



Rubio Monocoat Accelerator - comp. B

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of issue: 29/09/2011 Revision date: 29/11/2018 Version: 3.3

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

1.1. Product identifier

Product form : Mixture
Trade name : Rubio Monocoat Accelerator - comp. B

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Consumer use, Professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Muylle Facon - Rubio Monocoat
Ambachtenstraat 58
8870 Izegem - Belgium
T +32 (0) 51 30 80 54 - F +32 (0) 51 30 99 78
info@muyllefacon.be - www.muyllefacon.be

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixtures/Substances: SDS EU 2015: According to Regulation (EU) 2015/830 (REACH Annex II)

Acute toxicity (inhal.), Category 4 H332
Skin sensitisation, Category 1 H317
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation H335
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

CLP Signal word : Warning
Hazardous ingredients : Hexamethylene diisocyanate oligomers
Hazard statements (CLP) : H332 - Harmful if inhaled.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.
Precautionary statements (CLP) : P102 - Keep out of reach of children.
P260 - Do not breathe mist, vapours.
P285 - In case of inadequate ventilation wear respiratory protection.
P280 - Wear protective clothing, protective gloves, eye protection, face protection.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P352 - If on skin: Wash with plenty of soap and water.
EUH-statements : EUH204 - Contains isocyanates. May produce an allergic reaction.

Scandinavian countries regulation

Denmark
MAL code : 0-3

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

Rubio Monocoat Accelerator - comp. B

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hexamethylene diisocyanate oligomers	(CAS-No.) 28182-81-2 (EC-No.) 931-274-8 (REACH-no) 01-2119485796-17	~ 100	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Sens. 1, H317 STOT SE 3, H335
1,6-diisocyanatohexane	(CAS-No.) 822-06-0 (EC-No.) 212-485-8 (EC Index-No.) 615-011-00-1 (REACH-no) 01-2119457571-37	< 0,1	Acute Tox. 4 (Oral), H302 Acute Tox. 2 (Inhalation), H330 Skin Corr. 1C, H314 Resp. Sens. 1, H334 Skin Sens. 1, H317

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If medical advice is needed, have product container or label at hand. Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
First-aid measures after eye contact	: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take victim to an ophtalmologist if irritation persists.
First-aid measures after ingestion	: Give nothing to drink. Do NOT induce vomiting. (Irritation of the stomach possible.) Ask for medical advice.

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

Symptoms/effects after skin contact	: Repeated exposure may cause sensitization due to an allergic reaction of the skin.
Symptoms/effects after eye contact	: Risk of serious damage to eyes.
Symptoms/effects after ingestion	: May cause lung damage if swallowed.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: On heating/burning: release of harmful gases/vapours. Combustible liquid.
-------------	---

5.3. Advice for firefighters

Protection during firefighting	: Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Avoid contact of substance with water. Use water moderately and if possible collect or contain it. Exercise caution when fighting any chemical fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Nitrile-rubber protective gloves.
Emergency procedures	: Do not get in eyes, on skin, or on clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment	: Self-contained breathing apparatus. Use personal protective equipment as required. Protective gloves. Safety glasses.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Do not allow water (or moist air) contact with this material. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.

Rubio Monocoat Accelerator - comp. B

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use personal protective equipment as required.

Hygiene measures : Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : The floor of the depot should be impermeable and designed to form a water-tight basin.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hexamethylene diisocyanate oligomers (28182-81-2)

DNEL/DMEL (Workers)

Acute - local effects, inhalation 1 mg/m³

Long-term - local effects, inhalation 0,5 mg/m³

PNEC (Water)

PNEC aqua (freshwater) 0,127 mg/l

PNEC aqua (marine water) 0,0127 mg/l

PNEC aqua (intermittent, freshwater) 1,27 mg/l

PNEC (Sediment)

PNEC sediment (freshwater) 0,2667 mg/kg dwt

PNEC (Soil)

PNEC soil 0,0532 mg/kg dwt

PNEC (STP)

PNEC sewage treatment plant 38,28 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Safety glasses. Gloves.

Hand protection:

Nitrile-rubber protective gloves

Eye protection:

In case of risky circumstances: safety glasses or face shield

Skin and body protection:

Use personal protective equipment as required. Protective clothing

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

Consumer exposure controls:

Avoid contact during pregnancy/while nursing.

Other information:

Do not eat, drink or smoke when using this product.

Rubio Monocoat Accelerator - comp. B

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: colourless.
Odour	: odourless.
Odour threshold	: No data available
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: < -20 °C
Freezing point	: No data available
Boiling point	: > 150 °C
Flash point	: > 160 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1,1 kg/l
Solubility	: Reacts with water.
Log Pow	: No data available
Viscosity, kinematic	: ≈ 545,455 mm²/s
Viscosity, dynamic	: ≈ 600 mPa·s 25°C
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: 0 g/l
-------------	---------

SECTION 10: Stability and reactivity

10.1. Reactivity

Avoid contact of substance with water. Reacts violently with water.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts violently with water.

