

<b>MATERIAL SAFETY DATA SHEET</b>						
<b>SECTION 1 Identification of the Substance/Preparation and of the Company</b>						
1.1	Product Trade Name	<b>Super-Bond Sep</b>				
1.2	Exporter: Name	Sun Medical Co., Ltd.				
	Address	571-2 Furutaka-cho, Moriyama, Shiga, 524-0044, Japan				
	Telephone	81-77-582-9981				
	Facsimile	81-77-582-9984				
	e-mail	export@sunmedical.co.jp				
<b>SECTION 2 Composition / Information on Ingredients</b>						
		CAS No.	UN No.	Percent	Symbol	R-Phrase
	Preparation	----	1170	100	F	R11
	Ingredients	CAS No.	UN No.	Percent	Symbol	R-Phrase
	Polymers	----	----	approx. 30%	----	----
	polyvinylpyrrolidone (PVP)	9003-39-8	----	----	----	----
	polyethyleneglycol	25322-68-3	----	----	----	----
	ethyl alcohol	64-17-5	1170	approx. 70%	F	R11
<b>SECTION 3 Hazards Identification</b>						
3.1	Emergency overview	Highly flammable (F) liquid. Irritating to eyes, respiratory system and skin. Excess exposure may be harmful or fatal.				
3.2	Potential health effects					
	Eye	May cause irritation and possible corneal injury.				
	Skin	May cause irritation, dry skin.				
	Ingestion	Ingestion of larger amount may cause drunkenness, nausea, vomiting. Aspiration into lungs can produce severe lung damage and is a medical emergency.				
	Inhalation	Inhalation of vapors can irritate the respiratory tract, causes sore throat, cough. Inhalation of high concentration may cause central nervous system effects characterized by headache, dizziness and unconsciousness. May cause liver and kidney damage.				
	Effects of long-term or repeated exposure	Repeated or prolonged contact with skin may cause dermatitis. The substance may cause loss of appetite, nervousness, memory loss.				
<b>SECTION 4 First-Aid Measures</b>						
4.1	Eye	Immediately flush with flowing water for at least 15 minutes. Get medical attention.				
4.2	Skin	Flush with soap and plenty of water. Get medical attention if irritation develops or persists.				
4.3	Ingestion	Promptly drink several glasses of water or milk to dilute. Get medical attention.				
4.4	Inhalation	Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.				

SECTION 5 Fire-Fighting Measures			
5.0 Flammable properties		Highly flammable.	
5.1 Flash point	13 (ethanol)	5.2 Autoignition temp.	360 (ethanol)
5.3 Flammable limit	LEL= 3 vol% UEL=19 vol% (ethanol)	5.4 Suitable extinguishing media	Dry chemical, carbon dioxide, water spray or alcohol-resistant foam.
5.5 Hazardous decomposition products	Toxic gasses such as carbon monoxide, may be released in a fire.	5.6 Special protective equipment	During emergency conditions, over- exposure to thermal decomposition products may cause health hazard. Self-contained breathing apparatus should be worn.
SECTION 6 Accidental Release Measures			
6.1 Personal precaution		For skin protection wear impervious protective gloves and clothing. For eye protection use safety goggle or a full-face shield.	
6.2 Environmental precautions		May be hazardous to the environment. Special attention should be given to water.	
6.3 Methods for cleaning-up		In case material is released or spilled, remove all ignition sources, and ventilate the area of leak or spill. Collect spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer.	
SECTION 7 Handling and Storage			
7.1 Handling		Observe normal warehouse handling procedures. Protect against physical damages. Use in a well-ventilated place away from all ignition sources.	
7.2 Storage		Store in a cool, dry and dark well-ventilated place. Store away from sources of ignition. Take precautionary measures against static discharge.	
SECTION 8 Exposure Controls / Personal Protection			
8.1 Engineering measures			
Ventilation		Use general and/or local exhaust to keep exposures to a minimum.	
Other protective equipment		Eye wash station near work area.	
8.2 Personal protection			
Respiratory protection		None required during normal use of this product.	
Hand protection		Use impervious protective gloves to prevent skin contact.	
Eye protection		Use safety glasses.	
Skin protection		Use impervious protective gloves to prevent skin contact.	
Exposure guideline		(Ethanol) Recommended PEL:1000 ppm (TWA), TLV 1000 ppm (STEL)	
SECTION 9 Physical and Chemical Properties			
9.1 Appearance	Colorless, highly volatile liquid	9.2 Odor	Fragrant, alcohol odor
9.3 pH	Not applicable	9.4 Vapor density	1.6 (Air=1)
9.5 Boiling point	78	9.6 Solubility in water:	Miscible
9.7 Specific gravity	0.79 (20 )		
SECTION 10 Stability and Reactivity			
10.1 Stability		Stable under ordinary conditions of use and storage.	
10.2 Conditions to avoid		Heat beyond 30°C. Direct sunlight. Ignition sources.	
10.3 Incompatibility (materials to avoid)		Strong acids, oxidizing agents, chloroform, alkalis.	
10.4 Hazardous decomposition products		Carbon dioxide and carbon monoxide may form when heated to decomposition.	
10.5 Hazardous polymerization		Will not occur.	

SECTION 11 Toxicological Information	
11.1 Health hazards (immediate, delayed, acute, chronic)	Ingestion of larger amount may cause drunkenness, nausea, vomiting.
11.2 Toxicity	TDL <sub>0</sub> (Oral - man): 50 mg/kg (ethanol) LD <sub>50</sub> (Oral - rat): 7,060 mg/kg (ethanol)
11.3 Mutagenicity	Not known
11.4 Carcinogenicity	(ACGIH) No, (IARC) No (Group 3: PVP)
SECTION 12 Ecological Information	
12.1 General	This substance may be hazardous to the environment; special attention should be given to water.
12.2 Mobility	When released, this substance is expected to evaporate quickly or may leach into groundwater.
12.3 Degradability	Expected to readily biodegrade.
12.4 Accumulation	Not expected to significantly bioaccumulate.
12.5 Ecotoxicity	Not known. (Not significantly toxic.)
12.6 Other adverse effects	Not known
SECTION 13 Disposable Considerations	
13.1 Danger in disposal	Should be handled as hazardous waste.
13.2 Disposal method	(Consult federal, state, and local regulations): Do not empty into sewer. This substance should be handled as hazardous waste and sent to an approved incinerator.
SECTION 14 Transport Information	
14.1 Precautions for transport	Flammable liquid
14.2 UN	UN 1170 – (ethanol)
14.3 IMDG	Class 3, PG II
14.4 ICAO/IATA	Class 3, PG II
SECTION 15 Regulatory Information	
15.1 RTECS	ethanol AL3150000 polyvinylpyrrolidone TR9370000 polyethyleneglycol ZD2465300
15.2 EU Classification	F; R11 (Highly flammable) S7 (Keep container tightly closed.) S16 (Keep away from sources of ignition – no smoking.)
SECTION 16 Other Information	
16.1	Prepared / Revised in August 2005 by Sun Medical Co., Ltd.
16.2	This Product is for dental professional use only.
16.3	The information above is believed to be accurate. However, Sun Medical Co., Ltd. makes NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Users must take their own investigations to determine the suitability of the information and the Product for their particular purposes.