Rubio Monocoat Oil Plus 2C - comp. B

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 21/03/2008 Revision date: 23/06/2017 : Version: 3.4

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

1.1. Product identifier

Product form : Mixture

Trade name : Rubio Monocoat Oil Plus 2C - 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]

Acute Tox. 4 (Inhalation)	H332
Skin Sens. 1	H317
STOT SE 3	H335

Full text of H-phrases: 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 victim to fresh air and keep at rest in a position comfortable for breathing
P302+P352 - IF ON SKIN: Wash with plenty of soap and water

EUH phrases : EUH204 - Contains isocyanates. May produce an allergic reaction

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. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Hexamethylene diisocyanate oligomers	(CAS No) 28182-81-2 (EC no) 931-274-8 (REACH-no) 01-2119485796-17	> 51	Xn; R20 Xi; R37 R43
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	< 0,5	T; R23 Xi; R36/37/38 R42 R43

Name	Product identifier	Specific concentration limits
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	(0,5 =< C < 2) Xn;R20 (C >= 0,5) R42/43 (C >= 2) T;R23

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	> 51	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	< 0,5	Acute Tox. 2 (Inhalation), H330 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317

Name	Product identifier	Specific concentration limits
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	(C >= 0,5) Resp. Sens. 1, H334 (C >= 0,5) Skin Sens. 1, H317

Full text of R- and H-phrases: 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/injuries after skin contact : Repeated exposure may cause sensitization due to an allergic reaction of the skin.

Symptoms/injuries after eye contact : Risk of serious damage to eyes.

Symptoms/injuries 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.

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

1,6-diisocyanatohexane (822-06-0)		
Belgium	Limit value (mg/m³)	0,034 mg/m³
Belgium	Limit value (ppm)	0,005 ppm
Netherlands	Grenswaarde TGG 8H (mg/m³)	0,04 mg/m³
Netherlands	Grenswaarde TGG 8H (ppm)	0,005 ppm
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	0,14 mg/m³
Netherlands	Grenswaarde TGG 15MIN (ppm)	0,02 ppm
United Kingdom	WEL TWA (mg/m³)	0,02 mg/m³
United Kingdom	WEL STEL (mg/m³)	0,07 mg/m³
USA - ACGIH	ACGIH TWA (ppm)	0,005 ppm
USA - ACGIH	ACGIH STEL (ppm)	0,005 ppm

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)	

Hexamethylene diisocyanate oligomers (28182-81-2)	
PNEC soil	0,0532 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	38,28 mg/l

1,6-diisocyanatohexane (822-06-0)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	0,07 mg/m³
Long-term - systemic effects, inhalation	0,035 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	> 0,0774 mg/l
PNEC aqua (marine water)	> 0,00774 mg/l
PNEC aqua (intermittent, freshwater)	0,774 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	13,34 mg/kg dwt
PNEC sediment (marine water)	1,33 mg/kg dwt
PNEC (Soil)	
PNEC soil	2,6 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	8,42 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

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.

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	:	No data available
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 (NOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation: Harmful if inhaled.

ATE CLP (gases)	4500,000 ppmv/4h
ATE CLP (vapours)	11,000 mg/l/4h
ATE CLP (dust,mist)	1,500 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
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

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) : Not classified

1,6-diisocyanatohexane (822-06-0)	
NOAEL (inhalation, rat, gas, 90 days)	0,005 ppmv/6h/day

Aspiration hazard : Not classified

Rubio Monocoat Oil Plus 2C - comp. B	
Viscosity, kinematic	545,45454545 mm²/s

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product does not have any adverse effects on the aquatic organisms.

Hexamethylene diisocyanate oligomers (28182-81-2)	
LC50 fishes 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

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 Oil Plus 2C - 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
1,6-diisocyanatohexane (822-06-0)	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

Not regulated for transport

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
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

14.6.1. Overland transport

Transport regulations (ADR)	:	Not applicable

14.6.2. Transport by sea

Transport regulations (IMDG)	:	Not applicable

14.6.3. Air transport

Transport regulations (IATA)	:	Not applicable

14.6.4. Inland waterway transport

Carriage prohibited (ADN)	:	No
Not subject to ADN	:	No

14.6.5. Rail transport

Transport regulations (RID)	:	Not applicable
Carriage prohibited (RID)	:	No

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

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
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	Rubio Monocoat Oil Plus 2C - comp. B - Hexamethylene diisocyanate oligomers - 1,6-diisocyanatohexane

Rubio Monocoat Oil Plus 2C - comp. B is not on the REACH Candidate List

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0 g/l

15.1.2. National regulations

Germany

Water hazard class (WGK) : nwg - Non-hazardous to water

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Resp. Sens. 1	Sensitisation — Respiratory, category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
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
R20	Harmful by inhalation
R23	Toxic by inhalation
R36/37/38	Irritating to eyes, respiratory system and skin
R37	Irritating to respiratory system
R42	May cause sensitization by inhalation
R43	May cause sensitisation by skin contact
T	Toxic
Xi	Irritant
Xn	Harmful.

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