Water:	5.3 % 71.2 %
Solids content:	10.3 %
· Other information	The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications.

10 Stability and reactivity

- Reactivity No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.

 Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect. on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
- The product shows the following dangers according to internally approved calculation methods for preparations:
- Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

- NTP (National Toxicology Program)
- None of the ingredients is listed.
- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems: Bioaccumulative potential ${\it No}$ further relevant information available.
- Mobility in soil No further relevant information available.
- Ecotoxical effects:
- Remark: Harmful to fish
- Additional ecological information:
- General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Harmful to aquatic organisms

- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods

Recommendation:
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 5)



(Contd. of page 4)

- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

Transport information		
UN-Number DOT, ADR, ADN, IMDG, IATA	not applicable	
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	not applicable	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA Class	not applicable	
Packing group DOT, ADR, IMDG, IATA	not applicable	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Anne MARPOL73/78 and the IBC Code	ex II of Not applicable.	
UN "Model Regulation":	not applicable	

	-		
15 Rec	<i>rulatory</i>	ınforn	nation

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
- Section 355 (extremely hazardous substances):
- None of the ingredient is listed.
- Section 313 (Specific toxic chemical listings):
 - None of the ingredients is listed.
- TSCA (Toxic Substances Control Act):
- All components have the value ACTIVE
- Hazardous Air Pollutants
- None of the ingredients is listed.
- Proposition 65
- Chemicals known to cause cancer:
 - None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for females:
 - None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for males:
 - None of the ingredients is listed.
- Chemicals known to cause developmental toxicity:
 - None of the ingredients is listed.
 - DSL/NDSL (Canada) All ingredients are listed
- Cancerogenity categories
- EPA (Environmental Protection Agency)
- None of the ingredients is listed.
- · TLV (Threshold Limit Value)
 - None of the ingredients is listed.
- MAK (German Maximum Workplace Concentration)
 - None of the ingredients is listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health)
 - None of the ingredients is listed.
- GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms none
- Signal word none
- · Hazard statements
- H401 Toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects.
- Precautionary statements
- P273 Avoid release to the environment.

(Contd. on page 6) US



Trade name: AP 8548.2 WNP violet

(Contd. of page 5)

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · National regulations:
- · Technical instructions (air):

Class	Share in %
NK	5-<10

- Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Date of preparation / last revision 03/17/2023

Date of preparation / last revision 03/17/2023
Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DDT: US Department of Transportation
IATA: International Air Transport Association
IEINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
REL: Recommended Exposure Limit
Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3
* Data compared to the previous version altered.

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

- · 1.1 Product identifier
- Trade name: AP 85xx.2 NP/WNP; xx = 21 NP red, 26 WNP red, 80 NP silver
- · Article number: 100000004532
- · Registration number
- The ingredients of this product meet the criteria of the Regulation 1907/2006/EC (REACH).
- 1.2 Relevant identified uses of the substance or mixture and uses advised against Currently no such applications are identified.
 Application of the substance / the mixture water based pigmented marking ink
- 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

DOKUMENTAL GmbH & Co KG Woellnerstraße 26

D-67065 Ludwigshafen Phone + 49(0)621/37702 321 Fax + 49(0)621/37702 391 www.dokumental.de

· Further information obtainable from:

Technical Service & Product Safety
Tel.: +49-621-37702 390

E-Mail: msds@dokumental.de

1.4 Emergency telephone number: GBK Gefahrgut Büro GmbH +49 (0) 6132 / 84463 Ingelheim, Deutschland

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

Aquatic Chronic 3 $\,$ H412 $\,$ Harmful to aquatic life with long lasting effects.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
- The product is classified and labelled according to the CLP regulation.
- Hazard pictograms none Signal word none
- · Hazard statements
- H412 Harmful to aquatic life with long lasting effects.
- Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

CAS: 7429-90-5 EINECS: 231-072-3 Reg.nr.: 01-2119529243-45	aluminium powder (stabilised) Flam. Sol. 2, H228	2.5-10%
CAS: 95-38-5 EINECS: 204-414-9 Reg.nr.: 01-2119777867-13	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol STOT RE 2, H373; Skin Corr. 1C, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302	≤ 1 %
CAS: 3811-73-2 EINECS: 223-296-5 Reg.nr.: 01-2119493385-28	pyridine-2-thiol 1-oxide, sodium salt Aquatic Acute 1, H400; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H332	≤ 1 %
CAS: 52-51-7 EINECS: 200-143-0 Reg.nr.: 01-2119980938-15	bronopol (INN)	≤ 1 %

(Contd. on page 2)

(Contd. of page 1)

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor
- $4.2~{\it Most important symptoms}$ and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
 - 5.3 Advice for firefighters
 - Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.

