

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : BICCS 2C PROJECT HARDENER
Revision date : 11-12-2021
Print date : 21-02-2023

Version (Revision) : 4.1.1 (4.1.0)

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

1.1 Product identifier

BICCS 2C PROJECT HARDENER

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

Paint/paint-related material for industrial/professional use (see technical documentation).

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

PearlPaint Group

Street : Larserpoortweg 20

Postal code/city : 8218 NK Lelystad

Telephone : +31 (0)32 0285353

Information contact : msds@pearlpaint.nl

1.4 Emergency telephone number

+31 (0)32 0285353 (Office hours 08:00 - 16:30 GMT +1) Outside office hours: call a Poison Center or doctor/physician.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Flam. Liq. 3 ; H226 - Flammable liquids : Category 3 ; Flammable liquid and vapour.

Acute Tox. 4 ; H332 - Acute toxicity (inhalative) : Category 4 ; Harmful if inhaled.

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.

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

STOT SE 3 ; H335 - STOT-single exposure : Category 3 ; May cause respiratory irritation.

STOT RE 2 ; H373 - STOT-repeated exposure : Category 2 ; May cause damage to organs through prolonged or repeated exposure.

Classification procedure

Calculation method.

2.2 Label elements

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

Hazard pictograms



Flame (GHS02) · Health hazard (GHS08) · Exclamation mark (GHS07)

Signal word

Warning

Hazard components for labelling

XYLENE ; CAS No. : 1330-20-7

HDI OLIGOMERS, BIURET ; CAS No. : 28182-81-2

HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0

Hazard statements

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : BICCS 2C PROJECT HARDENER
Revision date : 11-12-2021
Print date : 21-02-2023

Version (Revision) : 4.1.1 (4.1.0)

H226	Flammable liquid and vapour.
H373	May cause damage to organs through prolonged or repeated exposure.
H332	Harmful if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P312	Call a doctor if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Special rules for supplemental label elements for certain mixtures

EUH204	Contains isocyanates. May produce an allergic reaction.
--------	---

As from 24 August 2023 adequate training is required before industrial or professional use.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

XYLENE ; REACH No. : 01-2119488216-32 ; EC No. : 215-535-7; CAS No. : 1330-20-7

Weight fraction : $\geq 25 - < 50$ %
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 STOT RE 2 ; H373 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

HDI OLIGOMERS, BIURET ; REACH No. : 01-2119970543-34 ; EC No. : 931-274-8; CAS No. : 28182-81-2

Weight fraction : $\geq 25 - < 50$ %
Classification 1272/2008 [CLP] : Acute Tox. 4 ; H332 Skin Sens. 1 ; H317 STOT SE 3 ; H335 EUH204

2-METHOXY-1-METHYLETHYL ACETATE ; REACH No. : 01-2119475791-29 ; EC No. : 203-603-9; CAS No. : 108-65-6

Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 STOT SE 3 ; H336

HEXAMETHYLENE-DI-ISOCYANATE ; REACH No. : 01-2119457571-37 ; EC No. : 212-485-8; CAS No. : 822-06-0

Weight fraction : $\geq 0,1 - < 0,3$ %
Classification 1272/2008 [CLP] : Acute Tox. 3 ; H331 Resp. Sens. 1 ; H334 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 STOT SE 3 ; H335 EUH204

Specific Conc. Limits : Skin Sens. 1 ; H317: C $\geq 0,3$ %

Additional information

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : BICCS 2C PROJECT HARDENER
Revision date : 11-12-2021
Print date : 21-02-2023

Version (Revision) : 4.1.1 (4.1.0)

respiration. If unconscious place in recovery position and seek medical advice.

