

Version: 4.4

Revision Date: 19.07.2018

Print Date: 20.07.2018

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

### **1.1 Product identifier**

Trade name : XI220-K10 hebro®xan

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

Use of the Sub-  
stance/Mixture : Cooling water treatment

### **1.3 Details of the supplier of the safety data sheet**

Company : hebro chemie- ZN der Rockwood Specialties Group  
GmbH  
Rostocker Str. 40  
41199 Mönchengladbach

Contact person : Zentrale hebro chemie  
Telephone : +49 (0) 2166 6009-0  
Telefax : +49 (0) 2166 6009-99

Contact person product safety : Abteilung Produktsicherheit  
Telephone : +49(0)2166 6009-311  
E-mail address : msds.de@hebro-chemie.de

### **1.4 Emergency telephone number**

: Giftinformationszentrum Erfurt:  
+49 (0) 361 730 730

---

## **SECTION 2: Hazards identification**

### **2.1 Classification of the substance or mixture**

#### **Classification (REGULATION (EC) No 1272/2008)**

Eye irritation, Category 2 H319: Causes serious eye irritation.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting effects.

### **2.2 Label elements**

#### **Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal word : Warning

Version: 4.4

Revision Date: 19.07.2018

Print Date: 20.07.2018

Hazard statements : H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P261 Avoid breathing mist or vapours.  
P262 Do not get in eyes, on skin, or on clothing.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 Call a POISON CENTER/doctor if you feel unwell.

Hazardous components which must be listed on the label:

Orange, sweet, ext.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

The information required is contained in this Material Safety Data Sheet.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : aqueous preparation based on terpenes and emulsifiers

#### Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (% w/w)
Orange, sweet, ext.	8028-48-6 232-433-8 01-2119493353-35	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Skin Sens. 1; H317 Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 5 - < 10
Isotridecyl alcohol, ethoxylated	9043-30-5 500-027-2	Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 2.5 - < 3

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : When symptoms persist or in all cases of doubt seek medical advice.

Version: 4.4

Revision Date: 19.07.2018

Print Date: 20.07.2018

---

- If inhaled : Provide fresh air.  
Keep patient warm and at rest.  
If symptoms persist, call a physician.
- In case of skin contact : After contact with skin, wash immediately with plenty of soap and water.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Seek medical advice.
- If swallowed : Call a physician immediately.  
Keep at rest.  
Do NOT induce vomiting.

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

- Symptoms : No information available.
- Risks : No information available.

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

- Treatment : Treat symptomatically.
- 

### **SECTION 5: Firefighting measures**

#### **5.1 Extinguishing media**

- Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder  
Water spray jet

- Unsuitable extinguishing media : none

#### **5.2 Special hazards arising from the substance or mixture**

- Specific hazards during fire-fighting : No information available.

#### **5.3 Advice for firefighters**

- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
- Further information : Use water spray to cool unopened containers.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Remove all sources of ignition.  
Ensure adequate ventilation.

### **6.2 Environmental precautions**

Environmental precautions : Do not let product enter drains.  
Inform the relevant authorities if it enters sewers, aquatic environment or soil.

### **6.3 Methods and material for containment and cleaning up**

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

See chapter  
8  
and  
13

---

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Advice on safe handling : Keep away from open flames, hot surfaces and sources of ignition.  
Take precautionary measures against static discharges.

Advice on protection against fire and explosion : Vapours are heavier than air and may spread along floors.  
Vapours may form explosive mixtures with air.

### **7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Keep away from open flames, hot surfaces and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Observe label precautions.

Further information on storage conditions : Keep away from sources of ignition - No smoking. Keep at temperatures between 5°C and 40°C.

Advice on common storage : Incompatible with oxidizing agents.

### **7.3 Specific end use(s)**

Specific use(s) : Cooling water treatment

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Orange, sweet, ext.	Workers	Inhalation	Long-term systemic effects	31.1 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	8.89 mg/kg bw/day
	Workers	Skin contact	Acute local effects	185.8 µg/cm <sup>2</sup>

#### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Orange, sweet, ext.	Fresh water	0.005 mg/l
	Marine water	0.0005 mg/l
	Intermittent use/release	0.0058 mg/l
	Sewage treatment plant	2.1 mg/l
	Fresh water sediment	1.3 mg/kg
	Marine sediment	0.13 mg/kg
	Soil	0.261 mg/kg
	Oral	13.3 mg/kg

### 8.2 Exposure controls

#### Engineering measures

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

#### Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection

Material : Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed.

Skin and body protection : Long sleeved clothing

Respiratory protection : Use respirator when performing operations involving potential exposure to vapour of the product.

Protective measures : Follow the skin protection plan.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : liquid

Version: 4.4

Revision Date: 19.07.2018

Print Date: 20.07.2018

Colour	:	milky, white
Odour	:	pleasant, like fruit
Odour Threshold	:	No data available
pH	:	7.50 (20 °C) : not determined
Boiling point/boiling range	:	from 100 °C
Flash point	:	57 °C Other information: Does not sustain combustion., Not classified as supporting combustion according to the transport regulations.
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	ca. 0.98 g/cm <sup>3</sup> (20 °C) Method: DIN 51757
Solubility(ies)		
Water solubility	:	completely soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	1.3 mm <sup>2</sup> /s (40 °C)
Flow time	:	No data available
Explosive properties	:	No data available

Version: 4.4

Revision Date: 19.07.2018

Print Date: 20.07.2018

---

Oxidizing properties : No data available

## 9.2 Other information

Other physico-chemical properties: This information is not available/not determined.

