



Safety Data Sheet

Issue Date: 21-Jan-2014

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Version 1

1. IDENTIFICATION

Product Identifier

Product Name MucoSoft™ Adhesive Agent

Other means of identification

SDS # S494
UN/ID No UN1247, UN1593

Recommended use of the chemical and restrictions on use

Recommended Use Relining Agent.

Details of the supplier of the safety data sheet

Supplier Address

Parkell, Inc.
300 Executive Drive
Edgewood, NY 11717

Emergency Telephone Number

Company Phone Number (631) 249-1134
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid

Physical State Liquid

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 3

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

Signal Word

Warning

Hazard Statements

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing cancer
May cause respiratory irritation. May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure
Flammable liquid and vapor



Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Contaminated work clothing should not be allowed out of the workplace
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Get medical attention
 IF ON SKIN: Wash with plenty of soap and water
 Take off contaminated clothing and wash it before reuse
 If skin irritation or rash occurs: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Get immediate medical attention
 IN CASE OF FIRE: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Methylene chloride	75-09-2	Proprietary
Proprietary Compound	Proprietary	Proprietary
Methyl methacrylate	80-62-6	Proprietary
Benzoyl peroxide	94-36-0	Proprietary

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
Skin Contact	Wash skin with soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if discomfort persists.
Ingestion	Do not induce vomiting, unless directed by medical personnel. Get immediate medical attention.

Most important symptoms and effects

Symptoms	May cause skin and eye irritation. May cause an allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog). Dry chemical. Carbon dioxide (CO₂). Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Flammable liquid and vapor.

Hazardous Combustion Products Carbon oxides. Phosgene. Hydrochloric acid.

Sensitivity to Static Discharge Take precautionary measures against static discharge.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Fight fire from safe distance/protected location. Use water spray to keep fire-exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protection recommended in Section 8.
Environmental Precautions	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Contain and collect with an inert absorbent and place into an appropriate container for disposal. Do not flush to sewer.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion proof equipment. Use only non-sparking tools. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed and store in a cool, dry and well-ventilated place. Store away from ignition sources and incompatible materials. Store locked up.

Incompatible Materials

Acids. Alkalis. Oxidizing agents. Chemically active metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methylene chloride 75-09-2	TWA: 50 ppm	TWA: 25 ppm (vacated) TWA: 500 ppm (vacated) STEL: 2000 ppm 5 min in any 3 h (vacated) Ceiling: 1000 ppm STEL: 125 ppm see 29 CFR 1910.1052	IDLH: 2300 ppm
Proprietary Compound	STEL: 750 ppm TWA: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³
Methyl methacrylate 80-62-6	STEL: 100 ppm TWA: 50 ppm	TWA: 100 ppm TWA: 410 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 410 mg/m ³	IDLH: 1000 ppm TWA: 100 ppm TWA: 410 mg/m ³
Benzoyl peroxide 94-36-0	TWA: 5 mg/m ³	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³	IDLH: 1500 mg/m ³ TWA: 5 mg/m ³

Appropriate engineering controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Safety glasses.

Skin and Body Protection

Impervious protective gloves.

Respiratory Protection

Use self-contained breathing apparatus when needed.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Not determined
Appearance	Clear liquid	Odor Threshold	Not determined
Color	Clear		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	>1	(Air=1)
Specific Gravity	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization	Hazardous polymerization does not occur.
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Conditions to Avoid

Avoid heat, ignition sources, moisture, aging, and contamination. Keep separated from incompatible substances. Keep out of reach of children.

Incompatible Materials

Acids. Alkalis. Oxidizing agents. Chemically active metals.

Hazardous Decomposition Products

Carbon oxides. Phosgene. Hydrochloric acid.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes serious eye irritation.
Skin Contact	Causes skin irritation. May cause an allergic skin reaction.
Inhalation	May cause respiratory irritation. May cause drowsiness or dizziness.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methylene chloride 75-09-2	> 2000 mg/kg (Rat)	-	= 76000 mg/m ³ (Rat) 4 h
Proprietary Compound	= 5800 mg/kg (Rat)	-	-
Methyl methacrylate 80-62-6	= 7872 mg/kg (Rat)	> 5 g/kg (Rabbit)	= 4632 ppm (Rat) 4 h = 400 ppm (Rat) 1 h
Benzoyl peroxide 94-36-0	= 6400 mg/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause an allergic skin reaction.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested. Suspected of causing cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Methylene chloride 75-09-2	A3	Group 2B	Reasonably Anticipated	X
Methyl methacrylate 80-62-6		Group 3		
Benzoyl peroxide 94-36-0		Group 3		

