

optima

SAFETY DATA SHEET	Revision Date: 03.02.2017
	Print Date: 01.03.2017
	SDS Number: 000000233633
PANEL BONDER ADHESIVE - PART B	Version: 2.0

Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_GB

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

1.1 Product identifier

Trade name : PANEL BONDER ADHESIVE - PART B

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

Recommended use : Adhesives

1.3 Details of the supplier of the safety data sheet LKQ Coatings Newberry House, Michigan Drive Tongwell, Milton Keynes MK15 8HQ optimaproducts@lkqcoatings.com	1.4 Emergency telephone number 01908 611117 Product Information 01908 611117
--	---

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin corrosion, Category 1B H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Hazard pictograms :



Signal word :

Danger

Hazard statements :

 H314
H317

 Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Precautionary statements :

Prevention:
P261

 Avoid breathing dust/ fume/ gas/ mist/
vapours/ spray.

P280

 Wear protective gloves/ protective clothing/
eye protection/ face protection.

Response:

 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do
NOT induce vomiting.

 P303 + P361 + P353 IF ON SKIN (or hair): Take off
immediately all contaminated clothing.
Rinse skin with water/shower.

 P304 + P340 + P310 IF INHALED: Remove person to fresh
air and keep comfortable for breathing.
Immediately call a POISON
CENTER/doctor.

 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously
with water for several minutes. Remove
contact lenses, if present and easy to do.
Continue rinsing. Immediately call a
POISON CENTER/doctor.

Hazardous components which must be listed on the label:

3,3'-Oxybis(ethyleneoxy)bis(propylamine)

2-Ethyl-4-methylimidazole

2-Methylpentane-1,5-diamine

Bis(dimethylamino)methyl]phenol

2.3 Other hazards

Additional advice

No information available.

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

SECTION 3: Composition/information on ingredients
3.2 Mixtures
Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
3,3'- Oxybis(ethyleneoxy)bis (propylamine)	4246-51-9 224-207-2	Skin Corr.1B; H314 Eye Dam.1; H318 Skin Sens.1; H317	>= 10,00 - < 15,00
2,4,6- Tris(dimethylaminomet hyl)phenol	90-72-2 202-013-9	Acute Tox.4; H302 Skin Irrit.2; H315 Eye Irrit.2; H319 Aquatic Chronic3; H412	>= 5,00 - < 10,00
2-Ethyl-4- methylimidazole	931-36-2 213-234-5	Acute Tox.4; H302 Skin Irrit.2; H315 Eye Dam.1; H318 Skin Sens.1B; H317	>= 2,50 - < 3,00
2-Methylpentane-1,5- diamine	15520-10-2 239-556-6	Acute Tox.4; H302 Acute Tox.4; H332 Acute Tox.4; H312 Skin Corr.1A; H314 Eye Dam.1; H318 STOT SE3; H335	>= 1,00 - < 2,50
Bis[(dimethylamino)met hyl]phenol	71074-89-0 275-162-0	Skin Corr.1B; H314 Eye Dam.1; H318	>= 1,00 - < 2,50
4-Methylimidazole	822-36-6 212-497-3	Acute Tox.4; H302 Acute Tox.3; H311 Skin Corr.1; H314 Eye Dam.1; H318 Carc.2; H351 STOT SE3; H335	>= 0,10 - < 0,50
Substances with a workplace exposure limit :			
Silica, vitreous	60676-86-0 262-373-8		>= 10,00 - < 15,00

For explanation of abbreviations see section 16.

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
Keep patient warm and at rest.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
If on skin, rinse well with water.
Wash contaminated clothing before re-use.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
- If swallowed : Get medical attention immediately.
Do NOT induce vomiting.
Rinse mouth with water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
stomach or intestinal upset (nausea, vomiting, diarrhea)
irritation (nose, throat, airways)
- Risks : May cause an allergic skin reaction.
Causes serious eye damage.
Causes severe burns.

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No hazards which require special first aid measures.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Water spray
Foam
Carbon dioxide (CO₂)
Dry chemical

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release.

Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : carbon dioxide and carbon monoxide
Nitrogen oxides (NO_x)

Ammonia
formaldehyde
nitrogen oxides (NO_x)
acid vapors
carboxylic acids

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Specific extinguishing methods : Product is compatible with standard fire-fighting agents.

