


## MATERIALS SAFETY DATA SHEET

 <p>bonding people fixing problems</p> <p><b>INNOVA</b> solutions</p>	MSDS No:	<b>014</b>	Issue No:	<b>1</b>
	Issue Date:	<b>14/01/14</b>		
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<b>PRODUCT</b>	<b>NovaBond Surface Primer</b>			

### COMPOSITION / INFORMATION OF INGREDIENTS

**Substance:**

Preparation

Chemical nature: Solution of organic titanate

Components contributing to the hazard: 2-Propanol (CAS: 67-63-0) :&gt; 90%

EEC Classification: Xi; R; 36-67

### INFORMATION TO INGREDIENTS

**Possible hazards:**

Most important Hazards

Adverse human health effects : Irritating to eyes

Slightly irritating to respiratory system

slightly irritating to skin

Main symptoms

: may have a narcotic effect

Physical and chemical hazards

- Fire or explosion

: Volatile liquid- very flammable

- Further hazards

: Violent reactions may occur on contact with

Certain chemicals. (Refer to the list of incompatible materials section 10: "Stability-Reactivity").

Classification/Specific hazards

: According to EEC criteria, this product is classified as:  
HIGHLY FLAMMABLE and IRRITANT.

### FIRST AID

**Inhalation:**

Move the affected person away from the contaminated area into fresh air. If the person feels unwell: Call a doctor immediately

**Skin contact:**

Immediately remove contaminated clothing or footwear. Wash immediately with plenty of soap and water.


**Eye contact:**

Immediately rinse with water for a prolonged period whilst keeping the eyes wide open. If irritation persists, consult an eye specialist.

**Ingestion:**

Never attempt to induce vomiting. Call a doctor immediately.

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### FIRE FIGHTING MEASURES

**Extinguishing Media:**

Powder, foam, pulverized water, carbon dioxide (CO)

**Not Suitable:**

Strong water jet

**Protection of Fire Fighters / Explosion Hazards:**

Very flammable, during combustion: toxic gases are released  
Cool down the containers/equipment exposed to heat with water spray Self-contained breathing apparatus

### ACCIDENTAL RELEASE MEASURES

- |                            |                                                                                                                                                                                                                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions       | : no flames, no sparks. Eliminate all sources of ignition.<br>Do not breathe vapours.<br>For further information refer to section 8 "Exposure controls / Personal protection."<br>Mechanically ventilate the spillage area, whilst avoiding the Formation of explosive concentrations. |
| Environmental precautions  | : For large spillage, contain the spillage by bunding.<br>Don not discharge into drains or rivers.                                                                                                                                                                                     |
| Methods for cleaning up    | : Collect up the product and place it in a spare container :<br>"Suitably labelled "Tightly closed. Use flame-proof equipment                                                                                                                                                          |
| - Recovery                 | : Absorb non-recoverable liquid with: " dry sand or inert absorbent"                                                                                                                                                                                                                   |
| - Neutralization           | : Then wash the floor with plenty of water                                                                                                                                                                                                                                             |
| - Cleaning/Decontamination | : Incinerate contaminated materials at an authorized installation                                                                                                                                                                                                                      |
| - Disposal                 |                                                                                                                                                                                                                                                                                        |

### HANDLING AND STORAGE


**Handling:**

- |                    |                                                                                                                                                  |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Technical measures | : Vapour extraction.<br>Material and equipment suitable for use under explosive conditions.<br>Earth the equipment used to transfer the product. |
| Measures           | : Prevent the buildup of electrostatic charge. Do NOT use compressed air to transfer, discharge or transport the product.                        |

**Storage:**

- |                    |                                                     |
|--------------------|-----------------------------------------------------|
| Technical measures | : Ensure that there is a suitable retention system. |
|--------------------|-----------------------------------------------------|

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### Storage conditions

- Recommended: store : Store: - the container tightly closed. - in a well-ventilated area  
Away from any source of heat.
- To be avoid : Store away from incompatible materials like strong oxidizing agents.

Packaging : Tin-plated drums or steel drums varnished with epikote.

### Packaging materials

- Recommended : Coated metals
- not suitable : Rubbers, certain plastic materials

### EXPOSURE CONTROLS / PERSONAL PROTECTION:

Engineering measures : Ensure good ventilation of the work station  
Extraction to remove vapours at their source.

### Control parameters Occupational exposure limits

- Limits France : 2-Propanol : VLE : 980 mg/m ( 400 ppm )
- Limits USA / A.C.G.I.H. : 2-Propanol : TLV (TWA): 983 mg/m ( 400 ppm )  
2-Propanol: TLV (STEL): 1230 mg/m (500 ppm)

Surveillance procedures : Monitor the atmosphere at regular intervals.

