



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II. - Europe

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

1.1 Product identifier

Product name : HEMPEL'S MCU 45760
Product identity : 4576050630
Product type : polyurethane paint

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

Field of application : metal industry
Identified uses : Industrial applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details : HEMPEL A/S
Lundtoftevej 150
DK-2800 Kgs. Lyngby
Denmark
Tel.: + 45 45 93 38 00
hempel@hempel.com
Emergency telephone number (with hours of operation)
+45 45 93 38 00 (08.00 - 17.00)
See section 4 First aid measures.

Date of issue : 29 November 2010
Date of previous issue : No previous validation.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R10
Carc. Cat. 3; R40
Xi; R36/37/38
R42/43
R52/53

Physical/chemical hazards : Flammable.
Human health hazards : Limited evidence of a carcinogenic effect. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.
Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Hazard symbol or symbols :



Indication of danger : Harmful

Risk phrases : R10- Flammable.
R40- Limited evidence of a carcinogenic effect.
R36/37/38- Irritating to eyes, respiratory system and skin.
R42/43- May cause sensitization by inhalation and skin contact.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S23- Do not breathe vapor or spray.
S36/37- Wear suitable protective clothing and gloves.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S51- Use only in well-ventilated areas.

Supplemental label elements : Contains isocyanates. See information supplied by the manufacturer.

Hazardous ingredients : aromatic polyisocyanate
methylenediphenyl diisocyanate

Special packaging requirements



SECTION 2: Hazards identification

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

SECTION 3: Composition/information on ingredients

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC or assigned an occupational exposure limit or PBT or vPvB.

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
solvent naphtha (petroleum), light arom.	EC: 265-199-0 CAS: 64742-95-6 Index: 649-356-00-4	20-25	Xn; R20, R65 Xi; R36/37/38 N; R51/53	ACUTE TOXICITY: INHALATION - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): INHALATION [Respiratory tract irritation] - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2	[1] [2]
aromatic polyisocyanate	EC: 500-120-8 CAS: *53317-61-6	10-20	Xi; R36 R43	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN SENSITIZATION - Category 1	[1]
n-butyl acetate	EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	<15	R10 R66, R67	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3	[1] [2]
methylenediphenyl diisocyanate	EC: 247-714-0 CAS: 26447-40-5 Index: 615-005-00-9	1-3	Carc. Cat. 3; R40 Xn; R20, R48/20 Xi; R36/37/38 R42/43	ACUTE TOXICITY: INHALATION - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	[1]
diamide wax mixture	-	0.25-2.5	R43 N; R51/53	SKIN SENSITIZATION - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2	[1]
tosyl isocyanate	EC: 223-810-8 CAS: 4083-64-1 Index: 615-012-00-7	0.1-5	R14 Xi; R36/37/38 R42	SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 RESPIRATORY SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3	[1]
diphenylmethane-diisocyanate (isomers and homologues)	CAS: 9016-87-9 Index: 615-005-00-9	0.1-1	Xn; R20 Xi; R36/37/38 R42/43	ACUTE TOXICITY: INHALATION - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): INHALATION [Respiratory tract irritation] - Category 3	[1]
			See Section 16 for the full text of the R-phrases declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit, see section 8.

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious, place in recovery position and get medical attention immediately.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.



SECTION 4: First aid measures

- Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
- Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact : Irritating to eyes.
- Inhalation : Irritating to respiratory system. May cause sensitization by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact : Irritating to skin. May cause sensitization by skin contact.
- Ingestion : Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact : Adverse symptoms may include the following:
irritation
watering
redness
- Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
wheezing and breathing difficulties
asthma
- Skin contact : Adverse symptoms may include the following:
irritation
redness
- Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician : If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed.
- Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Extinguishing media : Recommended: alcohol resistant foam, CO₂, powders, water spray.
Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Hazardous combustion products : Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.



SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used. Contains isocyanates. Exposure to isocyanate may result in acute irritation and/or sensitisation when breathing.

Care should be taken when re-opening partly-used containers.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations for flammable liquids. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Product/ingredient name	Exposure limit values
solvent naphtha (petroleum), light arom. n-butyl acetate	EU OEL (Europe, 1/2001). TWA: 120 mg/m ³ 8 hour(s). Form: TWA: 25 ppm 8 hour(s). Form: ACGIH TLV (United States, 2/2010). STEL: 200 ppm 15 minute(s). TWA: 150 ppm 8 hour(s).

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Derived effect levels

No DELs available.



SECTION 8: Exposure controls/personal protection

Predicted effect concentrations

No PECs available.

8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the workstation location.

Individual protection measures

General :	Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.
Hygiene measures :	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.
Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
Hand protection :	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances. Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type.
Body protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product. Wear suitable protective clothing. Always wear protective clothing when spraying.
Respiratory protection :	If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flattening should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used. When the product is applied by spraying and for continuous or prolonged work always wear an air-fed respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state :	Liquid.
Odor :	Solvent-like
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	Testing not relevant or not possible due to nature of the product.
Boiling point/boiling range :	Testing not relevant or not possible due to nature of the product.
Flash point :	Closed cup: 37°C (98.6°F)
Evaporation rate :	Testing not relevant or not possible due to nature of the product.
Flammability :	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and oxidizing materials.
Upper/lower flammability or explosive limits :	0.5 - 8 vol %
Vapor pressure :	Testing not relevant or not possible due to nature of the product.
Vapor density :	Testing not relevant or not possible due to nature of the product.
Relative density :	1.486 g/cm ³
Solubility(ies) :	Insoluble in the following materials: cold water and hot water.
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Testing not relevant or not possible due to nature of the product.