6.2 Environmental precautions:Inform respective authorities in case of seepage into water course or sewage system.

- Dilute with plenty of water.

 Do not allow to enter sewers/ surface or ground water.

 6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters
- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.
- Respiratory protection: Not required.
- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the

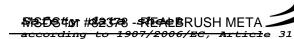
preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has (Contd. on page 3)



(Contd. of page 2)

to be checked prior to the application. Nitrile rubber, $\ensuremath{\textit{NBR}}$

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection: Goggles recommended during refilling

9.1 Information on basic physical and chemical General Information	properties
Appearance:	
Form:	Fluid
Colour:	According to product specification
Odour:	Product specific
Odour threshold:	Not determined.
Important information on protection of health	and
environment, and on safety.	_
pH-value at 20 °C:	8.5
Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100 °C
Flash point:	Not applicable.
-	
Flammability (solid, gas):	Not applicable.
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density at 20 °C:	1.07 g/cm³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
water:	Fully miscible.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic at 20 °C:	7.5-9.1 mPas
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	5.3 %
Water:	77.4 %
Solids content:	11.9 %
9.2 Other information	The physical and chemical properties given in
	Section 9.1 are rough data only, which are
	partially derived from the component's data of t
	mixture. These data are no binding product
	specifications.

SECTION 10: Stability and reactivity

- \cdot 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
 Thermal decomposition / conditions to be avoided:

- No decomposition if used according to specifications.

 10.3 Possibility of hazardous reactions No dangerous reactions known.

 10.4 Conditions to avoid No further relevant information available.

 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

(Contd. on page 4)

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Trade name: AP 85xx.2 NP/WNP; xx = 21 NP red, 26 WNP red, 80 NP silver

(Contd. of page 3)

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Additional toxicological information:
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.

 Reproductive toxicity Based on available data, the classification criteria are not met.

 STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Ecotoxical effects:
- Remark: Harmful to fish
- Additional ecological information:
- General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Harmful to aquatic organisms

- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- **vPvB:** Not applicable
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation
- Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
 Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information	
· 14.1 UN-Number · ADR, ADN, IMDG, IATA	not applicable
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	not applicable
· 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	not applicable
· 14.4 Packing group · ADR, IMDG, IATA	not applicable
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II Marpol and the IBC Code	of Not applicable.
· UN "Model Regulation":	not applicable

(Contd. on page 5)

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Trade name: AP 85xx.2 NP/WNP; xx = 21 NP red, 26 WNP red, 80 NP silver

(Contd. of page 4)

SECTION 15: Regulatory information

- \cdot 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Annex II

None of the ingredients is listed.

- · National regulations:
- · Technical instructions (air):

Class	Share in %
NK	2.5-10

- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

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H228 Flammable solid.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eve damage.
H332 Harmful if inhaled.
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H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life with long lasting effects.
H410 I Toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International carriage of Dangerous Goods by Road or Dangerous Goods
INTA: International Air Transport Association
GMS: Globally Hamonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
BBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Sol. 2: Flamable soilds - Category 2
Acute Tox. 4: Acute toxicity - Category 4
Skin Corr. 1C: Skin corrosion/irritation - Category 1
SKin Irrit. 2: Skin corrosion/irritation - Category 1
SKOT RE 2: Specific target organ toxicity (single exposure) - Category 3
STOT RE 2: Specific target organ toxicity (single exposure) - Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3
* Data compared to the previous version altered.

* Data compared to the previous version altered.



1 Identification

- · Product identifier
- · Trade name: AP 85xx.2 NP/WNP ; xx = 21 NP red, 26 WNP red, 80 NP silver
- · Article number: 100000004532
- Relevant identified uses of the substance or mixture and uses advised against
- Currently no such applications are identified.

