Hranitherm 860/861 PUR, Hranitherm 10.860/10.861 PUR

Issue date: 31/05/2019

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Supersedes version of: 28/12/2022 Revision date: 29/01/2023

: Mixture

Version: 2.0

Hranipex

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

1.1. Product identifier

Product form Product name UFI

: Hranitherm 860/861 PUR, Hranitherm 10.860/10.861 PUR

: DTS2-H0AQ-Y00R-K2PC

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

1.2.1. Relevant identified uses

Main use category Use of the substance/mixture Function or use category

- : Product for industrial use only : Hot melt adhesive
- : 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

1.4. Emergency telephone number

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

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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Issue date: 31/05/2019 Carcinogenicity, Category 2

H351

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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, gas, mist, 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+P313 - IF exposed or concerned: Get medical advice/attention. 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	(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 case of doubt or persistent symptoms, consult always a physician. If possible, show the doctor this safety data sheet. Failing this, show the doctor the packaging or label.
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. If breathing difficulties persist : Call a doctor.
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 symptoms persist call a doctor.
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	: Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Seek medical attention immediately.
4.2. Most important symptoms and effe	cts, both acute and delayed
Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact	 Irritating to eyes, respiratory system and skin. May cause allergy or asthma symptoms or breathing difficulties if inhaled. 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 Unsuitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.: Strong water jet.
5.2. Special hazards arising from the subst	ance or mixture
Explosion hazard Reactivity in case of fire Hazardous decomposition products in case of fire	 Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. On heating : release of (highly) toxic gases/vapours. Carbon dioxide. Carbon monoxide. Nitrogen oxides. Isocyanates. Hydrogen cyanide.
5.3. Advice for firefighters	
Firefighting instructions	: Evacuate the danger area. Fight fire with normal precautions from a reasonable distance. Get the package away from the fire if this can be done without risk. Cool down the containers/equipment exposed to heat with a water spray. Ensure that there is no direct contact between the water and the product. Do not allow water to enter the vessels, a violent reaction may occur. On exposure to high temperature, may decompose, releasing toxic gases. Do not breathe fumes from fires or vapours from decomposition. Keep upwind.
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 Emergency procedures	 Wear recommended personal protective equipment. Ventilate spillage area. Evacuate unnecessary personnel. Stop leak if safe to do so. Avoid contact with skin, eyes and clothing. Do not touch or walk on the spilled product. 		
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			

Do not allow product to spread into 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	: Leave the product to solidify. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Dispose of contaminated materials in accordance with current regulations.	
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 Hygiene measures	 Do not handle until all safety precautions have been read and understood. Ensure adequate air ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from : Incompatible products. Keep container closed when not in use. Keep away from food, drink and animal feeding stuffs. 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. Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, including a	any incompatibilities
Storage conditions	 Store in dry, cool, well-ventilated area. Store in original container. Keep in properly labelled containers Keep container tightly closed to prevent moisture pick-up. Protect from heat and direct sunlight. Store locked up. Acids and alkalis. Water. Amines. alcohols.
7.3 Specific and 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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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/m³	
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. Avoid all unnecessary exposure.

8.2.2.1. Eye and face protection

Eye protection:

Wear 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	:	white.
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
рН	:	Not available
pH solution	:	Not available
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	≈ 55000 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/cm ³
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

Water. alcohols. amines.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Exothermic reaction on contact with : Amines. alcohols. Reacts on contact with water releasing carbon dioxide (CO2). Never introduce water or any aqueous agent into tanks or containers. 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) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) 	
methylenediphenyl diisocyanate (26447	-40-5)	
LD50 oral rat	> 10000 mg/kg	
LD50 dermal rabbit	> 10000 mg/kg	
LC50 Inhalation - Rat	490 mg/m ³	
Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure methylenediphenyl diisocyanate (26447 - STOT-single exposure STOT-repeated exposure methylenediphenyl diisocyanate (26447 -	May cause respiratory irritation. Not classified (Based on available data, the classification criteria are not met)	
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 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

ADR	IMDG	ΙΑΤΑ	ADN	RID
I4.1. UN number or ID n	umber			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippin	g name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard o	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 haz	zards	•		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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	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

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
	Supersedes	Modified	
	Revision date	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	
4.2	Symptoms/effects	Added	
5.2	Explosion hazard	Added	
5.2	Reactivity in case of fire	Modified	
6.1	Emergency procedures		
6.2	Environmental precautions	Modified	
6.3	Methods for cleaning up	Modified	
7.2	Incompatible products	Modified	
8.2	Hand protection	Modified	



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Indication of changes				
Section	Changed item Change		Comments	
8.2	Eye protection	Modified		
8.2	Appropriate engineering controls	Modified		
8.2	Skin and body protection	Modified		
8.2	Respiratory protection	Modified		
9.1	Odour	Added		
9.1	Viscosity, dynamic	Modified		
9.1	Density	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		
ΙΑΤΑ	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		
EC50	Median effective concentration		
NOEC	No-Observed Effect Concentration		
РВТ	Persistent Bioaccumulative Toxic		
vPvB	Very Persistent and Very Bioaccumulative		

Data sources

: ECHA Guidance on the compilation of safety data sheets

Training advice

ECHA C&L Inventory database. Supplier's safety documents. : 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	atic 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		

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Full text of H- and EU	Full text of H- and EUH-statements:				
H315	Causes skin irritation.				
H317	May cause an allergic skin reaction.				
H319	Causes serious eye irritation.				
H332	Harmful if inhaled.				
H334	May cause allergy or asthma sympton	ns or breathing difficulties if inhaled.			
H335	May cause respiratory irritation.				
H351	Suspected of causing cancer.				

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.

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