

Printing Date 10/17/2011 Revision Number 1 Reviewed on 10/17/2011

*

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

- · Product identifier
- · Trade name: Double Bubble Epoxy Very High Peel Strength Part A (04007)
- · Application of the substance / the preparation Adhesives
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Royal Adhesives And Sealants, LLC

2001 W. Washington Street

South Bend IN 46628-2023

- · Information department: Environment protection department.
- · Emergency telephone number: ChemTrec: UNITED STATES 1(800)424-9300 INTERNATIONAL 703-527-3887

*

2 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture: consisting of the following components.

· Dangerous components:			
25068-38-6	Epoxy Resin	♦ Н411; ♦ Н315; Н319; Н317	50-100%
1332-58-7	Kaolin		10-25%
7631-86-9	silicon dioxide, chemically prepared		≤2.5%

[·] Additional information: For the wording of the listed risk phrases refer to section 15.

.

3 Hazards identification

- · Classification of the substance or mixture
- *H411 Toxic to aquatic life with long lasting effects.*
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Irritant

Irritating to eyes and skin. May cause sensitisation by skin contact.

Dangerous for the environment

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- · Label elements
- · Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

· Code letter and hazard designation of product:

Irritant

Dangerous for the environment

· Hazard-determining components of labelling:

Epoxy Resin

(Contd. on page 2)

Printing Date 10/17/2011 Revision Number 1 Reviewed on 10/17/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part A (04007)

(Contd. of page 1)

· Risk phrases:

Irritating to eyes and skin.

May cause sensitisation by skin contact.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Safety phrases:

Keep out of the reach of children.

Avoid contact with skin and eyes.

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

Wear suitable gloves and eye/face protection.

If swallowed, seek medical advice immediately and show this container or label.

· Special labelling of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



2 Health = 2

1 *Fire* = 1

PHYSICAL HAZARD $\boxed{0}$ Physical Hazard = 0

4 First aid measures

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: Do not induce vomiting; immediately call for medical help.

5 Firefighting measures

· Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

Use fire fighting measures that suit the environment.

· Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

· Environmental precautions: Do not allow to enter sewers/ surface or ground water.

(Contd. on page 3)

Printing Date 10/17/2011 Revision Number 1 Reviewed on 10/17/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part A (04007)

(Contd. of page 2)

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Use only in well ventilated areas.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location away from direct heat.
- · Information about storage in one common storage facility:

Store away from oxidizing agents.

Store away from flammable substances.

· Further information about storage conditions:

Protect from heat and direct sunlight.

Keep receptacle tightly sealed.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Components with limit values that require monitoring at the workplace:

1332-58-7 Kaolin (10-25%)

PEL 15* 5** mg/m³

*total dust **respirable fraction

REL 10* 5** mg/m³

*total dust **respirable fraction

TLV 2* mg/m³

E; as respirable fraction

- · Additional information: The lists that were valid during the creation were used as basis.
- · Personal protective equipment (see listings below)
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not necessary if room is well-ventilated.
- · Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Material of gloves

Nitrile rubber, NBR

Chloroprene rubber, CR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 4)

Printing Date 10/17/2011 Revision Number 1 Reviewed on 10/17/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part A (04007)

(Contd. of page 3)

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Eye protection: Safety glasses with side shields.
- · Body protection: Protective work clothing

9 Physical and chemical properties

· General Information		
· Appearance:		
Form:	Liquid	
Color:	Beige	
· Odor:	Characteristic	
· Change in condition		
Melting point:	Undetermined.	
Boiling point:	Undetermined.	
· Flash point:	> 104°C (> 219 °F)	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Specific gravity at 20°C (68 °F): 1.35 g/cm³ (11.266 lbs/gal)		
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Solvent content:		
Organic solvents:	0.0 %	
VOC (Per EPA 24)	1.303 GMS/L	
Solids content:	100.0 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Aldehydes

11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Skin Contact Sensitization possible through skin contact.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

(Contd. on page 5)

Printing Date 10/17/2011 Revision Number 1 Reviewed on 10/17/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part A (04007)

Irritant

(Contd. of page 4)

*

12 Ecological information

- · Acquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

ı.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, ADR, IMDG, IATA	Void
Environmental hazards:	Product contains environmentally hazardous substances: Epoxy Resin
Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· UN ''Model Regulation'':	-

- US/

Printing Date 10/17/2011 Revision Number 1 Reviewed on 10/17/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part A (04007)

(Contd. of page 5)

15 Regulatory information

- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity:

None of the ingredients is listed.

