According to Regulation (EG) 1907/2006 (REACH) Product name: HP 973X Cyan version: 1 - 11.5.2023



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

- 1.1. Product identifier
 - Mixture identification: Product name: Product code:

HP 973X Cyan K20710W4

- 1.2. Relevant identified uses of the substance or mixture and uses advised against
- 1.3. Details of the supplier of the safety data sheet
- Supplier:

Armor Print Solutions S.A.S. 17 Boulevard de Chantenay CS 90508 44105 Nantes Cedex 4 France

Phone : +33(0)240384000 Fax : +33(0)240384001

infoaopsds@armor-group.com http://www.armor-group.com

1.4. Emergency telephone number +49(0)231656000

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture EC regulation criteria 1272/2008 (CLP)

Warning, Skin Sens. 1A, May cause an allergic skin reaction.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning Hazard statements: H317 May cause an allergic skin reaction. Precautionary statements: P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P302+P352 IF ON SKIN: Wash with plenty of water/... P321 Specific treatment (see ... On this label). P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.



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P501 Dispose of contents/container in accordance with applicable regulations. Special Provisions:

None

Contains

2-methylisothiazol-3(2H)-one

1,2-benzisothiazol-3(2H)-one;1,2-benzisothiazolin-3-one: May produce an allergic reaction. reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7]and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1); reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7]and 2-methyl-4-isothiazolin-3- one [EC no. 220-239-6] (3:1): May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Num	ber	Classification
>= 7% - < 10%	2,2' -oxybisethanol; diethylene glycol	Index number: CAS:	603-140-00-6 111-46-6	3.1/4/Oral Acute Tox. 4 H302
>= 5% - < 7%	epsilon-caprolactam	EC: Index number: CAS: EC:	203-872-2 613-069-00-2 105-60-2 203-313-2	 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H335 3.2/2 Skin Irrit. 2 H315 3.1/4/Oral Acute Tox. 4 H302 3.1/4/Inhal Acute Tox. 4 H332
160 ppm	1,2-benzisothiazol-3(2 H)-one;1,2-benzisothia zolin-3-one	Index number: CAS: EC:	613-088-00-6 2634-33-5 220-120-9	
153 ppm	2-methylisothiazol-3(2 H)-one	CAS: EC:	2682-20-4 220-239-6	 4.1//11 Aquatic Acute Tox. 2 H330 3.1/2/Inhal Acute Tox. 2 H330 3.1/3/Dermal Acute Tox. 3 H311 3.4.2/1A Skin Sens. 1A H317 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410 3.1/3/Oral Acute Tox. 3 H301 3.2/1B Skin Corr. 1B H314



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			3.3/1 Eye Dam. 1 H318 EUH071
11 ppm	reaction mass of: 5-chloro-2-methyl-4-iso thiazolin-3-one [EC no. 247-500-7]and 2-methyl-2H-isothiazol- 3-one [EC no. 220-239-6] (3:1); reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3- one [EC no. 247-500-7]and 2-methyl-4-isothiazolin- 3- one [EC no. 220-239-6] (3:1)	613-167-00-5 55965-84-9	 3.1/1/Inhal Acute Tox. 1 H330 3.3/2 Eye Irrit. 2 H319 3.2/2 Skin Irrit. 2 H315 3.4.2/1A Skin Sens. 1A H317 3.1/2/Dermal Acute Tox. 2 H310 3.1/3/Oral Acute Tox. 3 H301 3.2/1C Skin Corr. 1C H314 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Remove contaminated clothing immediatley and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

- 4.2. Most important symptoms and effects, both acute and delayed None
- 4.3. Indication of any immediate medical attention and special treatment needed

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

- Treatment:
- None

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Suitable extinguishing media:
 - Water.
 - Carbon dioxide (CO2).
 - Extinguishing media which must not be used for safety reasons:
 - None in particular.
- 5.2. Special hazards arising from the substance or mixture Do not inhale explosion and combustion gases. Burning produces heavy smoke.
- 5.3. Advice for firefighters
 - Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.



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SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures Wear personal protection equipment. Remove persons to safety.
 - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
 - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.
 - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
- Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
- Wash with plenty of water. 6.4. Reference to other sections
 - See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists.
 - Don't use empty container before they have been cleaned.
 - Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
 - See also section 8 for recommended protective equipment.
 - Advice on general occupational hygiene:
 - Contamined clothing should be changed before entering eating areas.
 - Do not eat or drink while working.
- 7.2. Conditions for safe storage, including any incompatibilities
 - Keep away from food, drink and feed.
 - Incompatible materials:
 - None in particular.
 - Instructions as regards storage premises:
 - Adequately ventilated premises.
- 7.3. Specific end use(s)
 - None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
 - epsilon-caprolactam CAS: 105-60-2
 - OEL Type: EU TWA(8h): 10 mg/m3 STEL: 40 mg/m3
 - OEL Type: ACGIH TWA(8h): 5 mg/m3 Notes: (IFV), A5 URT irr
- DNEL Exposure Limit Values
 - N.A.
- PNEC Exposure Limit Values
 - N.Á.
- 8.2. Exposure controls
- Eye protection:

Use close fitting safety goggles, don't use eye lens.

