According to 1907/2006/EC (REACH), 2015/830/EU

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER

Solvent based Hardeners

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

Relevant uses: Hardener for coatings. For industrial user only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

CROMAUTO COATINGS, S.L.U.

P.I. Can Boada Vell - C/ Santa Margarida de Boada Vell nº 7 y 9 Nave 3

08184 Palau Solita i Plegamans - Barcelona - España Phone.: +34 937494502 - Fax: +34 938646076

info@cromauto.com www.cromauto.com

1.4 Emergency telephone number: +34 937494502 (8:00-13:00) (14:30-17:30)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Acute Tox. 4: Acute inhalation toxicity, Category 4, H332

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412

Eye Irrit. 2: Eye irritation, Category 2, H319 Flam. Liq. 3: Flammable liquids, Category 3, H226 Skin Irrit. 2: Skin irritation, Category 2, H315 Skin Sens. 1: Sensitisation, skin, Category 1, H317

STOT RE 2: Specific target organ toxicity if swallowed, repeated exposure, Category 2, H373

STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Warning







Hazard statements:

Acute Tox. 4: H332 - Harmful if inhaled

Aguatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects

Eye Irrit. 2: H319 - Causes serious eye irritation Flam. Liq. 3: H226 - Flammable liquid and vapour

Skin Irrit. 2: H315 - Causes skin irritation

Skin Sens. 1: H317 - May cause an allergic skin reaction

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral)

STOT SE 3: H335 - May cause respiratory irritation

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P280: Wear protective gloves/protective clothing/eye protection/face protection

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P370+P378: In case of fire: Use ABC powder extinguisher to extinguish

P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

Supplementary information:

EUH066: Repeated exposure may cause skin dryness or cracking EUH204: Contains isocyanates. May produce an allergic reaction

Substances that contribute to the classification

Hexamethylene diisocyanate, oligomers; Xylene

According to 1907/2006/EC (REACH), 2015/830/EU

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 2: HAZARDS IDENTIFICATION (continued)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture composed of additives and resins in solvents

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

	Identification		Chemical name/Classification					
		Hexamethylene diiso	Hexamethylene diisocyanate, oligomers□¹□ Self-classified					
Index: N	931-274-8 Non-applicable 91-2119485796-17-XXXX	Regulation 1272/2008	Acute Tox. 4: H332; Skin Sens. 1: H317; STOT SE 3: H335 - Warning	! >	25 - <50 %			
		Xylene□¹□	Self-cla	ssified				
Index: 6	215-535-7 501-022-00-9 01-2119488216-32-XXXX	Regulation 1272/2008	Acute Tox. 4: H312+H332; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H335 - Danger	<a> <a> <a> <a> <a> <a> <a> <a> <a> <a>	25 - <50 %			
		N-butyl acetate□2□	ATP CL	P00				
Index: 6	EC: 204-658-1 Index: 607-025-00-1 REACH: 01-2119485493-29-XXXX		Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Warning	<u>()</u>	10 - <25 %			
	108-65-6	2-methoxy-1-methyl	ethyl acetate□²□ ATP AT	P01				
Index: 6	203-603-9 507-195-00-7 01-2119475791-29-XXXX	Regulation 1272/2008	Flam. Liq. 3: H226 - Warning	(b)	2,5 - <5 %			
		Solvent naphtha (pet	roleum), light arom., < 0.1 % EC 200-753-7□¹□ ATP AT	P01				
Index: 6	265-199-0 549-356-00-4 01-2119486773-24-XXXX	Regulation 1272/2008	Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H336; EUH066 - Danger	\$	2,5 - <5 %			
	77-58-7	Dibutyltin Dilaurate]³□ Self-cla	ssified				
Index: 0	201-039-8 050-030-00-3 01-2119496068-27-XXXX	Regulation 1272/2008	Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Muta. 2: H341; Repr. 1B: H360; Skin Corr. 1C: H314; Skin Sens. 1: H317; STOT RE 1: H372; STOT SE 1: H370 - Danger	\$\&	<0,2 %			

[□]¹□ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 8, 11, 12, 15 and 16.