---

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

### 10.4 Conditions to avoid

Conditions to avoid : Exposure to moisture  
Exposure to light.  
Heat, flames and sparks.

### 10.5 Incompatible materials

Materials to avoid : Reducing agents  
Strong acids and strong bases  
Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon monoxid, carbon dioxid.

---

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Product:

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

#### Acute toxicity

##### Components:

#### Orange, sweet, ext.:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

---

Version: 4.4

Revision Date: 19.07.2018

Print Date: 20.07.2018

### **Skin corrosion/irritation**

**Product:**

Remarks: May cause skin irritation and/or dermatitis.

### **Serious eye damage/eye irritation**

**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

### **Respiratory or skin sensitisation**

**Product:**

Remarks: May cause an allergic skin reaction.

### **Germ cell mutagenicity**

**Product:**

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

### **Germ cell mutagenicity**

**Components:**

**Orange, sweet, ext.:**

Genotoxicity in vitro : Remarks: In vitro tests did not show mutagenic effects

### **Carcinogenicity**

**Product:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

### **Reproductive toxicity**

**Product:**

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

### **Reproductive toxicity**

**Components:**

**Orange, sweet, ext.:**

Effects on foetal development : Species: Rat  
591 mg/kg  
250 mg/kg

### **STOT - single exposure**

**Product:**

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



Version: 4.4

Revision Date: 19.07.2018

Print Date: 20.07.2018

### **STOT - repeated exposure**

#### **Product:**

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

### **Aspiration toxicity**

#### **Product:**

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

### **Further information**

#### **Product:**

Remarks: According to many years of experience, there are no known harmful effects when handled properly.

Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

---

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

#### **Product:**

- |   |   |  |
|---|---|--|
| Toxicity to fish                                    | : | LC50 (Danio rerio (zebra fish)): ca. 61 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203             |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): ca. 49 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202           |
| Toxicity to algae                                   | : | EC50 (Desmodesmus subspicatus (green algae)): > 128 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201 |
| Toxicity to microorganisms                          | : | (Pseudomonas putida): ca. 750 mg/l<br>Exposure time: 24 h  |

#### **Components:**

##### **Orange, sweet, ext.:**

- |   |   |   |
|---|---|---|
| Toxicity to fish                                    | : | LC50 (Pimephales promelas (Fathead minnow)): 0.7 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203 |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 0.67 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202          |
| Toxicity to algae                                   | : | ErC50 (Desmodesmus subspicatus): 150 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201             |

Version: 4.4

Revision Date: 19.07.2018

Print Date: 20.07.2018

## 12.2 Persistence and degradability

**Product:**

Biodegradability : Biodegradation: > 70 %  
Exposure time: 28 d  
Method: OECD Test Guideline 302 B  
Remarks: Readily biodegradable

## 12.3 Bioaccumulative potential

**Product:**

Bioaccumulation : Remarks: Remark: The substance has a low potential for bio-accumulation.

## 12.4 Mobility in soil

**Product:**

Mobility : Remarks: No data available

## 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

## 12.6 Other adverse effects

**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Harmful to aquatic life with long lasting effects.  
Do not flush into surface water or sanitary sewer system.  
Avoid subsoil penetration.

---

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.  
Do not let product enter drains.  
Do not dispose of with domestic refuse.

Contaminated packaging : Dispose of in accordance with local regulations.  
Since emptied containers retain product residues (vapour and/or liquid) follow all MSDS/label warnings after container is emptied.

Waste Code : 070499 : wastes not otherwise specified

Version: 4.4

Revision Date: 19.07.2018

Print Date: 20.07.2018

---

## **SECTION 14: Transport information**

### **14.1 UN number**

Not regulated as a dangerous good

### **14.2 UN proper shipping name**

Not regulated as a dangerous good

### **14.3 Transport hazard class(es)**

Not regulated as a dangerous good

### **14.4 Packing group**

Not regulated as a dangerous good

### **14.5 Environmental hazards**

Not regulated as a dangerous good

### **14.6 Special precautions for user**

Refer to protective measures listed in sections 7 and 8.

### **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable for product as supplied.

---

## **SECTION 15: Regulatory information**

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws.  
Regional or national implementations of GHS may not implement all hazard classes and categories.

### **15.2 Chemical safety assessment**

A Chemical Safety Assessment is not required for this substance.

---

## **SECTION 16: Other information**

### **Full text of H-Statements**

H226 : Flammable liquid and vapour.  
H304 : May be fatal if swallowed and enters airways.  
H315 : Causes skin irritation.  
H317 : May cause an allergic skin reaction.  
H318 : Causes serious eye damage.  
H411 : Toxic to aquatic life with long lasting effects.  
H412 : Harmful to aquatic life with long lasting effects.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**XI220-K10 hebro®xan**



Version: 4.4

Revision Date: 19.07.2018

Print Date: 20.07.2018

## Full text of other abbreviations

Aquatic Chronic	:	Chronic aquatic toxicity
Asp. Tox.	:	Aspiration hazard
Eye Dam.	:	Serious eye damage
Flam. Liq.	:	Flammable liquids
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

## Further information

Other information : The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.  
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

GB / EN