

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended


Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

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

- 1.1. Product identifier**
 Substance / mixture Haematoxylin Harris
 UFI mixture JCN9-W10X-X009-F1YE
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use
 Chemical production, analytical chemistry, laboratory synthesis, industrial applications.
Mixture uses advised against
 The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Supplier
 Name or trade name Ing. Petr Švec - PENTA s.r.o.
 Address Radiová 1122/1, Praha 10, 102 00
 Czech Republic
 Identification number (CRN) 02096013
 VAT Reg No CZ02096013
 Phone +420 226 060 681
 E-mail info@pentachemicals.eu
 Web address www.pentachemicals.eu
- Competent person responsible for the safety data sheet**
 Name Ing. Petr Švec - PENTA s.r.o.
 E-mail info@pentachemicals.eu
- 1.4. Emergency telephone number**
 European emergency number: 112 112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
 The mixture is classified as dangerous.
- Acute Tox. 4, H312
 STOT RE 2, H373 (kidneys)
 Aquatic Chronic 3, H412
- Full text of all classifications and hazard statements is given in the section 16.
- Most serious adverse effects on human health and the environment**
 May cause damage to the kidneys through prolonged or repeated exposure. Harmful in contact with skin. Harmful to aquatic life with long lasting effects.
- 2.2. Label elements**
Hazard pictogram
- 
- Signal word**
 Warning
- Hazard statements**
 H312 Harmful in contact with skin.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

H373 May cause damage to the kidneys through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe vapours.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 607-002-00-6 CAS: 64-19-7 EC: 200-580-7 Registration number: 01-2119475328-30-xxxx	acetic acid ... %	2-5	Flam. Liq. 3, H226 Skin Corr. 1A, H314 Eye Dam. 1, H318 Specific concentration limit: Skin Corr. 1A, H314: C ≥ 90 % Skin Irrit. 2, H315: 10 % ≤ C < 25 % Skin Corr. 1B, H314: 25 % ≤ C < 90 % Eye Irrit. 2, H319: 10 % ≤ C < 25 %	2, 4
CAS: 517-28-2 EC: 208-237-3	Haematoxylin	0,5-1	Eye Irrit. 2, H319	
Index: 603-002-00-5 CAS: 64-17-5 EC: 200-578-6 Registration number: 01-2119457-610-43-xxxx	ethanol	0,5-1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Specific concentration limit: Eye Irrit. 2, H319: C ≥ 50 %	
Index: 080-002-00-6 CAS: 21908-53-2 EC: 244-654-7	Mercury(II) oxide yellow	0,25-0,5	Acute Tox. 2, H300+H330 Acute Tox. 1, H310 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Specific concentration limit: STOT RE 2, H373 (kidneys): C ≥ 0.1 %	1, 3, 4, 5

Notes

- Note A: Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

- 2 Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
 - 3 Note 1: The concentration stated or, in the absence of such concentrations, the generic concentrations set out in this Regulation are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.
 - 4 A substance for which exposure limits are set.
 - 5 The use of the substance is restricted by Annex XVII of REACH Regulation
- Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes.

If swallowed

Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment.

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

If inhaled

Not expected.

If on skin

not available

If in eyes

Not expected.

If swallowed

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Prevent contact with skin and eyes. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Recommended storage temperature 15-25°C.

7.3. Specific end use(s)

In histology for staining cell nuclei.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union

Commission Directive (EU) 2017/164

Substance name (component)	Type	Value
acetic acid ... % (CAS: 64-19-7)	OEL 8 hours	25 mg/m ³
	OEL 8 hours	10 ppm
	OEL 15 minutes	50 mg/m ³
	OEL 15 minutes	20 ppm

European Union

Commission Directive 2009/161/EU

Substance name (component)	Type	Value
Mercury(II) oxide yellow (CAS: 21908-53-2)	OEL 8 hours	0,02 mg/m ³

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant to the product (nitrile rubber). When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Contaminated skin should be washed thoroughly.