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
 Ensure adequate ventilation.
 Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
 Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
 Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For further information see Section 8 and Section 13 of the safety data sheet.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.
 Do not smoke.
 Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
 Container hazardous when empty.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Wash hands before breaks and at the end of workday. When using do not eat or drink. Ensure that eyewash stations and safety showers are close to the workstation location. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Observe label precautions.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Silica, vitreous	60676-86-0	TWA (Respirable dust)	0,08 mg/m ³ Respirable dust	GB EH40

8.2 Exposure controls

Engineering measures

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Eye protection : Wear chemical splash goggles and face shield when there is potential for exposure of the eyes or face to liquid, vapor or mist.
Maintain eye wash station in immediate work area.

Hand protection

Remarks : Nitrile rubber

The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection

: Wear as appropriate:
Impervious clothing
Chemical resistant apron
Safety shoes
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Discard gloves that show tears, pinholes, or signs of wear.

Respiratory protection

: In the case of vapour formation use a respirator with an approved filter.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : viscous

Colour : tan

Odour : very faint, amine-like

Odour Threshold : No data available

pH :
No data available

Melting point/freezing point : No data available

Boiling point/boiling range : 132,5 °C
(1,333333 hPa)
Calculated Phase Transition Liquid/Gas

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Flash point : > 93,4 °C
 Method: Seta closed cup

Evaporation rate : 1
 Ethyl Ether

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : < 10 hPa (20 °C)

Relative vapour density : > 1
 (Air = 1.0)

Relative density : 1,13 (25 °C)

Density : 1,13 g/cm³ (20 °C)

Solubility(ies)
 Water solubility : practically insoluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Decomposition temperature : No data available

Viscosity
 Viscosity, dynamic : No data available

Viscosity, kinematic : > 10000 mm²/s (40 °C)

Oxidizing properties : No data available

9.2 Other information

No data available

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

SECTION 10: Stability and reactivity**10.1 Reactivity**

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Product will not undergo hazardous polymerization.

10.4 Conditions to avoidConditions to avoid : excessive heat
Exposure to moisture**10.5 Incompatible materials**Materials to avoid : Acids
fluorides
Oxidizing agents
Strong bases
Peroxides**10.6 Hazardous decomposition products**Hazardous decomposition products : carbon dioxide and carbon monoxide
carboxylic acids
Hydrogen cyanide (hydrocyanic acid)
Nitrogen oxides (NOx)
Ammonia
nitrogen oxides

SECTION 11: Toxicological information**11.1 Information on toxicological effects**Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion**Acute toxicity**

Not classified based on available information.

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Components:

3,3'-Oxybis(ethyleneoxy)bis(propylamine)

Acute oral toxicity : LD50 (Rat): ca. 3.160 mg/kg

Acute dermal toxicity : LD50 (Rabbit): Estimated > 2.500 mg/kg

 LD50 (Rat): > 2.150 mg/kg
 Method: OECD Test Guideline 402

Components:

2,4,6-Tris(dimethylaminomethyl)phenol

Acute oral toxicity : LD50 (Rat): 2.169 mg/kg

Method: OECD Test Guideline 401

Components:

2-Ethyl-4-methylimidazole

Acute oral toxicity : LD50 (Rat): ca. 731 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 0,03 mg/l

Exposure time: 8 h

Method: OECD Test Guideline 403

Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

Acute dermal toxicity : LD50 (Rabbit): > 400 mg/kg

Method: OECD Test Guideline 402

Assessment: No adverse effect has been observed in acute dermal toxicity tests.

Components:

2-Methylpentane-1,5-diamine

Acute oral toxicity : LD50 (Rat, male): 1.690 mg/kg

Method: OECD Test Guideline 401

GLP: no

Acute inhalation toxicity : LC50 (Rat, male and female): 4,9 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): 1.870 mg/kg

Method: OECD Test Guideline 402

GLP: no

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Remarks: Information given is based on data obtained from similar substances.

Components:

4-Methylimidazole

Acute oral toxicity : LD50 (Rat): 350 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 440 mg/kg

Skin corrosion/irritation

Causes severe burns.