· (DSL) Canada Dosmestic Substance List

All components of this product are on the DSL(Canada Domestic Substance list) or are exempt from DSL requirements.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

7631-86-9 silicon dioxide, chemically prepared

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

1332-58-7 Kaolin

A4

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard-determining components of labelling:

Epoxy Resin

· Risk phrases:

Irritating to eyes and skin.

May cause sensitisation by skin contact.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Special labeling of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.

(Contd. on page 7)

Printing Date 10/17/2011 Revision Number 1 Reviewed on 10/17/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part A (04007)

(Contd. of page 6)

- · National regulations:
- · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information

Although the information and recommendations set forth in this MSDS are presented in good faith and are believed to be correct as of the date of this MSDS, Royal Adhesives & Sealants makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Royal Adhesives & Sealants or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the MSDS.

- · Department issuing MSDS: Environment protection department.
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

USA



Printing Date 12/06/2011 Revision Number 2 Reviewed on 12/06/2011

1 Identification of the substance/mixture and of the company/undertaking
- Product identifier

- · Trade name: Double Bubble Epoxy Very High Peel Strength Part B (04007)
- · Application of the substance / the preparation Adhesives
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Royal Adhesives And Sealants, LLC

2001 W. Washington Street

South Bend IN 46628-2023

- · Information department: Environment protection department.
- · Emergency telephone number: ChemTrec: UNITED STATES 1(800)424-9300 INTERNATIONAL 703-527-3887

2 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture: consisting of the following components.

Dangerous (components:	
	Polyamide Resin	50-100%
1332-58-7	Kaolin	25-50%
	Aliphatic Amine ♦ H311; ♦ H314; H318; ♦ H317; H303; H402; H412	≤2.5%
	Amorphous Fumed Silica	≤2.5%
	Tertiary Amine ♦ H302; H315; H319	≤2.5%
13463-67-7	titanium dioxide H333	≤2.5%
1333-86-4	Carbon black	≤2.5%

[·] Additional information: For the wording of the listed risk phrases refer to section 15.

3 Hazards identification

· Classification of the substance or mixture

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H333 May be harmful if inhaled.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Irritant

May cause sensitisation by skin contact.

· Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- · Label elements
- · Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

(Contd. on page 2)

Printing Date 12/06/2011 Revision Number 2 Reviewed on 12/06/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part B (04007)

(Contd. of page 1)

The product has been classified and marked in accordance with directives on hazardous materials.

· Code letter and hazard designation of product:

Irritant

· Hazard-determining components of labelling:

Aliphatic Amine

· Risk phrases:

May cause sensitisation by skin contact.

· Safety phrases:

Keep out of the reach of children.

Avoid contact with skin.

Wear suitable gloves.

If swallowed, seek medical advice immediately and show this container or label.

Dispose of this material and its container to hazardous or special waste collection point.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



3 Health = 3

4 First aid measures

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not induce vomiting; immediately call for medical help.

5 Firefighting measures

· Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

Use fire fighting measures that suit the environment.

· Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

· Environmental precautions: Do not allow to enter sewers/ surface or ground water.

(Contd. on page 3)

Printing Date 12/06/2011 Revision Number 2 Reviewed on 12/06/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part B (04007)

(Contd. of page 2)

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Use only in well ventilated areas.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location away from direct heat.
- · Information about storage in one common storage facility:

Store away from flammable substances.

Store away from oxidizing agents.

· Further information about storage conditions:

Protect from heat and direct sunlight.

