



# Tech-Bond Debonder

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Date of issue: 05/05/2015 Revision date: 05/05/2015 Version: 1.0

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

#### 1.1. Product identifier

Product name : Tech-Bond Debonder

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

Use of the substance/mixture : Debonder for Structural Cyanoacrylate (SCA) Adhesives

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

Tech-Bond Solutions  
2055 Corvair Blvd., Suite 108,  
Columbus, OH 43207 - United States  
T 877 565 7225; F 866 411 0032  
[sales@tech-bond.net](mailto:sales@tech-bond.net) <http://www.tech-bond.net>

#### 1.4. Emergency telephone number

Emergency number : 1-800 535 5035

### SECTION 2: Hazards identification

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

##### GHS-US classification

Flam. Liq. 2 H225  
Eye Irrit. 2A H319  
STOT SE 3 H336

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Hazard statements (GHS-US) :

Precautionary statements (GHS-US) :

- : Danger
- : H225 - Highly flammable liquid and vapor
- H319 - Causes serious eye irritation
- H336 - May cause drowsiness, dizziness or fainting
- H302 - Harmful if swallowed
- : P201 - Obtain special instructions before use
- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P308+P313 - IF exposed or concerned: Get medical advice/attention
- P403+P235 - Store in a well-ventilated place. Keep cool
- P501 - Dispose of contents/container to local, regional, national, and international regulations

### SECTION 3: Composition/information on ingredients

#### 3.1: Substances

Hazardous ingredients:

Name	Product identifier	%	GHS-US classification
acetone	(CAS No) 67-64-1	15 - 30	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Nitromethane	(CAS No) 75-52-5	> 70	Flam. Liq. 3, H227 Eye Irrit. 2A H319 Skin Irrit. 2, H315 Harmful if swallowed STOT SE 3, H335

### SECTION 4: First Aid Measures

#### 4.1: Description of first aid measures.

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First-aid measures after skin contact	: Rinse skin immediately with plenty of soap and water/shower for 10 minutes or longer. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse immediately with plenty of water for at least 15 minutes. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Immediately after ingestion: give lots of water to drink. Do not give milk/oil to drink. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries	: Irritation of the eye tissue.
Symptoms/injuries after inhalation	: May cause drowsiness, dizziness or fainting. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause irritation to skin.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Gastrointestinal complaints. Convulsions. Coma.

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

If exposed or concerned, get medical advice and attention.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray or fog. Carbon dioxide. Dry chemical powder. Foam. Sand.
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire. Do not use a heavy water stream.

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

Fire hazard	: Extremely flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
Reactivity	: No dangerous reactions known under normal conditions of use.

### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Do not allow run-off from fire fighting to enter drains or water courses. Do not allow the product to be released into the environment.

## SECTION 6: Accidental release measures

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

General measures	: Use special care to avoid static electric charges. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing (dust, vapor, mist, gas). Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Avoid all contact with skin, eyes, or clothing.
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#### 6.1.1. For non-emergency personnel

Protective equipment	: Use appropriate personal protection equipment (PPE).
Emergency procedures	: Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Evacuate unnecessary personnel. Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 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. Use only non-sparking tools.
Methods for cleaning up	: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Use only non-sparking tools and equipment in clean-up procedure.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.
- 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. No naked lights. No smoking. Use only non-sparking tools. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/ equipment.
- Storage conditions : Store in a cool, well ventilated and fireproof area. Keep container tightly closed. Keep away from sources of ignition. Keep away from direct sunlight. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition
- Incompatible products : Strong bases. Strong acids. Oxidizing agent. Sources of ignition. Direct sunlight. Heat sources.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Tech-Bond Debonder		
USA OSHA	OSHA PEL (TWA) (ppm)	1000 Acetone
USA OSHA	OSHA PEL (STEL) (ppm)	1000 Acetone
USA OSHA	OSHA PEL (Ceiling) (ppm)	750 ppm Acetone
acetone (67-64-1)		
USA ACGIH	ACGIH TWA (ppm)	500 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm

#### 8.2. Exposure controls

- Appropriate engineering controls : Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases/vapours may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.
- Personal protective equipment : Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection. Avoid all unnecessary exposure.
- Materials for protective clothing : Wear fire/flamm resistant/retardant clothing.
- Hand protection : Wear protective gloves.
- Eye protection : Chemical goggles or safety glasses.
- Skin and body protection : Protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask.
- Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

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

- Physical state : Liquid
- Appearance : Colorless to pale yellow liquid.
- Color : Colorless to light yellow.
- Odor : Ketones.
- Boiling point : 133 – 242°F
- Relative density of saturated gas/air mixture : 2 – 3.52
- Flash point : > - 4°F
- Self ignition temperature : ~ 465 °C
- Specific Gravity : 0.87- 0.95
- Vapor Density : 2.0 – 3.52
- Solubility : In water, material is partially soluble.  
Water: 40 - 80 %
- Explosive limits : 1.8 - 12.8 vol %

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### 9.2. Other information

VOC content : 40% - 80%

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 10.2. Chemical stability

Extremely flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

### 10.3. Possibility of hazardous reactions

Will not occur. Stable under normal conditions.

### 10.4. Conditions to avoid

Avoid high temperatures, direct sunlight, open flames, sparks, welding, smoking and other ignition sources. Avoid static charge accumulation and discharge.

### 10.5. Incompatible materials

Strong bases. Strong acids. Oxidizing agent. Sources of ignition. Direct sunlight. Heat sources.

### 10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<b>acetone (67-64-1)</b>	
LD50 oral rat	5800 mg/kg (Rat; Experimental value,Rat; Experimental value)
LD50 dermal rabbit	20000 mg/kg (Rabbit; Experimental value,Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	71 mg/l/4h (76 mg/l/4h; Rat; Rat; Experimental value; Experimental value,76 mg/l/4h; Rat; Rat; Experimental value; Experimental value)
LC50 inhalation rat (ppm)	30000 ppm/4h (Rat; Experimental value,Rat; Experimental value)
<b>Propylene carbonate (108-32-7)</b>	
LD50 oral rat	> 20000 mg/kg (Rat)
LD50 dermal rabbit	> 24000 mg/kg (Rabbit)

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>acetone (67-64-1)</b>	
LC50 fishes 1	6210 mg/l (96 h; Pimephales promelas; Nominal concentration)
EC50 Daphnia 1	8800 mg/l (48 h; Daphnia pulex)
LC50 fish 2	5540 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
TLM fish 1	13000 ppm (96 h; Gambusia affinis; Turbulent water)
TLM fish 2	> 1000 ppm (96 h; Pisces)
Threshold limit other aquatic organisms 1	3000 mg/l (Plankton)
Threshold limit other aquatic organisms 2	28 mg/l (Protozoa)
Threshold limit algae 1	7500 mg/l (Scenedesmus quadricauda; pH = 7)
Threshold limit algae 2	3400 mg/l (48 h; Chlorella sp.)
<b>Nitromethane (75-52-5)</b>	
LC50 fishes 1	No data available.
EC50 Daphnia 1	No data available.
Threshold limit algae 1	No data available

### 12.2. Persistence and degradability

<b>Tech-Bond Debonder</b>	
Persistence and degradability	Not established.
<b>acetone (67-64-1)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	1.43 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.92 g O <sub>2</sub> /g substance

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acetone (67-64-1)	
ThOD	2.20 g O <sub>2</sub> /g substance
BOD (% of ThOD)	(20 day(s)) 0.872
Nitromethane (75-52-5)	
Persistence and degradability	No data available
(BOD)	No data available
Chemical oxygen demand (COD)	No data available

### 12.3. Bioaccumulative potential

Tech-Bond Debonder	
Bioaccumulative potential	Not established.

acetone (67-64-1)	
BCF fish 1	0.69 (Pisces)
BCF other aquatic organisms 1	3
Log Pow	-0.24 (Test data)
Bioaccumulative potential	Not bioaccumulative.
nitromethane (75-52-5)	
Log Pow	Data not available
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

acetone (67-64-1)	
Surface tension	0.0237 N/m
Nitromethane (75-52-5)	
No data available	

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Sewage disposal recommendations	: Do not discharge into drains or the environment.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT

Transport document description : UN1090 Acetone, 3, II  
UN1281 Nitromethane

N-No.(DOT) : 1090 - Acetone

N-No.(DOT) : 1281 - Nitromethane

DOT NA no. - Acetone : UN1090

DOT Proper Shipping Name : Acetone

DOT NA no. - Nitromethane : UN1290

DOT Proper Shipping Name : Nitromethane

Department of Transportation (DOT) Hazard

: **Classes** 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquids

Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / (1 + a (tr - tf))$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202



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DOT Packaging Bulk (49 CFR 173.xxx) : 242

### Additional information

Other information : No supplementary information available.

### ADR

Packing group : II  
Class  
Hazard identification number : 3 - Flammable liquids 33  
Classification code : F1  
Danger labels (ADR) : 3 - Flammable liquids  
Proper shipping name : Acetone, Nitromethane

### Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

### Air transport

DOT Quantity Limitations Passenger : 5 L  
Aircraft/rail (49 CFR 173.27)  
DOT Quantity Limitations : 60 L  
Cargo aircraft only (49 CFR 175.75)

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Tech-Bond Debonder

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard
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#### acetone (67-64-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

RQ (Reportable quantity, section 304 of EPA's List of Lists) :	5000 lb
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#### Nitromethane (75-52-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

##### Acetone (67-64-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.  
WHMIS Classification

Class B Division 2 - Flammable Liquid Class D Division 2  
Subdivision B - Toxic material causing other toxic effects

##### Nitromethane (75-52-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.  
WHMIS Classification

Class B Division 2 - Flammable Liquid Class D Division 2  
Subdivision B - Toxic material causing other toxic effects

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

#### Acetone

Flam. Liq. 2 H225  
Eye Irrit. 2A H319  
STOT SE 3 H336

#### Nitromethane

Flam. Liq. 2 H227  
Eye Irrit. 2 H319  
Skin Irritant : H315  
STOT SE 3 H336

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

F; R11

Xi; R36

R66

R67

### 15.2.2. National regulations

Acetone (67-64-1); Nitromethane (75-52-5)

Both substances are listed on the Canadian Ingredient Disclosure List

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### 15.3. US State regulations

#### acetone (67-64-1) & nitromethane (76-52-5)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

### SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixturejs, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H-phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
Skin Irritant 2	May cause skin irritation
H225	Highly flammable liquid and vapor
H319	Causes serious eye irritation
H336	May cause drowsiness, dizziness
H315	May cause skin irritation

#### HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur  
Flammability : 3 Serious Hazard  
Physical : 0 Minimal Hazard

SDS US (GHS HazCom 2012)

*This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.*

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