Product:

Remarks: May cause skin irritation in susceptible persons., Causes severe skin burns and eye damage.

Components:

3,3'-Oxybis(ethyleneoxy)bis(propylamine)

Result: Corrosive to skin

2,4,6-Tris(dimethylaminomethyl)phenol

Result: Corrosive after 1 to 4 hours of exposure

2-Ethyl-4-methylimidazole

Result: Irritating to skin.

2-Methylpentane-1,5-diamine

Species: Rabbit

Method: OECD Test Guideline 404

Result: Corrosive after 3 minutes or less of exposure

Bis(dimethylamino)methylphenol

Result: Corrosive to skin

4-Methylimidazole

Result: Corrosive to skin

Silica, vitreous

Result: Slight, transient irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks: May cause irreversible eye damage.

Components:

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

3,3'-Oxybis(ethyleneoxy)bis(propylamine)

Result: **Corrosive**

2,4,6-Tris(dimethylaminomethyl)phenol

Result: **Corrosive**

2-Ethyl-4-methylimidazole

Result: **Corrosive**

2-Methylpentane-1,5-diamine

Species: **Rabbit**

Result: **Corrosive**

Bis[(dimethylamino)methyl]phenol

Result: **Corrosive**

4-Methylimidazole

Result: **Corrosive**

Silica, vitreous

Result: Slight, transient irritation

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

Product:

Remarks: May cause allergic skin reaction.

Components:

3,3'-Oxybis(ethyleneoxy)bis(propylamine)

Assessment: **May cause sensitisation by skin contact.**

2-Ethyl-4-methylimidazole

Assessment: **The product is a skin sensitiser, sub-category 1B.**

Method: **Local lymph node assay**

2-Methylpentane-1,5-diamine

Species: **Guinea pig**

Assessment: **Did not cause sensitisation on laboratory animals.**

Germ cell mutagenicity

Not classified based on available information.

Components:

2-Ethyl-4-methylimidazole

Genotoxicity in vitro : Test Type: **Ames test**

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Result: **negative**

2-Methylpentane-1,5-diamine

Genotoxicity in vitro : Test Type: **Chromosome aberration test in vitro**
 Test species: **Human lymphocytes**
 Metabolic activation: **with and without metabolic activation**
 Method: **OECD Test Guideline 473**
 Result: **negative**
 GLP: **yes**

: Test species: **mouse lymphoma cells**
 Metabolic activation: **with and without metabolic activation**
 Method: **OECD Test Guideline 476**
 Result: **negative**
 GLP: **yes**

Genotoxicity in vivo : Test Type: **In vivo micronucleus test**
 Test species: **Mouse (male and female)**
 Application Route: **inhalation (dust/mist/fume)**
 Method: **OECD Test Guideline 474**
 Result: **negative**
 GLP: **yes**
 Remarks: **Information given is based on data obtained from similar substances.**

4-Methylimidazole

Genotoxicity in vitro : Test Type: **Ames test**
 Test species: **Salmonella typhimurium**
 Result: **negative**

Genotoxicity in vivo : Test Type: **In vivo micronucleus test**
 Test species: **Rat**
 Result: **negative**

Germ cell mutagenicity-Assessment : **Not mutagenic in Ames Test**

Carcinogenicity

Not classified based on available information.

Components:

4-Methylimidazole

Carcinogenicity - Assessment : **Limited evidence of carcinogenicity in animal studies**

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Reproductive toxicity

Not classified based on available information.

Components:

4-Methylimidazole

Effects on fertility : Species: **Rat, male**
 Application Route: **Oral**
 Dose: **2500 parts per million**
 Symptoms: **Reduced fertility**

STOT - single exposure

Not classified based on available information.