### Personal protective equipment

- Respiratory protection : In the event of insufficient ventilation:  
Respiratory protective device with a gas filter.
- Hand protection : Protective rubber gloves, resistant to solvents.
- Eye protection : Goggles
- Collective emergency eqpt : Safety shower, eye fountain

### PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

- Physical state : Liquid
- Form : Mobile
- Colour : Colourless
- Odour : Pleasant
- PH : Not applicable

#### Specific temperatures

- Boiling : 82°C

#### Flammability characteristics

- Flash point : 12°C (Closed cup, according to method Afnor T 60103)
- Auto-ignition temperature : 2-Propanol: 460°C (Spontaneous ignition temperature)

Oxidizing properties : No oxidizing material according to EEC criteria

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### PRODUCT

**NovaBond Surface Primer**

#### Explosion properties

Explosion limits in air : Applicable  
- Lower : 2-Propanol: 2% (volume)  
- Upper : 2-Propanol: 11,8% (volume)  
Vapour pressure : env.4.3Kpa at 20°C  
Vapour density (air= 1 ) : >1 at 20°C  
Specific gravity : approx.790 kg/m at 25°C

#### Solubility

- in water : 2-Propanol miscible  
- in organic solvents : Miscible ( in all proportions ) with :  
- aliphatic hydrocarbons  
- aromatic hydrocarbons ( toluene, xylene)  
- chlorinated solvents

Kinematic viscosity : approx.2.5mm<sup>2</sup>/s at 25°C

### STABILITY AND REACTIVITY

Stability : Dries rapidly at room temperature on contact with air.

#### Hazardous reactions

- Materials to avoid : strong oxidizing agents  
- Hazardous decomposition

Products : On combustion forms: (carbon oxides (CO + CO))

Further information : Attacks: certain plastics, rubbers and coatings

### TOXICOLOGICAL INFORMATION

Acute toxicity : 2-Propanol: DL 50 skin (Rabbit) = 12800 mg/kg 2-Propanol: DL 50 oral (Rat) = 5045 mg/kg (Published data).

Acute symptoms : On inhalation: Drowsiness, Dizziness

Local effects : At high concentrations, the vapours can be irritating to the respiratory system.  
Repeated or prolonged contact with skin may cause dermatitis. Irritating to the eye.

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## PRODUCT

**NovaBond Surface Primer**

## ECOLOGICAL INFORMATION

Mobility  
Volatility : Volatile part, following hydrolysis: approx.99% of weight of the product.

Expected behaviour of the Product : Ultimate destination of the product: Water

**Biodegradability:**  
- Ultimate aerobis  
Biodegradability : Inherently biodegradable

**Bioaccumulation:**  
Octanol/water partition Coefficient : Not potentially bioaccumlable

**Eco toxicity:**  
Effects on the aquatic Environment : 2-Propanol:  
EC 50 (Daphnia magna)/24h: 8600mg/l  
(Published data)

## DISPOSAL CONSIDERATIONS

Waste from residues  
Destruction/Disposal : Incinerate at a licensed installation

Contaminated Packaging  
Decontamination/cleaning : Allow it to drain thoroughly.  
Rinse with an appropriate solvent.  
Recover and incinerate the cleaning solvent and dispose of at licensed site.

Destruction/Disposal : Recycle following cleaning or dispose of at an authorised site.


Note : The user`s attention is drawn to the possible existence of local regulations regarding disposal.

## TRANSPORT INFORMATION

International regulations Land  
- Rail/road (RID/ADR) : Class: 3  
(Item number: 5°b).  
Hazard identification number: 33. Substance  
identification number: 1219 Labelling: N°3.

- Sea (IMO/IMDG) : Class: 3-2  
UN number: 1219  
Labelling: 3 Liquid Inflammable Packaging

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group: II  
 Marine pollutant: NO.  
 Emergency schedule (EmS):3-05 Medical  
 First Aid Guide (MFAG).310, 313.

Air (ICAO-IATA) : Class: 3  
 UN number: 1219  
 Labelling: 3 Flammable Liquid Packaging  
 group: II.  
 Cargo aircraft: Packaging instruction: 307 Quantity: 60L Passenger  
 aircraft: Packaging instruction: 305

Quantity: 5L Other regulations  
 - France: Rail/road (RID/ADR) : Class: 3.  
 (Item number: 5°b).  
 Hazard identification number: 33  
 Substance identification number: 1263  
 Labelling N°3

Note : The above regulatory prescriptions are those valid on date of publication of this sheet.  
 Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

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### REGULARITY INFORMATION

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Labelling  
 EEC regulations : Mandatory labelling (self-classification) of hazardous Preparations: Applicable  
 - Classifications/Symbols : Highly flammable ( F )  
 Irritant (XI)  
 - R phrases : R 36: Irritating to eyes  
 - S phrases : S 7: Keep container tightly closed.  
 S16: Keep away from sources of ignition. No smoking S24/25:  
 Avoid contact with skin and eyes.  
 S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Further regulations  
 France : > Maladies professionnelles: Tableau N°84

Note : The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the Safety Data Sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations Refer to all applicable national, international and local regulations or provisions.

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**OTHER INFORMATION**

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Uses

- Recommended uses : Adhesion promoter for low surface energy substrates and silicone elastomers.
- Prohibited uses : This product is only intended for industrial use.
- European inventory (EINECS, ELINCS) : All the constituents of this preparation are registered in the EINECS inventory.
- American inventory ( TSCA ) : All the components of this preparation are registered in the TSCA inventory.