SECTION 4: FIRST AID MEASURES

4.1 **Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

- CONTINUED ON NEXT PAGE -

Page 2/14

[□]²□ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830 □³□ Substance with a Union workplace exposure limit

^{**} Changes with regards to the previous version

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 4: FIRST AID MEASURES (continued)

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers ($CO\square$). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 7: HANDLING AND STORAGE (continued)

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 94/9/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 °C

Maximum Temp.: 30 °C

Maximum time: 12 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

Identification	Environmental limits		
Dibutyltin Dilaurate	IOELV (8h)		
CAS: 77-58-7 EC: 201-039-8	IOELV (STEL)		
Xylene	IOELV (8h)	50 ppm	221 mg/m ³
CAS: 1330-20-7 EC: 215-535-7	IOELV (STEL)	100 ppm	442 mg/m ³
2-methoxy-1-methylethyl acetate	IOELV (8h)	50 ppm	275 mg/m ³
CAS: 108-65-6 EC: 203-603-9	IOELV (STEL)	100 ppm	550 mg/m ³

DNEL (Workers):

		Short e	xposure	Long e	xposure
Identification		Systemic	Local	Systemic	Local
Hexamethylene diisocyanate, oligomers	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 28182-81-2	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 931-274-8	Inhalation	Non-applicable	-14 - 16 mg/m ³	Non-applicable	-14,5 - 15,5 mg/m ³
Xylene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	165 - 195 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	274 - 304 mg/m ³	274 - 304 mg/m ³	62 - 92 mg/m ³	Non-applicable
N-butyl acetate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 123-86-4	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 204-658-1	Inhalation	945 - 975 mg/m ³	945 - 975 mg/m ³	465 - 495 mg/m ³	465 - 495 mg/m ³

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
2-methoxy-1-methylethyl acetate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 108-65-6	Dermal	Non-applicable	Non-applicable	138,5 - 168,5 mg/kg	Non-applicable
EC: 203-603-9	Inhalation	Non-applicable	Non-applicable	260 - 290 mg/m ³	Non-applicable
Dibutyltin Dilaurate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 77-58-7	Dermal	-14 - 16 mg/kg	Non-applicable	-14,8 - 15,2 mg/kg	Non-applicable
EC: 201-039-8	Inhalation	-14,93 - 15,07 mg/m ³	Non-applicable	-14,99 - 15,01 mg/m ³	Non-applicable

DNEL (General population):

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
Xylene	Oral	Non-applicable	Non-applicable	-13,4 - 16,6 mg/kg	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	93 - 123 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	Non-applicable	Non-applicable	-0,2 - 29,8 mg/m ³	Non-applicable
N-butyl acetate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 123-86-4	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 204-658-1	Inhalation	844,7 - 874,7 mg/m ³	844,7 - 874,7 mg/m ³	87,34 - 117,34 mg/m ³	87,34 - 117,34 mg/m ³
2-methoxy-1-methylethyl acetate	Oral	Non-applicable	Non-applicable	-13,33 - 16,67 mg/kg	Non-applicable
CAS: 108-65-6	Dermal	Non-applicable	Non-applicable	39,8 - 69,8 mg/kg	Non-applicable
EC: 203-603-9	Inhalation	Non-applicable	Non-applicable	18 - 48 mg/m ³	Non-applicable
Dibutyltin Dilaurate	Oral	-14,99 - 15,01 mg/kg	Non-applicable	-15 - 15 mg/kg	Non-applicable
CAS: 77-58-7	Dermal	-14,5 - 15,5 mg/kg	Non-applicable	-14,92 - 15,08 mg/kg	Non-applicable
EC: 201-039-8	Inhalation	-14,98 - 15,02 mg/m ³	Non-applicable	-15 - 15 mg/m ³	Non-applicable

PNEC:

Identification				
Hexamethylene diisocyanate, oligomers	STP	23,3 - 53,3 mg/L	Fresh water	-14,87 - 15,13 mg/L
CAS: 28182-81-2	Soil	53167 - 53197 mg/kg	Marine water	-14,99 - 15,01 mg/L
EC: 931-274-8	Intermittent	-13,73 - 16,27 mg/L	Sediment (Fresh water)	266685 - 266715 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	26655 - 26685 mg/kg
Xylene	STP	-8,42 - 21,58 mg/L	Fresh water	-14,67 - 15,33 mg/L
CAS: 1330-20-7	Soil	-12,69 - 17,31 mg/kg	Marine water	-14,67 - 15,33 mg/L
EC: 215-535-7	Intermittent	-14,67 - 15,33 mg/L	Sediment (Fresh water)	-2,54 - 27,46 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	-2,54 - 27,46 mg/kg
N-butyl acetate	STP	20,6 - 50,6 mg/L	Fresh water	-14,82 - 15,18 mg/L
CAS: 123-86-4	Soil	-14,91 - 15,09 mg/kg	Marine water	-14,98 - 15,02 mg/L
EC: 204-658-1	Intermittent	-14,64 - 15,36 mg/L	Sediment (Fresh water)	-14,02 - 15,98 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	-14,9 - 15,1 mg/kg
2-methoxy-1-methylethyl acetate	STP	85 - 115 mg/L	Fresh water	-14,37 - 15,64 mg/L
CAS: 108-65-6	Soil	-14,71 - 15,29 mg/kg	Marine water	-14,94 - 15,06 mg/L
EC: 203-603-9	Intermittent	-8,65 - 21,35 mg/L	Sediment (Fresh water)	-11,71 - 18,29 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	-14,67 - 15,33 mg/kg
Dibutyltin Dilaurate	STP	85 - 115 mg/L	Fresh water	-15 - 15 mg/L
CAS: 77-58-7	Soil	Non-applicable	Marine water	-15 - 15 mg/L
EC: 201-039-8	Intermittent	-15 - 15 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	-14,8 - 15,2 g/kg	Sediment (Marine water)	Non-applicable

- CONTINUED ON NEXT PAGE -

Date of compilation: 01/11/2012 Revised: 02/06/2017 Version: 6 (Replaced 5) **Page 5/14**

According to 1907/2006/EC (REACH), 2015/830/EU

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory respiratory tract protection	Filter mask for gases, vapours and particles	CAT III	EN 149:2001+A1:2009 EN 405:2001+A1:2009	Replace when an increase in resistence to breathing is observed and/or a smell or taste of the contaminant is detected.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	NON-disposable chemical protective gloves	CAT III	EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

[&]quot;As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Face shield	CATII	EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982- 1:2004/A1:2010 EN ISO 6529:2001 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
	ANSI Z358-1 ISO 3864-1:2002	(© +	DIN 12 899 ISO 3864-1:2002
Emergency shower		Eyewash stations	

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply): 50,29 % weight

V.O.C. density at 20 °C: 502,91 kg/m³ (502,91 g/L)

Average carbon number: 7,35

Date of compilation: 01/11/2012 Revised: 02/06/2017 Version: 6 (Replaced 5) **Page 6/14**

According to 1907/2006/EC (REACH), 2015/830/EU

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Average molecular weight: 112,07 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C:

Appearance:

Colour:

Colour:

Colour:

Solvent

Odour threshold: Non-applicable *

Volatility:

Boiling point at atmospheric pressure: 136 °C Vapour pressure at 20 °C: 812 Pa

Vapour pressure at 50 °C: 32,47 (4,33 kPa) Evaporation rate at 20 °C: Non-applicable *

Product description:

Density at 20 °C: $990 - 1010 \text{ kg/m}^3$ Relative density at 20 °C: 0,99 - 1,01 Dynamic viscosity at 20 °C: 39 - 19 cP Kinematic viscosity at 20 °C: 29 cSt

Kinematic viscosity at 40 °C: Non-applicable * Concentration: Non-applicable * pH: Non-applicable * Vapour density at 20 °C: Non-applicable * Partition coefficient n-octanol/water 20 °C: Non-applicable * Solubility in water at 20 °C: Non-applicable * Solubility properties: Immiscible Decomposition temperature: Non-applicable * Non-applicable * Melting point/freezing point: Explosive properties: Non-applicable * Oxidising properties: Non-applicable *