Respiratory protection

Respirator. Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	red, violet
Odour	data not available
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Solubility in water	soluble
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	data not available
Relative vapour density	data not available
Particle characteristics	data not available

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

not available

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

Acute toxicity

Harmful in contact with skin.

acetic acid ... %						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD ₅₀		3310 mg/kg		Rat (Rattus norvegicus)	
Dermal	LD ₅₀		1060 mg/kg		Rabbit	

ethanol						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD ₅₀		13300 mg/kg		Rat (Rattus norvegicus)	
Dermal	LD ₅₀		>15800 mg/kg		Rabbit	
Inhalation (vapor)	LC ₅₀		124.7 mg/l	4 hours	Rat (Rattus norvegicus)	

Haematoxylin						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD ₅₀	OECD 423	>2000 mg/kg		Rat (Rattus norvegicus)	

Mercury(II) oxide yellow						
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD ₅₀		18 mg/kg		Rat	

Skin corrosion/irritation

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

Corrosivity

ethanol			
Route of exposure	Result	Exposure time	Species
	No effect		Rabbit

Serious eye damage/irritation

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

ethanol			
Route of exposure	Result	Exposure time	Species
	Irritating		Rabbit

Respiratory or skin sensitisation

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

ethanol				
Route of exposure	Result	Exposure time	Species	Sex
	Indeterminate		Human	

Germ cell mutagenicity

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

ethanol				
Result	Exposure time	Specific target organ	Species	Sex
Indeterminate				

Carcinogenicity

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

ethanol					
Route of exposure	Parameter	Value	Result	Species	Sex
Oral			Indeterminate	Rat (Rattus norvegicus)	

Reproductive toxicity

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

ethanol						
Effect	Parameter	Value	Exposure time	Result	Species	Sex
Developmental toxicity	NOAEL	38 mg/l		Negative	Rat (Rattus norvegicus)	
	NOAEL	5200 mg/kg	24 hours	Indeterminate	Rat (Rattus norvegicus)	

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

Toxicity for specific target organ - single exposure

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

ethanol							
Route of exposure	Parameter	Value	Exposure time	Specific target organ	Result	Species	Sex
Inhalation	LOAEL	2.6 mg/l	30 minutes	Nervous system	Drowsiness, Dizziness	Human	
Inhalation	LOAEL	9.4 mg/l		Lungs	Indeterminate	Human	

Toxicity for specific target organ - repeated exposure

May cause damage to the kidneys through prolonged or repeated exposure. Data for the components of the mixture are not available.

Aspiration hazard

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

Acute toxicity

acetic acid ... %					
Parameter	Value	Exposure time	Species	Environment	Value determination
LC ₅₀	75 mg/l	96 hours	Fish (Lepomis macrochirus)		
EC ₅₀	47 mg/l	24 hours	Daphnia (Daphnia magna)		

ethanol					
Parameter	Value	Exposure time	Species	Environment	Value determination
EC ₅₀	42 mg/l	96 hours	Fish		Experimentally
EC ₅₀	5012 mg/l	48 hours	Daphnia		Experimentally
NOEC	<500 mg/l	96 hours	Algae		Experimentally

Mercury(II) oxide yellow					
Parameter	Value	Exposure time	Species	Environment	Value determination
LC ₅₀	0.19 mg/l	96 hours	Fish		

12.2. Persistence and degradability

No data are available for either the mixture or the components.

12.3. Bioaccumulative potential

No data are available for either the mixture or the components.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

12.4. Mobility in soil

No data are available for either the mixture or the components.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

not available

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out (mixture).

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H310	Fatal in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to the kidneys through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H300+H330	Fatal if swallowed or if inhaled.

Guidelines for safe handling used in the safety data sheet

P260	Do not breathe vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Haematoxylin Harris

Creation date	29th July 2020	Version	4.0
Revision date	27th November 2023		

LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Eye Dam.	Serious eye damage
Flam. Liq.	Flammable liquid
Skin Corr.	Skin corrosion
STOT RE	Specific target organ toxicity - repeated exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 4.0 replaces the SDS version from 12 June 2023. Changes were made in sections 2 and 16.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.