In case of skin contact

Change contaminated, saturated clothing. After contact with skin, wash immediately with plenty of water and soap. Clean with detergents. Avoid solvent cleaners.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam Carbon dioxide (CO₂) Extinguishing powder Sand Water mist

Unsuitable extinguishing media

Strong water jet

5.2 Special hazards arising from the substance or mixture

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

5.3 Advice for firefighters

Special protective equipment for firefighters

Cool endangered containers with water in case of fire. Do not allow run-off from fire-fighting to enter drains or water courses. Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment

Use personal protection equipment. Provide adequate ventilation. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Prevent spread over a wide area (e.g. by containment or oil barriers). Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean with detergents. Avoid solvent cleaners.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : BICCS 2C PROJECT HARDENER
Revision date : 11-12-2021
Print date : 21-02-2023

Version (Revision) : 4.1.1 (4.1.0)

Vapours can travel considerable distances to a source of ignition where they can ignite, flash back, or explode. Heating causes rise in pressure with risk of bursting. Provide earthing of containers, equipment, pumps and ventilation facilities. Avoid contact with skin and eyes. Inhalation of dust/particles Generation/formation of mist When using do not eat, drink, smoke, sniff.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Protect containers against damage. Keep only in the original container in a cool, well-ventilated place. Do not allow to enter into surface water or drains.

Requirements for storage rooms and vessels

Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. Remove all sources of ignition.

Further information on storage conditions

Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Only use containers specifically approved for the substance/product.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

XYLENE ; CAS No. : 1330-20-7

Limit value type (country of origin) : STEL (EC)

Limit value : 100 ppm / 442 mg/m³

Remark : H

Version : 08-06-2000

Limit value type (country of origin) : TWA (EC)

Limit value : 50 ppm / 221 mg/m³

Remark : H

Version : 08-06-2000

2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6

Limit value type (country of origin) : STEL (EC)

Limit value : 100 ppm / 550 mg/m³

Remark : H

Version : 08-06-2000

Limit value type (country of origin) : TWA (EC)

Limit value : 50 ppm / 275 mg/m³

Remark : H

Version : 08-06-2000

8.2 Exposure controls

Appropriate engineering controls

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Personal protection equipment

Eye/face protection

Eye glasses with side protection

Skin protection

Hand protection

Solvent-resistant protective gloves must be worn.

Suitable gloves type : Disposable gloves.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : BICCS 2C PROJECT HARDENER
Revision date : 11-12-2021
Print date : 21-02-2023

Version (Revision) : 4.1.1 (4.1.0)

Suitable material : NR (natural rubber, natural latex)
Required properties : liquid-tight.
Breakthrough time (maximum wearing time) : > 60 min
Thickness of the glove material : > 0,5 mm
Recommended glove articles : EN ISO 374

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values By spraying: air fed respirator. By other operations than spraying: in well ventilated areas, airfed respirators could be replaced by a combination of charcoal filter and particulate filter mask.

General information

Full-face mask or mouthpiece with particulate filter: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 15 times the exposure limit. P3 filter: up to a max. of

8.3 Additional information

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit) , suitable respiratory protection must be worn.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Liquid

Colour : transparent

Odour : solvent

Safety characteristics

Solidifying point :	(1013 hPa)	No data available
Melting point/freezing point :	(1013 hPa)	No data available
Freezing point :		No data available
Initial boiling point and boiling range :	(1013 hPa)	No data available
Decomposition temperature :	(1013 hPa)	No data available
Flash point :		26 °C
Auto-ignition temperature :		No data available
Lower explosion limit :		0,9 Vol-%
Density :	(20 °C)	0,982 g/cm ³
Solvent separation test :	(20 °C)	< 3 %
Water solubility :	(20 °C)	practically insoluble
pH :		not applicable
Viscosity :	(20 °C)	250 mPa*s
Solid content :		45,8 Wt %
Solvent content :		54,2 Wt %
Odour threshold :		No data available
Evaporation rate :		No data available
Vapourisation rate :		No data available
VOC-value :		532,5 g/l
Explosive properties :	No data available.	

9.2 Other information

None

SECTION 10: Stability and reactivity

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : BICCS 2C PROJECT HARDENER
Revision date : 11-12-2021
Print date : 21-02-2023

Version (Revision) : 4.1.1 (4.1.0)

10.1 Reactivity

No information available.