Components:

2-Methylpentane-1,5-diamine

Exposure routes: **Inhalation**
 Target Organs: **Respiratory Tract**
 Assessment: **May cause respiratory irritation.**

4-Methylimidazole

Exposure routes: **inhalation (dust/mist/fume)**
 Target Organs: **Respiratory system**
 Assessment: **May cause respiratory irritation.**

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

Components:

Silica, vitreous
 Remarks: Lung

SECTION 12: Ecological information

12.1 Toxicity

Components:

3,3'-Oxybis(ethyleneoxy)bis(propylamine)

Toxicity to fish : **LD50 (Leuciscus idus (Golden orfe)): > 1.000 mg/l**
 Exposure time: **96 h**

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Test Type: **static test**
 Test substance: **Neutralised product**
 Method: **DIN 38412**

Toxicity to daphnia and other aquatic invertebrates : **EC50 (Daphnia magna (Water flea)): 218,16 mg/l**
 Exposure time: **48 h**
 Test Type: **static test**
 Method: **Directive 67/548/EEC, Annex V, C.2.**

2,4,6-Tris(dimethylaminomethyl)phenol

Toxicity to fish : **LC50 (Oncorhynchus mykiss (rainbow trout)): > 180 - < 240 mg/l**
 Exposure time: **96 h**
 Test Type: **static test**

Toxicity to algae : **EC50 (Desmodesmus subspicatus (green algae)): 84 mg/l**
 End point: **Growth inhibition**
 Exposure time: **72 h**

2-Ethyl-4-methylimidazole

Toxicity to fish : **LC50 (Leuciscus idus (Golden orfe)): 68,1 mg/l**
 Exposure time: **96 h**
 Remarks: **Mortality**

Toxicity to daphnia and other aquatic invertebrates : **EC50 (Daphnia magna (Water flea)): 297 mg/l**
 Exposure time: **48 h**
 Test Type: **static test**

Toxicity to algae : **EC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): 124,8 mg/l**
 Exposure time: **72 h**
 Test Type: **static test**

2-Methylpentane-1,5-diamine

Toxicity to fish : **LC50 (Leuciscus idus (Golden orfe)): 130 mg/l**
 Exposure time: **48 h**
 Test Type: **static test**
 Method: **OECD Test Guideline 203**
 GLP: **yes**

Toxicity to daphnia and other aquatic invertebrates : **EC50 (Daphnia magna (Water flea)): 50 mg/l**
 Exposure time: **48 h**
 Test Type: **static test**
 Method: **EPA-660/3-75-009**
 Remarks: **Information given is based on data obtained from**

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

similar substances.

Toxicity to algae : **EC50 (Pseudokirchneriella subcapitata (green algae))**: > 100 mg/l
 Exposure time: 72 h
 Test Type: static test
 Method: OECD Test Guideline 201
 Remarks: Information given is based on data obtained from similar substances.

NOEC (Pseudokirchneriella subcapitata (green algae)): 10 mg/l
 Exposure time: 72 h
 Test Type: static test
 Method: OECD Test Guideline 201
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to bacteria : **EC20 (Pseudomonas putida)**: 30 mg/l
 End point: Growth rate
 Exposure time: 18 h
 Test Type: Static

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : **NOEC**: 4,16 mg/l
 Exposure time: 21 d
 End point: Reproduction Test
 Species: Daphnia magna (Water flea)
 Test Type: semi-static test
 Method: OECD Test Guideline 211
 GLP: yes
 Remarks: Information given is based on data obtained from similar substances.

4-Methylimidazole

Toxicity to fish : **EC50 (Leuciscus idus (Golden orfe))**: 34 mg/l
 Exposure time: 96 h
 Remarks: Mortality

Toxicity to daphnia and other aquatic invertebrates : **EC50 (Daphnia magna (Water flea))**: 180 mg/l
 Exposure time: 48 h

Toxicity to algae : **EC50 (Desmodesmus subspicatus (green algae))**: 2 mg/l
 Exposure time: 72 h

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

12.2 Persistence and degradability

Components:

3,3'-Oxybis(ethyleneoxy)bis(propylamine)

Biodegradability : Result: **Not readily biodegradable.**
 Biodegradation: **< 10 %**
 Exposure time: **60 d**
 Method: **OECD Test Guideline 301B**

2,4,6-Tris(dimethylaminomethyl)phenol

Biodegradability : Result: **Not readily biodegradable.**
 Biodegradation: **4 %**
 Exposure time: **28 d**
 Method: **OECD Test Guideline 301D**

2-Ethyl-4-methylimidazole

Biodegradability : Biodegradation: **90 %**
 Exposure time: **28 d**
 Remarks: **Readily biodegradable**

