

Hranitherm 830 PUR, Hranitherm 10.830 PUR

Issue date: 04/05/2020

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
 Revision date: 24/01/2023
 Supersedes version of: 06/06/2022

Version: 2.0

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

1.1. Product identifier

Product form : Mixture
 Product name : Hranitherm 830 PUR, Hranitherm 10.830 PUR
 UFI : FNS2-G0XX-C00R-8DH7

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

1.2.1. Relevant identified uses

Main use category : Product for industrial use only
 Use of the substance/mixture : Hot melt adhesive
 Function or use category : adhesives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Distributor

Hranipex Czech Republic k.s.
 J. Rýznerové 97, Komorovice
 CZ- 396 01 Humpolec
 Czech Republic
 T 565 501 210

hranipex@hranipex.cz - www.hranipex.cz

E-mail address of competent person responsible for the SDS :

sds@regartis.com

Supplier

Hranipex Ltd.
 Unit 2 Radial Park, Birmingham Business Park
 Birmingham, B37 7YN
 United Kingdom

T 0121 767 9180 - F 0121 782 6250

hranipex@hranipex.co.uk - www.hranipex.co.uk

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Respiratory sensitisation, Category 1 H334
 Skin sensitisation, Category 1 H317

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Carcinogenicity, Category 2

H351

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Suspected of causing cancer. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS08

Signal word (CLP)

: Danger

Contains

: methylenediphenyl diisocyanate

Hazard statements (CLP)

: H317 - May cause an allergic skin reaction.
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H351 - Suspected of causing cancer.

Precautionary statements (CLP)

: P261 - Avoid breathing dust, fume, mist, gas, vapours, aerosol.
 P280 - Wear protective gloves, protective clothing, eye protection, face protection.
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P308+P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
 P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Extra phrases

: As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

Other hazards which do not result in classification : Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
methylenediphenyl diisocyanate	CAS-No.: 26447-40-5 EC-No.: 247-714-0 EC Index-No.: 615-005-00-9	2 – 5	Acute Tox. 4 (Inhalation), H332 (ATE=0.49 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 4, H413

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Specific concentration limits:

Name	Product identifier	Specific concentration limits
methylenediphenyl diisocyanate	CAS-No.: 26447-40-5 EC-No.: 247-714-0 EC Index-No.: 615-005-00-9 REACH-no: 01-2119457015-45	(0.1 ≤C ≤ 100) Resp. Sens. 1, H334 (5 ≤C ≤ 100) Eye Irrit. 2, H319 (5 ≤C ≤ 100) Skin Irrit. 2, H315 (5 ≤C ≤ 100) STOT SE 3, H335

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention. Contact with molten material may result in thermal burns.
First-aid measures after inhalation	: Move the affected person away from the contaminated area and into the fresh air. If breathing is difficult, give oxygen. Seek medical advice.
First-aid measures after skin contact	: In case the melted product gets on skin, cool immediately with cold water. . Do not pull solidified product away from the skin. Wash skin with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Consult an eye specialist.
First-aid measures after ingestion	: Drink plenty of water. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Seek medical attention immediately.

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

Symptoms/effects	: Irritating to eyes, respiratory system and skin.
Symptoms/effects after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Reactivity in case of fire	: On heating : release of (highly) toxic gases/vapours.
Hazardous decomposition products in case of fire	: Carbon monoxide. Carbon dioxide. Nitrogen oxides. Isocyanates. Hydrogen cyanide. Do not breathe fumes from fires or vapours from decomposition.

5.3. Advice for firefighters

Firefighting instructions	: Evacuate the danger area. Fight fire with normal precautions from a reasonable distance. Cool down the containers exposed to heat with a water spray. On exposure to high temperature, may decompose, releasing toxic gases.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Do not allow run-off from fire fighting to enter drains or water courses.

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SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Stop leak if safe to do so. Avoid any direct contact with the product. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : If melted: allow liquid to solidify before taking it up. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Precautions for safe handling : Obtain special instructions before use. Good ventilation of the workplace required. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep container closed when not in use. Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material.
Hygiene measures : Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands and face immediately after handling this product, and once again before leaving the workplace. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, cool, well-ventilated area. Keep only in the original container. Keep container tightly closed to prevent moisture pick-up. Keep in properly labelled containers. . Store away from direct sunlight or other heat sources.
Incompatible products : Acids and alkalis. Amines. alcohols.

7.3. Specific end use(s)

Polyurethane. Hot melt adhesives.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****8.1.1 National occupational exposure and biological limit values**

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

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8.1.4. DNEL and PNEC

methylenediphenyl diisocyanate (26447-40-5)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	50 mg/kg bodyweight/day
Acute - local effects, dermal	28.7 mg/cm ²
Acute - local effects, inhalation	0.1 mg/m ³
Long-term - local effects, inhalation	0.05 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	1 mg/l
PNEC aqua (marine water)	0.1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	11.7 mg/kg dwt
PNEC sediment (marine water)	1.17 mg/kg dwt
PNEC (Soil)	
PNEC soil	1 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide adequate general and local exhaust ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

8.2.2.1. Eye and face protection

Eye protection:

Safety glasses with side shields

8.2.2.2. Skin protection

Skin and body protection:

Long sleeved protective clothing

Hand protection:

Chemical resistant gloves (according to European standard EN 374 or equivalent). Use insulated gloves when handling this material hot. Contaminated gloves must be decontaminated and disposed of.