 Application of the substance / the mixture water based pigmented marking ink
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

DOKUMENTAL GmbH & Co KG Woellnerstraße 26 D-67065 Ludwigshafen

Phone + 49 (0) 621/37702 321 Fax + 49 (0) 621/37702 391

www.dokumental.de

Information department:

Technical Service & Product Safety Tel.: +49-621-37702 390

E-Mail: msds@dokumental.de Emergency telephone number:

24-hour-Emergency- Telephone-Number (GBK Contract ID: 94050): (001) 352 323 3500

2 Hazard(s) identification

· Classification of the substance or mixture

Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms none
- · Signal word none
- Hazard statements

H401 Toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 0 Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 0 Fire = 0Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB:** Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- Mixture of the following substances, containing non-hazardous substances and colouring agents.
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
7429-90-5	aluminium powder (stabilised)	5-<10%
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	0.1-<1%
3811-73-2	pyridine-2-thiol 1-oxide, sodium salt	<0.1%
52-51-7	bronopol (INN)	<0.1%
	(Cont	d. on page 2)

US

· Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed
- No further relevant information available
- Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system. Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

- · Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Reference to other sections
 See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

- See Section 13 for disposal information.
- Protective Action Criteria for Chemicals
- · PAC-1:

None of the ingredients is listed.

- · PAC-2:
 - None of the ingredients is listed.
- PAC-3:
 - None of the ingredients is listed.

7 Handling and storage

- · Handling:
- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Storage class: 12
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- · Additional information: The lists that were valid during the creation were used as basis.

(Contd. on page 3)

(Contd. of page 2)

- · Exposure controls
- Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.
- Breathing equipment: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Nitrile rubber, NBR
Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

Information on basic physical and chemical pr	roperties
General Information	
Appearance:	
Form:	Fluid
Color: Odor:	According to product specification
odor: Odor threshold:	Product specific Not determined.
Important information on protection of health environment, and on safety.	and _
рH-value at 20 °C (68 °F):	8.5
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 20 °C (68 °F):	23 hPa (17.251 mm Hg)
Density at 20 °C (68 °F):	1.1 g/cm³ (9.2 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic at 20 °C (68 °F):	7.5-9.1 mPas
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	5.3 %
Water:	77.4 %



	(Contd. or page 3)
Solids content:	11.9 %
· Other information	The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications.

10 Stability and reactivity

- Reactivity No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.

 Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

- · Carcinogenic categories
- IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

- NTP (National Toxicology Program)
 - None of the ingredients is listed.
- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available.
- Ecotoxical effects:
- Remark: Harmful to fish
- Additional ecological information:
- General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- Harmful to aquatic organisms Results of PBT and vPvB assessment
- PBT: Not applicable. vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation:
- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

(Contd. on page 5)

· Recommended cleansing agent: Water, if necessary with cleansing agents.

(Contd. of page 4)

· UN-Number		
· DOT, ADR, ADN, IMDG, IATA	not applicable	
UN proper shipping name		
DOT, ADR, ADN, IMDG, IATA	not applicable	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA		
· Class	not applicable	
Packing group		
DOT, ADR, IMDG, IATA	not applicable	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex	x II of	
MARPOL73/78 and the IBC Code	Not applicable.	

15 Regulatory information

- \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- · TSCA (Toxic Substances Control Act):
- All components have the value ACTIVE.
- · Hazardous Air Pollutants
- None of the ingredients is listed.
- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · DSL/NDSL (Canada) All ingredients are listed
- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms none
- · Signal word none
- Hazard statements

H401 Toxic to aquatic life.

- H412 Harmful to aquatic life with long lasting effects.
- · Precautionary statements

P273 Avoid release to the environment.

(Contd. on page 6)



P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · National regulations:
- Technical instructions (air):

Class	Share in %
NK	5-<10

- · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Date of preparation / last revision 03/10/2023

Date of preparation / last revision 03/10/2023
Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Cartage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

LATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

RMIS: Hazardous Materials Identification System (USA)

FBT: Persistent, Bioaccumulative and Toxic

VPVB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

FBL: Permissible Exposure Limit

REL: Recommended Exposure Limit

REL: Recommended Exposure Limit

REL: Recommended Exposure Limit

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

* Data compared to the previous version altered.