Flammability:

Flash Point: 27 °C

Flammability (solid, gas): Non-applicable *

Autoignition temperature: 315 °C

Lower flammability limit: Not available

Upper flammability limit: Not available

Explosive:

Lower explosive limit:

Upper explosive limit:

Non-applicable *

Non-applicable *

9.2 Other information:

Surface tension at 20 °C: Non-applicable *
Refraction index: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

Date of compilation: 01/11/2012 Revised: 02/06/2017 Version: 6 (Replaced 5) **Page 7/14**

According to 1907/2006/EC (REACH), 2015/830/EU

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION **

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
 - Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- B- Inhalation (acute effect):
 - Acute toxicity: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
 - Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Produces skin inflammation.
 - Contact with the eyes: Produces eye damage after contact.
- $\mbox{D-}\mbox{ CMR}$ effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.

 IARC: Xylene (3)
 - Mutagenicity: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with mutagenic effects. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.
- E- Sensitizing effects:
 - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
 - Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

Date of compilation: 01/11/2012 Revised: 02/06/2017 Version: 6 (Replaced 5) **Page 8/14**

^{**} Changes with regards to the previous version

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

F- Specific target organ toxicity (STOT) - single exposure:

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
 - Skin: Repeated exposure may cause skin dryness or cracking
- H- Aspiration hazard:

Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Ac	cute toxicity	Genus
Solvent naphtha (petroleum), light arom., < 0.1 % EC 200-753-7	LD50 oral	2100 mg/kg	Rat
CAS: 64742-95-6	LD50 dermal	2000 mg/kg	Rabbit
EC: 265-199-0	LC50 inhalation	>20 mg/L (4 h)	
N-butyl acetate	LD50 oral	12789 mg/kg	Rat
CAS: 123-86-4	LD50 dermal	14112 mg/kg	Rabbit
EC: 204-658-1	LC50 inhalation	23,4 mg/L (4 h)	Rat
Hexamethylene diisocyanate, oligomers	LD50 oral	5100 mg/kg	Rat
CAS: 28182-81-2	LD50 dermal	>2000 mg/kg	
EC: 931-274-8	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Xylene	LD50 oral	2100 mg/kg	Rat
CAS: 1330-20-7	LD50 dermal	1100 mg/kg (ATEi)	Rat
EC: 215-535-7	LC50 inhalation	11 mg/L (4 h) (ATEi)	
2-methoxy-1-methylethyl acetate	LD50 oral	8532 mg/kg	Rat
CAS: 108-65-6	LD50 dermal	5100 mg/kg	Rat
EC: 203-603-9	LC50 inhalation	30 mg/L (4 h)	Rat
Dibutyltin Dilaurate	LD50 oral	175 mg/kg	Rat
CAS: 77-58-7	LD50 dermal	>2000 mg/kg	
EC: 201-039-8	LC50 inhalation	>20 mg/L	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	Non-applicable
Dermal	3508,49 mg/kg (Calculation method)	0 %
Inhalation	13,86 mg/L (4 h) (Calculation method)	0 %

^{**} Changes with regards to the previous version

SECTION 12: ECOLOGICAL INFORMATION **

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Identification		Acute toxicity	Species	Genus
Xylene	LC50	13.5 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 1330-20-7	EC50	3.4 mg/L (48 h)	Ceriodaphnia dubia	Crustacean
EC: 215-535-7	EC50	10 mg/L (72 h)	Skeletonema costatum	Algae
N-butyl acetate	LC50	62 mg/L (96 h)	Leuciscus idus	Fish
CAS: 123-86-4	EC50	73 mg/L (24 h)	Daphnia magna	Crustacean
EC: 204-658-1	EC50	675 mg/L (72 h)	Scenedesmus subspicatus	Algae

^{**} Changes with regards to the previous version

Date of compilation: 01/11/2012 Revised: 02/06/2017 Version: 6 (Replaced 5) **Page 9/14**

⁻ CONTINUED ON NEXT PAGE -

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 12: ECOLOGICAL INFORMATION ** (continued)