Keep receptacle tightly sealed.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Components with limit values that require monitoring at the workplace:

1332-58-7 Kaolin (25-50%)

PEL 15* 5** mg/m³

*total dust **respirable fraction

REL 10* 5** mg/m³

*total dust **respirable fraction

TLV 2* mg/m³

E; as respirable fraction

- · Additional information: The lists that were valid during the creation were used as basis.
- · Personal protective equipment (see listings below)
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not necessary if room is well-ventilated.
- · Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Material of gloves

Nitrile rubber, NBR

Chloroprene rubber, CR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)

Printing Date 12/06/2011 Revision Number 2 Reviewed on 12/06/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part B (04007)

(Contd. of page 3)

• Eye protection: Safety glasses with side shields. • Body protection: Protective work clothing

9 Physical and chemical properties

9 Physical and chemical properties		
· General Information · Appearance:		
Form:	Liquid	
Color:	Gray	
· Odor:	Amine-like	
· Change in condition		
Melting point:	Undetermined.	
Boiling point:	Undetermined.	
· Flash point:	> 96°C (> 205 °F)	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Specific gravity at 20°C (68 °F)	: 1.23 g/cm³ (10.264 lbs/gal)	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Solvent content:		
Organic solvents:	0.0 %	
VOC (Per EPA 24)	103.3 GMS/L	
Solids content:	33.8 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Incompatible materials: Reacts with strong oxidizing agents.
- · Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Nitrogen oxides

Ammonia

11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: Skin Contact Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

USA

Printing Date 12/06/2011 Revision Number 2 Reviewed on 12/06/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part B (04007)

(Contd. of page 4)

12 Ecological information

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Must be specially treated adhering to official regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

1 4 7		·	. •
14 Trans	nort in	orma	m
TT TIWIUS			uvu

HN.	.Numher	

· DOT, ADR, ADN, IMDG, IATA Void

· UN proper shipping name

· DOT, ADR, ADN, IMDG, IATA Void

· Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA

· Class Void

· Packing group

· DOT, ADR, IMDG, IATA Void

· Special precautions for user Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· UN ''Model Regulation'':

15 Regulatory information

- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

(Contd. on page 6)

Printing Date 12/06/2011 Revision Number 2 Reviewed on 12/06/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part B (04007)

(Contd. of page 5) · Proposition 65 · Chemicals known to cause cancer: None of the ingredients is listed. · Chemicals known to cause reproductive toxicity: None of the ingredients is listed. · (DSL) Canada Dosmestic Substance List All components of this product are on the DSL(Canada Domestic Substance list) or are exempt from DSL requirements. · Cancerogenity categories · EPA (Environmental Protection Agency) None of the ingredients is listed. · IARC (International Agency for Research on Cancer) 13463-67-7 titanium dioxide 2B1333-86-4 Carbon black 2B · NTP (National Toxicology Program) None of the ingredients is listed. · TLV (Threshold Limit Value established by ACGIH) 1332-58-7 Kaolin *A4* 13463-67-7 titanium dioxide A41333-86-4 Carbon black A4· MAK (German Maximum Workplace Concentration) 13463-67-7 titanium dioxide *3A* 1333-86-4 Carbon black · NIOSH-Ca (National Institute for Occupational Safety and Health)

3B

13463-67-7 titanium dioxide 1333-86-4 Carbon black

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Product related hazard informations:

Observe the general safety regulations when handling chemicals.

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard-determining components of labelling:

Aliphatic Amine

· Risk phrases:

May cause sensitisation by skin contact.

- · National regulations:
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information

(Contd. on page 7)

Printing Date 12/06/2011 Revision Number 2 Reviewed on 12/06/2011

Trade name: Double Bubble Epoxy Very High Peel Strength Part B (04007)

(Contd. of page 6)

Although the information and recommendations set forth in this MSDS are presented in good faith and are believed to be correct as of the date of this MSDS, Royal Adhesives & Sealants makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Royal Adhesives & Sealants or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the MSDS.

- · Department issuing MSDS: Environment protection department.
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

US/