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. If excessive exposure exists, use only approved air-purifying or supplied air respirator operated in a positive pressure mode

8.2.2.4. Thermal hazards

No additional information available

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8.2.3. Environmental exposure controls**Environmental exposure controls:**

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use. Immediately remove contaminated clothing or footwear. Always wash hands after handling the product.

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

Physical state	: Solid
Colour	: Yellow.
Odour	: Mild odor.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Explosion limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: 50000 mPa.s @ 140 °C
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.1 g/l
Relative density	: Not applicable
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information**9.2.1. Information with regard to physical hazard classes**

No additional information available

9.2.2. Other safety characteristics

No additional information available

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

Reacts with : Water. alcohols. amines.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactionsExothermic reaction on contact with : alcohols. Amines. Reacts on contact with water releasing carbon dioxide (CO₂). Closed containers may generate internal gas pressure. pressure rise and possible bursting of container.**10.4. Conditions to avoid**

High temperature. humidity.

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10.5. Incompatible materials

Acids and alkalis. Amines. alcohols.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
 Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
 Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

methylenediphenyl diisocyanate (26447-40-5)

LD50 oral rat > 10,000 mg/kg

LD50 dermal rabbit > 10,000 mg/kg

LC50 Inhalation - Rat 490 mg/m³

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
 Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
 Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
 Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
 Carcinogenicity : Suspected of causing cancer.
 Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
 STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

methylenediphenyl diisocyanate (26447-40-5)

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

methylenediphenyl diisocyanate (26447-40-5)

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

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Viscosity, kinematic Not applicable

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

11.2.2. Other information

No additional information available

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SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)
 Hazardous to the aquatic environment, long-term (chronic) : Not classified (Based on available data, the classification criteria are not met)

12.2. Persistence and degradability

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Persistence and degradability	No information available.

12.3. Bioaccumulative potential

Hranitherm 830 PUR, 10.830 PUR	
Bioaccumulative potential	No information available.

methylenediphenyl diisocyanate (26447-40-5)	
Partition coefficient n-octanol/water (Log Pow)	4.5

12.4. Mobility in soil

Hranitherm 830 PUR, 10.830 PUR	
Ecology - soil	No information available.

12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

12.7. Other adverse effects

Additional information : No other effects known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
 Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
 Sewage disposal recommendations : Do not dispose of waste into sewer.
 Product/Packaging disposal recommendations : Dispose of at authorized waste collection point.
 Ecology - waste materials : Avoid release to the environment.
 HP Code : HP7 - "Carcinogenic:" waste which induces cancer or increases its incidence
 HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

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SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
56.	methylenediphenyl diisocyanate

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

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PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP)

United Kingdom

British National Regulations

: Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives, in the valid wording.
 Regulation (EC) No 1013/2006 of the European Parliament and of the Council on shipments of waste, in the valid wording.
 UK Waste Regulations.
 UK REACH.
 GB CLP.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes

Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	Precautionary statements (CLP)	Modified	
2.3	Other hazards not contributing to the classification	Modified	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures after ingestion	Modified	
4.1	First-aid measures general	Modified	
5.2	Explosion hazard	Added	
7.2	Incompatible products	Modified	
8.2	Hand protection	Modified	
8.2	Eye protection	Modified	
8.2	Appropriate engineering controls	Modified	
8.2	Respiratory protection	Modified	

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Indication of changes

Section	Changed item	Change	Comments
9.1	Odour	Added	
9.1	Viscosity, dynamic	Modified	
9.1	Colour	Modified	
9.1	Density	Modified	
10.1	Reactivity	Modified	
10.3	Possibility of hazardous reactions	Modified	
10.4	Conditions to avoid	Modified	
10.5	Incompatible materials	Modified	
15.1	British National Regulations	Added	
15.1	REACH Annex XVII	Modified	

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
SDS	Safety Data Sheet
DNEL	Derived-No Effect Level
PNEC	Predicted No-Effect Concentration
LC50	Median lethal concentration
LD50	Median lethal dose
NOEC	No-Observed Effect Concentration
EC50	Median effective concentration
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative

Data sources	: ECHA Guidance on the compilation of safety data sheets ECHA C&L Inventory database. Supplier's safety documents.
Training advice	: Provide SDS to employees. Follow general rules on handling chemical substances and/or mixtures. Safety training for chemicals handling.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H315	Causes skin irritation.

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Full text of H- and EUH-statements:

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H413	May cause long lasting harmful effects to aquatic life.
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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

Resp. Sens. 1	H334	Calculation method
Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.