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 IARC components are "not classifiable as human carcinogens"

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methylene chloride 75-09-2	500: 96 h Pseudokirchneriella subcapitata mg/L EC50 500: 72 h Pseudokirchneriella subcapitata mg/L EC50	140.8 - 277.8: 96 h Pimephales promelas mg/L LC50 flow-through 262 - 855: 96 h Pimephales promelas mg/L LC50 static 193: 96 h Lepomis macrochirus mg/L LC50 static 193: 96 h Lepomis macrochirus mg/L LC50 flow-through	EC50 = 1 mg/L 24 h EC50 = 2.88 mg/L 15 min	1532 - 1847: 48 h Daphnia magna mg/L EC50 Static 190: 48 h Daphnia magna mg/L EC50
Proprietary Compound		4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50	EC50 = 14500 mg/L 15 min	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
Methyl methacrylate 80-62-6	170: 96 h Pseudokirchneriella subcapitata mg/L EC50	243 - 275: 96 h Pimephales promelas mg/L LC50 flow-through 125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 170 - 206: 96 h Lepomis macrochirus mg/L LC50 flow-through 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 79: 96 h Oncorhynchus mykiss mg/L LC50 static 326.4 - 426.9: 96 h Poecilia reticulata mg/L LC50 static		69: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Methylene chloride 75-09-2	1.25
Proprietary Compound	-0.24
Methyl methacrylate 80-62-6	0.7

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methylene chloride 75-09-2	U080	Included in waste streams: F001, F002, F024, F025, F039, K009, K010, K156, K157, K158		U080
Proprietary Compound		Included in waste stream: F039		U002
Methyl methacrylate 80-62-6	U162	Included in waste stream: F039		U162

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Methylene chloride 75-09-2	Category I - Volatiles		Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Methylene chloride 75-09-2	Toxic
Proprietary Compound	Ignitable
Methyl methacrylate 80-62-6	Toxic Ignitable
Benzoyl peroxide 94-36-0	Toxic Ignitable Reactive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1992
 Proper Shipping Name Flammable liquid, toxic, n.o.s. (Methyl methacrylate, Dichloromethane)
 Hazard Class 3
 Subsidiary Hazard Class 6.1
 Packing Group III

IATA

UN/ID No UN1992
 Proper Shipping Name Flammable liquid, toxic, n.o.s. (Methyl methacrylate, Dichloromethane)
 Hazard Class 3
 Subsidiary Hazard Class 6.1
 Packing Group III

IMDG

UN/ID No UN1992
 Proper Shipping Name Flammable liquid, toxic, n.o.s. (Methyl methacrylate, Dichloromethane)
 Hazard Class 3
 Subsidiary Hazard Class 6.1
 Packing Group III

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Methylene chloride	Present	X		Present		Present	X	Present	X	X
Proprietary Compound	Present	X		Present		Present	X	Present	X	X
Methyl methacrylate	Present	X		Present		Present	X	Present	X	X
Benzoyl peroxide	Present	X		Present		Present	X	Present	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methylene chloride 75-09-2	1000 lb 1 lb		RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
Proprietary Compound	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Methyl methacrylate 80-62-6	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Methylene chloride - 75-09-2	75-09-2	Proprietary	0.1
Methyl methacrylate - 80-62-6	80-62-6	Proprietary	1.0
Benzoyl peroxide - 94-36-0	94-36-0	Proprietary	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Methylene chloride		X	X	
Methyl methacrylate	1000 lb			X

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Methylene chloride - 75-09-2	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Methylene chloride 75-09-2	X	X	X
Proprietary Compound	X	X	X
Methyl methacrylate 80-62-6	X	X	X
Benzoyl peroxide 94-36-0	X	X	X

16. OTHER INFORMATION**NFPA****Health Hazards**

2

Flammability

3

Instability

3

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical Hazards

Not determined

Personal Protection

Not determined

Issue Date:

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13-Jan-2015

Revision Note:

New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet