



## UTENSIL BONDING AGENT B1

Safety Data Sheet PP1-USB1

Date of issue: 24/12/2014

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Version: 1.0

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

#### 1.1. Product identifier

|                 |  |
|-----------------|--|
| Product form    | : Substance  |
| Physical state  | : Liquid   |
| Substance name  | : UTENSIL BONDING AGENT B1                                 |
| Product code    | : PP1-USB1   |
| Synonyms        | : TETRAMETHYLAMMONIUM SILOXANOLATE in hexamethyldisiloxane |
| Chemical family | : ORGANOSILOXANE BLEND                                     |

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

##### 1.2.1. Relevant identified uses

No additional information available

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

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#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

|   |      |
|---|------|
| Flammable liquids, Category 2                                     | H225 |
| Acute toxicity (oral), Category 4                                 | H302 |
| Acute toxicity (dermal), Category 3                               | H311 |
| Skin corrosion/irritation, Category 2                             | H315 |
| Serious eye damage/eye irritation, Category 2                     | H319 |
| Specific target organ toxicity — single exposure, Category 1      | H370 |
| Specific target organ toxicity — Repeated exposure, Category 1    | H372 |
| Hazardous to the aquatic environment — Chronic Hazard, Category 2 | H411 |

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

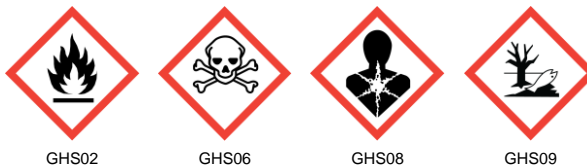
# UTENSIL BONDING AGENT B1

## Safety Data Sheet

### 2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour.  
H302 - Harmful if swallowed.  
H311 - Toxic in contact with skin.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H370 - Causes damage to organs (central nervous system).  
H372 - Causes damage to organs (liver, thymus) through prolonged or repeated exposure (in contact with skin).  
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical, lighting, ventilating equipment.  
P260 - Do not breathe vapours.  
P264 - Wash hands, forearms and face thoroughly after handling.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type :

Multi-constituent

Name :

UTENSIL BONDING AGENT B1

| Name                             | Product identifier                       | %         | Classification according to Regulation (EC) No. 1272/2008 [CLP]  |
|----------------------------------|--|-----------|--|
| Hexamethyldisiloxane             | (CAS-No.) 107-46-0<br>(EC-No.) 203-492-7 | 60 - 100  | Flam. Liq. 2, H225<br>Aquatic Chronic 2, H411  |
| Tetramethylammonium siloxanolate | (CAS-No.) 68440-88-0                     | 10 - 30   | Skin Corr. 1C, H314<br>Eye Dam. 1, H318  |
| Tetramethylammonium hydroxide    | (CAS-No.) 75-59-2                        | 0.5 - 1.5 | Acute Tox. 2 (Oral), H300<br>Acute Tox. 1 (Dermal), H310<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>STOT SE 1, H370<br>STOT RE 1, H372<br>Aquatic Chronic 2, H411 |

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general :

If exposed or concerned: get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.

First-aid measures after inhalation :

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention. If breathing is difficult, supply oxygen. If breathing has stopped, give artificial respiration.

First-aid measures after skin contact :

IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. Get medical attention immediately.

First-aid measures after eye contact :

IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Get medical attention immediately. Continue rinsing.

# UTENSIL BONDING AGENT B1

## Safety Data Sheet

First-aid measures after ingestion : IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Causes damage to organs (liver, thymus) through prolonged or repeated exposure (dermal). Causes damage to organs (central nervous system).

Symptoms/effects after skin contact : Causes skin irritation. Toxic in contact with skin.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Harmful if swallowed.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Dry powder. Foam. Water fog. Water spray.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

Explosion hazard : Product is not explosive.

### 5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment. Prevent human exposure to fire, fumes, smoke and products of combustion.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eyes or face protection. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Soak up spills with inert absorbent solids as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (See Section 13).

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe vapours. Keep away from sources of ignition - No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools.

### 7.2. Conditions for safe storage, including any incompatibilities

No additional information available

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Tetramethylammonium hydroxide (75-59-2)

Italy - Portugal - USA ACGIH Remark (ACGIH)

OELs not established

# UTENSIL BONDING AGENT B1

## Safety Data Sheet

### Tetramethylammonium hydroxide (75-59-2)

USA OSHA

Remark (OSHA)

OELs not established

### 8.2. Exposure controls

#### Appropriate engineering controls:

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

#### Personal protective equipment:

Gloves. Protective goggles. Protective clothing. Lab coat. Chemically resistant apron.

#### Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Be aware that the chemical may penetrate the gloves. Frequent changes are advisable. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.

#### Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

#### Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

#### Respiratory protection:

Use NIOSH-approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OEL's, use NIOSH-approved respiratory protective equipment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|  |  |
|--|--|
| Physical state                             | : Liquid                                   |
| Appearance                                 | : Slightly viscous.                        |
| Colour                                     | : No data available                        |
| Odour                                      | : Amine.                                   |
| Odour threshold                            | : No data available                        |
| Refractive index                           | : No additional information available      |
| pH   | : No data available                        |
| Relative evaporation rate (butylacetate=1) | : No data available                        |
| Melting point                              | : No data available                        |
| Freezing point                             | : No data available                        |
| Boiling point                              | : > 130 °C Decomposes                      |
| Flash point                                | : -1 °C COC                                |
| Auto-ignition temperature                  | : 340 °C (Hexamethyldisiloxane)            |
| Decomposition temperature                  | : No data available                        |
| Flammability (solid, gas)                  | : No data available                        |
| Vapour pressure                            | : No data available                        |
| Relative vapour density at 20 °C           | : 0  |
| Relative density                           | : 0.78 (WATER = 1)                         |
| Solubility                                 | : Insoluble, reacts slowly.                |
| Log Pow                                    | : No data available                        |
| Log Kow                                    | : No data available                        |
| Viscosity, kinematic                       | : No data available                        |
| Viscosity, dynamic                         | : No data available                        |
| Explosive properties                       | : No data available                        |
| Oxidising properties                       | : No data available                        |
| Explosive limits                           | : 1.25 - 18.6 vol % (Hexamethyldisiloxane) |

### 9.2. Other information

No additional information available

# UTENSIL BONDING AGENT B1

## Safety Data Sheet

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reacts with water.

#### 10.2. Chemical stability

Stable in sealed containers.

#### 10.3. Possibility of hazardous reactions

Reacts with water and moisture in air, liberating methanol.

#### 10.4. Conditions to avoid

Heat. Sparks. Open flame.

#### 10.5. Incompatible materials

Water.

#### 10.6. Hazardous decomposition products

Organic acid vapors. Methanol.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Toxic in contact with skin.

#### UTENSIL BONDING AGENT B1

|                  |                      |
|------------------|----------------------|
| ATE CLP (oral)   | 500 mg/kg bodyweight |
| ATE CLP (dermal) | 500 mg/kg bodyweight |

#### Tetramethylammonium hydroxide (75-59-2)

|                  |                     |
|------------------|---------------------|
| LD50 oral rat    | 34 - 50 mg/kg       |
| LD50 dermal rat  | 112 mg/kg           |
| ATE CLP (oral)   | 34 mg/kg bodyweight |
| ATE CLP (dermal) | 5 mg/kg bodyweight  |

#### Hexamethyldisiloxane (107-46-0)

|                           |               |
|---------------------------|---------------|
| LC50 inhalation rat (ppm) | 15956 ppm/4h  |
| LDLo oral guinea pig      | 32500 mg/kg   |
| ATE CLP (gases)           | 15956 ppmv/4h |

|                                     |  |
|-------------------------------------|--|
| Skin corrosion/irritation           | : Causes skin irritation.  |
| Serious eye damage/irritation       | : Causes serious eye irritation.   |
| Respiratory or skin sensitisation   | : Not classified   |
| Germ cell mutagenicity              | : Not classified   |
| Carcinogenicity                     | : Not classified   |
| Reproductive toxicity               | : Not classified   |
| STOT-single exposure                | : Causes damage to organs (central nervous system).  |
| STOT-repeated exposure              | : Causes damage to organs (liver, thymus) through prolonged or repeated exposure (in contact with skin). |
| Aspiration hazard                   | : Not classified   |
| Symptoms/effects after skin contact | : Causes skin irritation. Toxic in contact with skin.  |
| Symptoms/effects after eye contact  | : Causes serious eye irritation.   |
| Symptoms/effects after ingestion    | : Harmful if swallowed.  |

### SECTION 12: Ecological information

#### 12.1. Toxicity

|                          |  |
|--------------------------|--|
| Ecology - general        | : No information available.                        |
| Acute aquatic toxicity   | : Not classified                                   |
| Chronic aquatic toxicity | : Toxic to aquatic life with long lasting effects. |

#### Hexamethyldisiloxane (107-46-0)

|             |   |
|-------------|---|
| LC50 fish 1 | 3.02 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through]) |
|-------------|---|

#### 12.2. Persistence and degradability

#### UTENSIL BONDING AGENT B1

|                               |                           |
|-------------------------------|---------------------------|
| Persistence and degradability | No information available. |
|-------------------------------|---------------------------|

#### Hexamethyldisiloxane (107-46-0)

|                               |   |
|-------------------------------|---|
| Persistence and degradability | May cause long-term adverse effects in the environment. |
|-------------------------------|---|

# UTENSIL BONDING AGENT B1

## Safety Data Sheet

### 12.3. Bioaccumulative potential

| Hexamethyldisiloxane (107-46-0) |      |
|---------------------------------|------|
| BCF fish 1                      | 1300 |
| Log Pow                         | 4.2  |

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

## SECTION 14: Transport information

### 14.1. UN number

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

|               |        |
|---------------|--------|
| UN-No. (ADR)  | : 1992 |
| UN-No. (IMDG) | : 1992 |
| UN-No. (IATA) | : 1992 |
| UN-No. (ADN)  | : 1992 |
| UN-No. (RID)  | : 1992 |

### 14.2. UN proper shipping name

|                                       |   |
|---------------------------------------|---|
| Proper Shipping Name (ADR)            | : FLAMMABLE LIQUID, TOXIC, N.O.S.   |
| Proper Shipping Name (IMDG)           | : FLAMMABLE LIQUID, TOXIC, N.O.S.   |
| Proper Shipping Name (IATA)           | : Flammable liquid, toxic, n.o.s.   |
| Proper Shipping Name (ADN)            | : FLAMMABLE LIQUID, TOXIC, N.O.S.   |
| Proper Shipping Name (RID)            | : FLAMMABLE LIQUID, TOXIC, N.O.S.   |
| Transport document description (ADR)  | : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (TETRAMETHYLAMMONIUM SILOXANOLATE in hexamethyldisiloxane), 3 (6.1), II, (D/E), ENVIRONMENTALLY HAZARDOUS           |
| Transport document description (IMDG) | : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (TETRAMETHYLAMMONIUM SILOXANOLATE in hexamethyldisiloxane), 3 (6.1), II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS |
| Transport document description (IATA) | : UN 1992 Flammable liquid, toxic, n.o.s. (TETRAMETHYLAMMONIUM SILOXANOLATE in hexamethyldisiloxane), 3 (6.1), II, ENVIRONMENTALLY HAZARDOUS                  |
| Transport document description (ADN)  | : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (TETRAMETHYLAMMONIUM SILOXANOLATE in hexamethyldisiloxane), 3 (6.1), II, ENVIRONMENTALLY HAZARDOUS                  |
| Transport document description (RID)  | : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (TETRAMETHYLAMMONIUM SILOXANOLATE in hexamethyldisiloxane), 3 (6.1), II, ENVIRONMENTALLY HAZARDOUS                  |

### 14.3. Transport hazard class(es)

#### ADR

|                                  |           |
|----------------------------------|-----------|
| Transport hazard class(es) (ADR) | : 3 (6.1) |
| Danger labels (ADR)              | : 3, 6.1  |



#### IMDG

|                                   |           |
|-----------------------------------|-----------|
| Transport hazard class(es) (IMDG) | : 3 (6.1) |
| Danger labels (IMDG)              | : 3, 6.1  |

# UTENSIL BONDING AGENT B1

## Safety Data Sheet



### IATA

Transport hazard class(es) (IATA) : 3 (6.1)

Hazard labels (IATA) : 3, 6.1



### ADN

Transport hazard class(es) (ADN) : 3 (6.1)

Danger labels (ADN) : 3, 6.1



### RID

Transport hazard class(es) (RID) : 3 (6.1)

Danger labels (RID) : 3, 6.1



#### 14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

#### 14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

#### 14.6. Special precautions for user

##### - Overland transport

Classification code (ADR) : FT1

Special provisions (ADR) : 274

Limited quantities (ADR) : 1I

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02

Mixed packing provisions (ADR) : MP19

Portable tank and bulk container instructions (ADR) : T7

Portable tank and bulk container special provisions (ADR) : TP2

Tank code (ADR) : L4BH

# UTENSIL BONDING AGENT B1

## Safety Data Sheet

Tank special provisions (ADR) : TU15  
Vehicle for tank carriage : FL  
Transport category (ADR) : 2  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28  
Special provisions for carriage - Operation (ADR) : S2, S22  
Hazard identification number (Kemler No.) : 336  
Orange plates :

336

1992

Tunnel restriction code (ADR) : D/E

### - Transport by sea

Special provisions (IMDG) : 274  
Limited quantities (IMDG) : 1 L  
Excepted quantities (IMDG) : E2  
Packing instructions (IMDG) : P001  
IBC packing instructions (IMDG) : IBC02  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP2, TP13  
EmS-No. (Fire) : F-E  
EmS-No. (Spillage) : S-D  
Stowage category (IMDG) : B  
Stowage and handling (IMDG) : SW2  
Properties and observations (IMDG) : Flammable toxic liquid which is not specified by name in this class or, on account of its characteristics, in some other class. Toxic if swallowed, by skin contact or by inhalation.

### - Air transport

PCA Excepted quantities (IATA) : E2  
PCA Limited quantities (IATA) : Y341  
PCA limited quantity max net quantity (IATA) : 1L  
PCA packing instructions (IATA) : 352  
PCA max net quantity (IATA) : 1L  
CAO packing instructions (IATA) : 364  
CAO max net quantity (IATA) : 60L  
Special provisions (IATA) : A3  
ERG code (IATA) : 3HP

### - Inland waterway transport

Classification code (ADN) : FT1  
Special provisions (ADN) : 274, 802  
Limited quantities (ADN) : 1 L  
Excepted quantities (ADN) : E2  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EP, EX, TOX, A  
Ventilation (ADN) : VE01, VE02  
Number of blue cones/lights (ADN) : 2

### - Rail transport

Classification code (RID) : FT1  
Special provisions (RID) : 274  
Limited quantities (RID) : 1L  
Excepted quantities (RID) : E2  
Packing instructions (RID) : P001, IBC02  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T7  
Portable tank and bulk container special provisions (RID) : TP2



# UTENSIL BONDING AGENT B1

## Safety Data Sheet

|   |              |
|---|--------------|
| Tank codes for RID tanks (RID)  | : L4BH       |
| Special provisions for RID tanks (RID)                                  | : TU15       |
| Transport category (RID)  | : 2          |
| Special provisions for carriage - Loading, unloading and handling (RID) | : CW13, CW28 |
| Colis express (express parcels) (RID)                                   | : CE7        |
| Hazard identification number (RID)                                      | : 336        |

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

UTENSIL BONDING AGENT B1 is not on the REACH Candidate List

UTENSIL BONDING AGENT B1 is not on the REACH Annex XIV List

#### 15.1.2. National regulations

All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory

#### Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

#### Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Other information : Author: ANF.

Full text of H- and EUH-statements:

|                       |   |
|-----------------------|---|
| Acute Tox. 1 (Dermal) | Acute toxicity (dermal), Category 1                               |
| Acute Tox. 2 (Oral)   | Acute toxicity (oral), Category 2                                 |
| Acute Tox. 3 (Dermal) | Acute toxicity (dermal), Category 3                               |
| Acute Tox. 4 (Oral)   | Acute toxicity (oral), Category 4                                 |
| Aquatic Chronic 2     | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Eye Dam. 1            | Serious eye damage/eye irritation, Category 1                     |
| Eye Irrit. 2          | Serious eye damage/eye irritation, Category 2                     |
| Flam. Liq. 2          | Flammable liquids, Category 2                                     |
| Skin Corr. 1B         | Skin corrosion/irritation, Category 1B                            |
| Skin Corr. 1C         | Skin corrosion/irritation, Category 1C                            |
| Skin Irrit. 2         | Skin corrosion/irritation, Category 2                             |
| STOT RE 1             | Specific target organ toxicity — Repeated exposure, Category 1    |
| STOT SE 1             | Specific target organ toxicity — single exposure, Category 1      |
| H225                  | Highly flammable liquid and vapour.                               |

# UTENSIL BONDING AGENT B1

## Safety Data Sheet

|      |   |
|------|---|
| H300 | Fatal if swallowed.   |
| H302 | Harmful if swallowed.   |
| H310 | Fatal in contact with skin.                                     |
| H311 | Toxic in contact with skin.                                     |
| H314 | Causes severe skin burns and eye damage.                        |
| H315 | Causes skin irritation.   |
| H318 | Causes serious eye damage.                                      |
| H319 | Causes serious eye irritation.                                  |
| H370 | Causes damage to organs.  |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects.                |

SDS EU (REACH Annex II) - Custom

*The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.*

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The logo for Gelest features the word "Gelest" in a large, sans-serif font. The "G" is grey, and the "elest" is white. The white portion of the logo is set against a light purple, right-angled triangle that points to the right.

## UtenSil® Primer P1

Adhesive/Primer for Reprographic  
Grade Silicones

### Description

UtenSil® Primer P1 enhances the adhesion of reprographic silicones to a desired substrate.

### Solution Properties

|                  |                  |
|------------------|------------------|
| Form             | clear, colorless |
| Solids           | 5-10 wt%         |
| Flashpoint       | -4°C             |
| Specific Gravity | 0.70             |
| Viscosity        | 1.0-2.0 cSt      |

### Shelf life

12 months when stored below 25°C in sealed containers. Keep container sealed after dispensing product.

### Application Methods

UtenSil® Primer P1 is applied as a coating by spraying, dipping or brushing. The solvent is removed by evaporation in an exhausted area. Moisture induced crosslinking occurs at room temperature over 1-2 hours at 35-85% relative humidity.

### Standard Packaging

PP1-USP1 UtenSil® Primer P1  
100 g  
1 kg

## UtenSil® Bonding Agent B1

Bonding Agent for Reprographic  
Grade Silicones

### Description

UtenSil® Bonding Agent B1 binds reprographic silicone surfaces together irreversibly.

### Solution Properties

|                  |                |
|------------------|----------------|
| Form             | opaque, white* |
| Solids           | 5-10 wt%       |
| Flashpoint       | -1°C           |
| Specific Gravity | 0.78           |
| Viscosity        | 2.0-3.0 cSt    |

\*Turns clear after deactivation.

### Shelf life

6 months when stored below 25°C in sealed containers. Keep container sealed after dispensing product.

### Application Methods

UtenSil® Bonding Agent B1 is applied by spraying, dipping or brushing. The solvent is removed by evaporation in an exhausted area. Bonding of silicone surfaces occurs at 80°C over 4 hours. After bonding is complete the process is deactivated by heating to 140°C for 4 hours in an exhausted area. An amine odor is generated during the deactivation step.

### Standard Packaging

PP1-USB1 UtenSil® Bonding Agent B1  
100 g  
1 kg