10.4. Conditions to avoid

Direct sunlight.

10.5. Incompatible materials

alcohols. amines. bases.

10.6. Hazardous decomposition products

carbon oxides (CO and CO₂). nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Inhalation: Harmful if inhaled.

ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1,5 mg/l/4h

Hexamethylene diisocyanate oligomers (28182-81-2)

LD50 oral rat	> 2500 mg/kg OECD 423 (female)
LD50 dermal rat	> 2000 mg/kg OECD 402
LD50 dermal rabbit	> 2000 mg/kg

Rubio Monocoat Accelerator - comp. B

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

LC50 inhalation rat (Dust/Mist - mg/l/4h)	0,39 mg/l/4h OECD 403 (female)
---	--------------------------------

1,6-diisocyanatohexane (822-06-0)

LD50 oral rat	959 mg/kg bodyweight OECD 401
LD50 dermal rabbit	> 7000 mg/kg bodyweight OECD 402
LC50 inhalation rat (mg/l)	0,124 mg/l/4h OECD 403

Skin corrosion/irritation	: Not classified pH: Not applicable
Serious eye damage/irritation	: Not classified pH: Not applicable
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified

1,6-diisocyanatohexane (822-06-0)

NOAEC (inhalation, rat, gas, 90 days)	0,005 ppmv/6h/day
---------------------------------------	-------------------

Aspiration hazard	: Not classified
-------------------	------------------

Rubio Monocoat Accelerator - comp. B

Viscosity, kinematic	≈ 545,455 mm²/s
----------------------	-----------------

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product does not have any adverse effects on the aquatic organisms.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

Hexamethylene diisocyanate oligomers (28182-81-2)

LC50 fish 1	8,9 mg/l Brachydanio rerio
EC50 Daphnia 1	127 mg/l Daphnia magna (48h static / EU C.2)
EC50 other aquatic organisms 1	3828 mg/l Activated sludge, 3h, OECD 209 method
EC50 other aquatic organisms 2	> 1000 mg/l Scenedesmus subspicatus, 72h, DIN 38412
ErC50 (algae)	> 1000 mg/l Desmodesmus subspicatus (72h)

1,6-diisocyanatohexane (822-06-0)

EC50 other aquatic organisms 1	842 mg/l Bakterie (3h)
ErC50 (algae)	> 77,4 mg/l Desmodesmus subspicatus (72h)
NOEC chronic algae	11,7 mg/l Desmodesmus subspicatus (72h)

12.2. Persistence and degradability

Hexamethylene diisocyanate oligomers (28182-81-2)

Biodegradation	1 % (28 days)
----------------	---------------

1,6-diisocyanatohexane (822-06-0)

Persistence and degradability	Not readily biodegradable.
Biodegradation	42 % (28 days)

12.3. Bioaccumulative potential

Hexamethylene diisocyanate oligomers (28182-81-2)

BCF fish 1	3,2 mg/l
------------	----------

Rubio Monocoat Accelerator - comp. B

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

1,6-diisocyanatohexane (822-06-0)	
BCF fish 1	58 mg/l
Log Pow	1,08 (QSAR)
Bioaccumulative potential	Slightly bioaccumulative.

12.4. Mobility in soil

Hexamethylene diisocyanate oligomers (28182-81-2)	
Log Koc	7,8

1,6-diisocyanatohexane (822-06-0)	
Log Koc	5861

12.5. Results of PBT and vPvB assessment

Rubio Monocoat Accelerator - comp. B	
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	

Component	
Hexamethylene diisocyanate oligomers (28182-81-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
European List of Waste (LoW) code	: 08 05 01* - waste isocyanates

SECTION 14: Transport information

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

14.1. UN number	
UN-No.	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (ICAO)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable

14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
IATA	
Transport hazard class(es) (IATA)	: Not applicable
ADN	
Transport hazard class(es) (ADN)	: Not applicable
RID	
Transport hazard class(es) (RID)	: Not applicable

14.4. Packing group	
Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable

Rubio Monocoat Accelerator - comp. B

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:	
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Hexamethylene diisocyanate oligomers - 1,6-diisocyanatohexane
3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	Hexamethylene diisocyanate oligomers - 1,6-diisocyanatohexane

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0 g/l

Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) nwg, Non-hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
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
The requirements from the Danish Working Environment Authorities regarding work with epoxy resins and isocyanates must be observed during use and disposal

Rubio Monocoat Accelerator - comp. B

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
EUH204	Contains isocyanates. May produce an allergic reaction.

SDS EU (REACH Annex II)

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