- Protection for skin:
 - Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
- Protection for hands:
 - Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
- Respiratory protection:
 - Not needed for normal use.



According to Regulation (EG) 1907/2006 (REACH) Product name: HP 973X Cyan version: 1 - 11.5.2023 Thermal Hazards: None Environmental exposure controls: None Appropriate engineering controls: None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance:	liquid		
Colour:	Cyan		
Odour:	N.A.		
Odour threshold:	N.A.		
pH:	8,9	DIN 19268	
Melting point / freezing point:	N.A.		
Initial boiling point and boiling range:	N.A.		
Flash point:	97 ° C		
Evaporation rate:	N.A.		
Solid/gas flammability:	N.A.		
Upper/lower flammability or explosive limits:	N.A.		
Vapour pressure:	N.A.		
Vapour density:	N.A.		
Relative density:	1.06	ISO 1183	
Solubility in water:	soluble		
Solubility in oil:	N.A.		
Partition coefficient (n-octanol/water):	N.A.		
Auto-ignition temperature:	N.A.		
Decomposition temperature:	N.A.		
Viscosity:	2 - 6 cps	ISO 2555	
Explosive properties:	N.A.		
Oxidizing properties:	N.A.		

9.2. Other information

Properties	Value	Method:	Notes	
Miscibility:	N.A.			
Fat Solubility:	N.A.			
Conductivity:	N.A.			
Substance Groups relevant properties	N.A.			

SECTION 10: Stability and reactivity

- 10.1. Reactivity
 - Stable under normal conditions
- 10.2. Chemical stability
 - Stable under normal conditions
- 10.3. Possibility of hazardous reactions



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- version: 1 11.5.2023
 - None
 - 10.4. Conditions to avoid Stable under normal conditions.
 - 10.5. Incompatible materials None in particular.
 - 10.6. Hazardous decomposition products None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
- Toxicological information of the product:

N.Ă.

- Toxicological information of the main substances found in the product:
 - N.A.

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

a) acute toxicity;

- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

- Adopt good working practices, so that the product is not released into the environment. N.A.
- 12.2. Persistence and degradability
 - N.A.
- 12.3. Bioaccumulative potential
- N.A.
- 12.4. Mobility in soil
 - N.A.
- 12.5. Results of PBT and vPvB assessment vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects None

SECTION 13: Disposal considerations

13.1. Waste treatment methods Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number
 - Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
 - N.A.



According to Regulation (EG) 1907/2006 (REACH) Product name: HP 973X Cyan

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 - 14.3. Transport hazard class(es)
 - N.A.
 - 14.4. Packing group
 - N.A. 14.5. Environmental hazards

N.A.

- ADR-Enviromental Pollutant: No
- IMDG-Marine pollutant: No
- 14.6. Special precautions for user N.A.
 - N.A. 7 Transport in
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EG) 1907/2006 (REACH) Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP) Regulation (EU) n. 2021/849 (ATP 17 CLP) Regulation (EU) n. 2022/692 (ATP 18 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: **Restriction 3 Restriction 40** Restrictions related to the substances contained: **Restriction 75** Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive) Dir. 2004/42/EC (VOC directive) WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefÄphrdende Stoffe) WGK3 - Highly hazardous for water Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1



According to Regulation (EG) 1907/2006 (REACH) Product name: HP 973X Cyan version: 1 - 11.5.2023

Product belongs to	Lower-tier	Upper-tier
category:	threshold (tonnes)	threshold (tonnes)
None		

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3: H302 Harmful if swallowed. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H315 Causes skin irritation. H332 Harmful if inhaled. H318 Causes serious eve damage. H317 May cause an allergic skin reaction. H400 Very toxic to aquatic life. H330 Fatal if inhaled. H311 Toxic in contact with skin. H410 Very toxic to aquatic life with long lasting effects. H301 Toxic if swallowed. H314 Causes severe skin burns and eye damage.

EUH071 Corrosive to the respiratory tract.

H310 Fatal in contact with skin.

Hazard class and hazard category	Code	Description
Acute Tox. 1	3.1/1/Inhal	Acute toxicity (inhalation), Category 1
Acute Tox. 2	3.1/2/Dermal	Acute toxicity (dermal), Category 2
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Corr. 1C	3.2/1C	Skin corrosion, Category 1C
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

This safety data sheet has been completely updated in compliance to Regulation 2015/830.



According to Regulation (EG) 1907/2006 (REACH) Product name: HP 973X Cyan version: 1 - 11.5.2023

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Sens. 1A, H317	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This Safety Data Sheet is only for the wecare product mentioned after " Product name : " in SECTION 1 - All use for other products is strictly forbidden.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS: GefStoffVO:	European Inventory of Existing Commercial Chemical Substances. Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of
0110.	Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Áviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.