2-Methylpentane-1,5-diamine

Biodegradability : Result: **Readily biodegradable.**
 Biodegradation: **100 %**
 Exposure time: **28 d**
 Method: **OECD Test Guideline 301D**
 GLP: **yes**

4-Methylimidazole

Biodegradability : Result: **Readily biodegradable.**
 Remarks: **Information given is based on data obtained from similar substances.**

12.3 Bioaccumulative potential

Components:

2-Ethyl-4-methylimidazole

Partition coefficient: n-octanol/water : log Pow: **1,13**

2-Methylpentane-1,5-diamine

Partition coefficient: n-octanol/water : log Pow: **<= 1 (25 °C)**
 pH: **9**
 GLP: **yes**

4-Methylimidazole

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Bioaccumulation : Remarks: **The product may be accumulated in organisms.**

Partition coefficient: n-octanol/water : log Pow: **0,23**

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

Product:

Additional ecological information : No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number

ADR: UN3267

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: UN3267

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: UN3267

INTERNATIONAL MARITIME DANGEROUS GOODS: UN3267

optima

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

RID: UN3267

14.2 UN proper shipping name

ADR: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (ALIPHATIC AMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Corrosive liquid, basic, organic, n.o.s. (ALIPHATIC AMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Corrosive liquid, basic, organic, n.o.s. (ALIPHATIC AMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

INTERNATIONAL MARITIME DANGEROUS GOODS: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (ALIPHATIC AMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

RID: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (ALIPHATIC AMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

14.3 Transport hazard class(es)

ADR: 8

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: 8

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: 8

INTERNATIONAL MARITIME DANGEROUS GOODS: 8

RID: 8

14.4 Packing group

ADR: III

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: III

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: III

INTERNATIONAL MARITIME DANGEROUS GOODS: III

RID: III

14.5 Environmental hazards

ADR: Not applicable

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not applicable

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not applicable

INTERNATIONAL MARITIME DANGEROUS GOODS: Not applicable

RID: Not applicable

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

Ship Type: Not applicable
 Hazard code(s): Not applicable
 Pollutant Category: Not applicable

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15: Regulatory information

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

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Cristobalite

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
 Not applicable

Other regulations : Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work.

The components of this product are reported in the following inventories:

DSL : This product contains one or several components that are not

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

	on the Canadian DSL and have annual quantity limits.
AICS	On the inventory, or in compliance with the inventory
ENCS	Not in compliance with the inventory
KECI	On the inventory, or in compliance with the inventory
PICCS	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory
TSCA	On TSCA Inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Further information

Revision Date: 03.02.2017

Classification procedure:

H314	Causes severe skin burns and eye damage.	Calculation method
H318	Causes serious eye damage.	Calculation method
H317	May cause an allergic skin reaction.	Calculation method

Full text of H-Statements

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

optima

SAFETY DATA SHEET	Revision Date: 03.02.2017
	Print Date: 01.03.2017
	SDS Number: 000000233633
PANEL BONDER ADHESIVE - PART B	Version: 2.0

H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H412	Harmful to aquatic life with long lasting effects.

Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Sources of key data used to compile the Safety Data Sheet

Internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

SAFETY DATA SHEET

Revision Date: 03.02.2017

Print Date: 01.03.2017

SDS Number: 000000233633

PANEL BONDER ADHESIVE - PART B

Version: 2.0

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

ABM : Water Hazard Class for the Netherlands

ADR : Agreement concerning the International Carriage of Dangerous Goods by Road.

ADNR: Regulation for the Carriage of Dangerous Substances on the Rhine

CLP : Classification, Labelling and Packaging

CSA : Chemical Safety Assessment

CSR : Chemical Safety Report

DNEL : Derived No Effect Level.

EINECS : European Inventory of Existing Commercial Chemical Substances.

ELINCS : European List of Notified Chemical Substances

PEC : Predicted Effect Concentration

PEL : Permissible Exposure Limits

PNEC : Predicted No Effect Concentration

R-phrase : Risk phrase

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

RID : Regulation Concerning the International Transport of Dangerous Goods by Rail

S-phrase: Safety phrase

WGK : German Water Hazard Class