Identification		Acute toxicity	Species	Genus
2-methoxy-1-methylethyl acetate	LC50	161 mg/L (96 h)	Pimephales promelas	Fish
CAS: 108-65-6	EC50	481 mg/L (48 h)	Daphnia sp.	Crustacean
EC: 203-603-9	EC50	Non-applicable		
Solvent naphtha (petroleum), light arom., < 0.1 % EC 200-753-7	LC50	1 - 10 mg/L (96 h)		Fish
CAS: 64742-95-6	EC50	1 - 10 mg/L		Crustacean
EC: 265-199-0	EC50	1 - 10 mg/L		Algae
Dibutyltin Dilaurate	LC50	0.1 - 1 mg/L (96 h)		Fish
CAS: 77-58-7	EC50	0.1 - 1 mg/L		Crustacean
EC: 201-039-8	EC50	0.1 - 1 mg/L		Algae

12.2 Persistence and degradability:

Identification	Degra	adability	Biodegradab	oility
Xylene	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 1330-20-7	COD	Non-applicable	Period	28 days
EC: 215-535-7	BOD5/COD	Non-applicable	% Biodegradable	88 %
N-butyl acetate	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 123-86-4	COD	Non-applicable	Period	5 days
EC: 204-658-1	BOD5/COD	0.79	% Biodegradable	84 %
2-methoxy-1-methylethyl acetate	BOD5	Non-applicable	Concentration	785 mg/L
CAS: 108-65-6	COD	Non-applicable	Period	8 days
EC: 203-603-9	BOD5/COD	Non-applicable	% Biodegradable	100 %
Solvent naphtha (petroleum), light arom., < 0.1 % EC 200 -753-7	BOD5	0.19 g O2/g	Concentration	Non-applicable
CAS: 64742-95-6	COD	0.44 g O2/g	Period	Non-applicable
EC: 265-199-0	BOD5/COD	0.43	% Biodegradable	Non-applicable
Dibutyltin Dilaurate	BOD5	0.00054 g O2/g	Concentration	100 mg/L
CAS: 77-58-7	COD	Non-applicable	Period	28 days
EC: 201-039-8	BOD5/COD	Non-applicable	% Biodegradable	50 %

12.3 Bioaccumulative potential:

Identification		umulation potential
Xylene	BCF	9
CAS: 1330-20-7	Pow Log	2.77
EC: 215-535-7	Potential	Low
N-butyl acetate	BCF	4
CAS: 123-86-4	Pow Log	1.78
EC: 204-658-1	Potential	Low
2-methoxy-1-methylethyl acetate	BCF	1
CAS: 108-65-6	Pow Log	0.43
EC: 203-603-9	Potential	Low
Solvent naphtha (petroleum), light arom., < 0.1 % EC 200-753-7	BCF	
CAS: 64742-95-6	Pow Log	4
EC: 265-199-0	Potential	
Dibutyltin Dilaurate	BCF	31
CAS: 77-58-7	Pow Log	3.12
EC: 201-039-8	Potential	Moderate

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Xylene	Koc	202	Henry	524,86 Pa·m³/mol
CAS: 1330-20-7	Conclusion	Moderate	Dry soil	Yes
EC: 215-535-7	Surface tension	Non-applicable	Moist soil	Yes
N-butyl acetate	Koc	Non-applicable	Henry	Non-applicable
CAS: 123-86-4	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 204-658-1	Surface tension	2,478E-2 N/m (25 °C)	Moist soil	Non-applicable

^{**} Changes with regards to the previous version

Date of compilation: 01/11/2012 Revised: 02/06/2017 Version: 6 (Replaced 5) **Page 10/14**

⁻ CONTINUED ON NEXT PAGE -

According to 1907/2006/EC (REACH), 2015/830/EU

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 12: ECOLOGICAL INFORMATION ** (continued)

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP3 Flammable, HP4 Irritant — skin irritation and eye damage, HP5 Specific Target Organ Toxicity (STOT) /Aspiration Toxicity, HP6 Acute Toxicity, HP13 Sensitising

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2017 and RID 2017:



14.1 UN number: UN1263

14.2 UN proper shipping name: PAINT RELATED MATERIAL

14.3 Transport hazard class(es): 3 Labels: 3

14.4 Packing group: III
14.5 Environmental hazards: No

14.6 Special precautions for user

Special regulations: 163, 367, 650

Tunnel restriction code: D/E

Physico-Chemical properties: see section 9 Limited quantities: 5 L

14.7 Transport in bulk according

to Annex II of Marpol and the IBC Code: Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 38-16:

- CONTINUED ON NEXT PAGE -

^{**} Changes with regards to the previous version

According to 1907/2006/EC (REACH), 2015/830/EU

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 14: TRANSPORT INFORMATION (continued)



14.1 UN number: UN1263

14.2 UN proper shipping name: PAINT RELATED MATERIAL

14.3 Transport hazard class(es): 3 Labels: 3

14.4 Packing group: III

14.5 Environmental hazards: No

14.6 Special precautions for user

Special regulations: 163, 223, 955, 367

EmS Codes: F-E, S-E
Physico-Chemical properties: see section 9

Limited quantities: 5 L

Segregation group: Non-applicable **1.7 Transport in bulk according** Non-applicable

14.7 Transport in bulk according Nonto Annex II of Marpol and

the IBC Code:

Transport of dangerous goods by air:

With regard to IATA/ICAO 2018:



14.1 UN number: UN1263

14.2 UN proper shipping name: PAINT RELATED MATERIAL

14.3 Transport hazard class(es): 3Labels: 314.4 Packing group: III

14.4 Packing group: III **14.5 Environmental hazards:** No

14.6 Special precautions for user

Physico-Chemical properties: see section 9 **14.7 Transport in bulk according** Non-applicable

to Annex II of Marpol and

the IBC Code:

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Contains Dibutyltin Dilaurate

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c		5000	50000

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

According to 1907/2006/EC (REACH), 2015/830/EU

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 15: REGULATORY INFORMATION (continued)

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- "whoopee" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs.
- stink bombs.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

'For professional users only'.

Shall not be used in:

- —ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- -tricks and iokes,
- —games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

New declared substances

Dibutyltin Dilaurate (77-58-7)

Texts of the legislative phrases mentioned in section 2:

- H317: May cause an allergic skin reaction
- H373: May cause damage to organs through prolonged or repeated exposure (Oral)
- H315: Causes skin irritation
- H412: Harmful to aquatic life with long lasting effects
- H335: May cause respiratory irritation
- H332: Harmful if inhaled
- H226: Flammable liquid and vapour
- H319: Causes serious eye irritation

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

According to 1907/2006/EC (REACH), 2015/830/EU

CRH43 CATALIZADOR RAPIDO UHS RAPID UHS HARDENER Solvent based Hardeners

SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled

Acute Tox. 4: H332 - Harmful if inhaled

Aquatic Acute 1: H400 - Very toxic to aquatic life

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways

Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 3: H226 - Flammable liquid and vapour

Muta. 2: H341 - Suspected of causing genetic defects Repr. 1B: H360 - May damage fertility or the unborn child

Skin Corr. 1C: H314 - Causes severe skin burns and eye damage

Skin Irrit. 2: H315 - Causes skin irritation

Skin Sens. 1: H317 - May cause an allergic skin reaction

STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure. (Oral) STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral)

STOT SE 1: H370 - Causes damage to organs STOT SE 3: H335 - May cause respiratory irritation STOT SE 3: H336 - May cause drowsiness or dizziness

Classification procedure:

Skin Sens. 1: Calculation method STOT RE 2: Calculation method Skin Irrit. 2: Calculation method Aquatic Chronic 3: Calculation method STOT SE 3: Calculation method Acute Tox. 4: Calculation method

Flam. Liq. 3: Calculation method (2.6.4.3)

Eye Irrit. 2: Calculation method

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand

BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration 50 EC50: Effective concentration 50

Log-POW: Octanol—water partition coefficient Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET
Date of compilation: 01/11/2012 Revised: 02/06/2017 Version: 6 (Replaced 5) Page 14/14