10.2 Chemical stability

No information available.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.5 Incompatible materials

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Acute oral toxicity

Parameter :	LD50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Oral
Species :	Rat
Effective dose :	8700 mg/kg
Parameter :	LD50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Oral
Species :	Rat
Effective dose :	8500 mg/kg
Parameter :	LD50 (HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0)
Exposure route :	Oral
Species :	Rat
Effective dose :	710 mg/kg

Acute dermal toxicity

Parameter :	LD50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	2000 mg/kg
Parameter :	LD50 (HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	570 mg/kg

Acute inhalation toxicity

Parameter :	LC50 (XYLENE ; CAS No. : 1330-20-7)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	6350 mg/l
Parameter :	LC50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	35,7 mg/l
Parameter :	LC50 (HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : BICCS 2C PROJECT HARDENER
Revision date : 11-12-2021
Print date : 21-02-2023

Version (Revision) : 4.1.1 (4.1.0)

Exposure route : Inhalation
Species : Mouse
Effective dose : 1570 mg/m³

11.2 Information on other hazards

No information available.

SECTION 12: Ecological information

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

12.8 Additional ecotoxicological information

Product may not be released into water without pre-treatment (biological sewage plant).

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

SECTION 14: Transport information

14.1 UN number

UN 1263

14.2 UN proper shipping name

Land transport (ADR/RID)

PAINT

Sea transport (IMDG)

PAINT

Air transport (ICAO-TI / IATA-DGR)

PAINT

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) : 3

Classification code : F1

Hazard identification number (Kemler) 30

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : BICCS 2C PROJECT HARDENER
Revision date : 11-12-2021
Print date : 21-02-2023

Version (Revision) : 4.1.1 (4.1.0)

No.) :
Tunnel restriction code : D/E
Special provisions : LQ 5 | · E 1
Hazard label(s) : 3
Sea transport (IMDG)
Class(es) : 3
EmS-No. : F-E / S-E
Special provisions : LQ 5 | · E 1
Hazard label(s) : 3
Air transport (ICAO-TI / IATA-DGR)
Class(es) : 3
Special provisions : E 1
Hazard label(s) : 3

14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID) : No
Sea transport (IMDG) : No
Air transport (ICAO-TI / IATA-DGR) : No

14.6 Special precautions for user

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

SECTION 15: Regulatory information

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

EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 3

Other regulations (EU)

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

This product meets the requirements of Regulation (EC) No. 1935/2004 on the limitation of VOC content.

15.2 Chemical safety assessment

No information available.

SECTION 16: Other information

16.1 Indication of changes

None

16.2 Abbreviations and acronyms

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road
ASTM = American Society of Testing and Materials (US)
CAS No = Chemical Abstracts Service Number (see ACS - American Chemical Society)
DNEL = Derived No-Effect Level
DT50 = Time for 50% loss; half-life
EbC50 = Median effective concentration (biomass, e.g. of algae)
EC50 = Median effective concentration
EINECS = European Inventory of Existing Commercial Substances

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : BICCS 2C PROJECT HARDENER
Revision date : 11-12-2021
Print date : 21-02-2023

Version (Revision) : 4.1.1 (4.1.0)

ELINCS = European List of Notified (New) Chemicals (see Tab 7, Background - Guide)
ErC50 = Median effective concentration (growth rate, e.g. of algae)
EWC = European Waste Catalogue
IATA = International Air Transport Association
IC50 = Concentration that produces 50% inhibition
IMDG = International Maritime Dangerous Goods Code
IMO = International Maritime Organization
LC50 = Concentration required to kill 50% of test organisms
LD50 = Dose required to kill 50% of test organisms
LEL = Lower Explosive Limit/Lower Explosion Limit
LOAEL = Lowest observed adverse effect level
MRL = Maximum Residue Limit
NOAEL = No Observed Adverse Effect Level
NOEC = No observed effect concentration
NOEL = No Observable Effect Level
OEL = Occupational Exposure Limits
PBT = Persistent, Bioaccumulative or Toxic
PNEC = Previsible Non Effect Concentration
STEL = Short-Term Exposure Limit
TWA = Time-Weighted Average
vPvB = Very Persistent and Very Bioaccumulative

16.3 Key literature references and sources for data

None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

16.6 Training advice

None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.