SECTION 9: Physical and chemical properties

Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Testing not relevant or not possible due to nature of the product.
Explosive properties :	Slightly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.
Oxidizing properties :	Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight :	Weighted average: 29 %
Water % by weight :	Weighted average: 0 %
VOC content :	432.9 g/l
TOC Content :	Weighted average: 359 g/l
Solvent Gas :	Weighted average: 0.091 m ³ /l

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Isocyanate containing products have characteristics that include producing acute irritation and/or sensitisation when breathing, subsequent asthmatic problems and lung contractions. Sensitised people can, as a result from this, show asthmatic symptoms with exposure to atmospheric concentrations far below the TLV. Repeated exposures will lead to permanent damage to the respiratory system.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
solvent naphtha (petroleum), light arom.	LD50 Oral	Rat	8400 mg/kg	-
n-butyl acetate	LC50 Inhalation Gas. LD50 Dermal	Rat Rabbit	390 ppm >17600 mg/kg	4 hours -
tosyl isocyanate	LD50 Oral LC50 Inhalation Gas.	Rat Rat	10768 mg/kg >640 ppm	- 1 hours
diphenylmethane-diisocyanate (isomers and homologues)	LD50 Oral LC50 Inhalation Dusts and mists	Rat Rat	2234 mg/kg 490 mg/m ³	- 4 hours

**SECTION 11: Toxicological information**

	LD50 Dermal	Rabbit	>9400 mg/kg	-
	LD50 Oral	Rat	49 g/kg	-

Acute toxicity estimates

Route	ATE value
Inhalation (vapors)	51.35 mg/l
Inhalation (dusts and mists)	54.27 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
solvent naphtha (petroleum), light arom.	Eyes - Mild irritant	Rabbit	-	-	-
n-butyl acetate	Eyes - Moderate irritant	Rabbit	-	-	-
	Skin - Moderate irritant	Rabbit	-	-	-
tosyl isocyanate	Eyes - Moderate irritant	Rabbit	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-
diphenylmethane-diisocyanate (isomers and homologues)	Eyes - Mild irritant	Rabbit	-	-	-

Potential chronic health effects

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
methylenediphenyl diisocyanate	Carc. Cat. 3; R40	-	-	-

Sensitization : Contains aromatic polyisocyanate, methylenediphenyl diisocyanate, diamide wax mixture, 4-isocyanatosulphonyltoluene, diphenylmethane-diisocyanate (isomers and homologues). May produce an allergic reaction.

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information**12.1 Toxicity**

Do not allow to enter drains or watercourses. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute LC50 32000 ug/L Marine water Acute LC50 18000 - 19000 ug/L Fresh water	Crustaceans - Artemia salina - Nauplii Fish - Pimephales promelas - 31 - 32 days - 21.6 mm - 0.175 g	48 hours 96 hours

12.2 Persistence and degradability

No known data available in our database.

12.3 Bioaccumulative potential

No known data available in our database.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : No known data available in our database.

Mobility : No known data available in our database.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects

No known significant effects or critical hazards.



SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible.
Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations.
Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.
European waste catalogue no. (EWC) and national waste group, catalogue, code or number is given below.

European waste catalogue (EWC) : 08 01 11*




Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN1263	PAINT	3 	III	No.	Special provisions 640 (E) Tunnel code (D/E)
IMDG Class	UN1263	PAINT	3 	III	No.	Emergency schedules (EmS) F-E, S-E
IATA Class	UN1263	PAINT	3 	III	No.	-

PG* : Packing group

Env.* : Environmental hazards

14.6 Special precautions for user

Not available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

Seveso category : 6

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

**SECTION 16: Other information**

▣ Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number

Full text of abbreviated R phrases : R10- Flammable.
 R14- Reacts violently with water.
 R40- Limited evidence of a carcinogenic effect.
 R20- Harmful by inhalation.
 R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 R65- Harmful: may cause lung damage if swallowed.
 R36- Irritating to eyes.
 R36/37/38- Irritating to eyes, respiratory system and skin.
 R42- May cause sensitization by inhalation.
 R43- May cause sensitization by skin contact.
 R42/43- May cause sensitization by inhalation and skin contact.
 R66- Repeated exposure may cause skin dryness or cracking.
 R67- Vapors may cause drowsiness and dizziness.
 R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD] : Carc. Cat. 3 - Carcinogen category 3
 Xn - Harmful
 Xi - Irritant
 N - Dangerous for the environment

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

Hazard pictograms :



Signal word : Danger

Hazard statements : Flammable liquid and vapor.
 Causes skin irritation.
 Causes serious eye irritation.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause an allergic skin reaction.
 Suspected of causing cancer.
 May cause respiratory irritation.
 Harmful to aquatic life with long lasting effects.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): INHALATION [Respiratory tract irritation] - Category 3 AQUATIC TOXICITY (CHRONIC) - Category 3	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

Notice to reader

Modified data or content compared with the previous version are marked with a triangular marker in the upper-left corner within the Safety Data Sheet.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.