



Safety Data Sheet

Issue Date: 16-Dec-2013

Revision Date: 3-April-2019

Version 1

1. IDENTIFICATION

Product Identifier

Product Name SNAP™ and RELATE Liquid

Other means of identification

SDS # S441

UN/ID No UN2283

Recommended use of the chemical and restrictions on use

Recommended Use Provisional Prosthodontic Resin.

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, pale, oily liquid

Physical State Liquid

Odor Acrid, fruity odor

Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
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 in contact with skin

Signal Word

Warning

Hazard Statements

Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause respiratory irritation
May cause damage to organs through prolonged or repeated exposure
Flammable liquid and vapor



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Wear protective gloves/protective clothing/eye protection/face protection
 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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Seek immediate medical attention/advice
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing 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 medical attention if symptoms persist
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
 Immediately call a poison center or doctor/physician
 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

Other Hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Isobutyl methacrylate	97-86-9	60-100
2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester	97-90-5	0-20
N,N-DIMETHYL-P-TOLUIDINE	99-97-8	0-5
Trade Secret	131-57-7	0-5

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 prompt medical attention.
Skin Contact	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing 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. If breathing is difficult, give oxygen. Get medical attention if symptoms persist.
Ingestion	Rinse mouth. Do not induce vomiting. Dilute with milk or water. Immediately call a poison center or doctor/physician.

Most important symptoms and effects

Symptoms	Moderately irritating to eyes, causing initial pain with tearing, redness, swelling, or blurring of vision. Skin contact may cause irritation with discomfort or rash, and possibly allergic rashes or sensitization. Liquid is rapidly absorbed through skin; absorption of this product into the body causes the formation of methemoglobin, which, in sufficient concentrations, causes cyanosis, headache, dizziness, nausea, and abdominal pain. Inhalation may cause irritation at high concentrations which may lead to dizziness, headache, nausea, staggering gait, confusion, and anesthetic effects. Symptoms may include coughing or weakness. Inhalation can also cause elevated methemoglobin in the blood with symptoms such as headache, weakness, dizziness, and blue coloration of the lips, fingernails, nose, and earlobes. Vapor or mist is irritating to mucous membranes and upper respiratory tract. Ingestion causes irritation, a burning sensation in the mouth, throat, and respiratory tract, and abdominal pain.
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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

Foam. Carbon dioxide (CO₂). Dry chemical.

Unsuitable Extinguishing Media Water may not be effective in extinguishing this fire.

Specific Hazards Arising from the Chemical

Flammable liquid and vapor. Vapors may travel to source of ignition and flash back. Heat can cause polymerization with rapid release of energy which may rupture the container explosively. Spontaneous polymerization may occur upon prolonged storage.

Hazardous Combustion Products Carbon oxides.

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 protected location. Move containers from fire area if it can be done without risk. Use water spray to cool containers and minimize vapors. Avoid spreading the burning liquid with water used for cooling.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protection recommended in Section 8.
For Emergency Responders	Evacuate area and shut off ignition source. Wear self-contained breathing apparatus and fire resistant gear.
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	Dike and absorb spill with inert material. Transfer to proper containers for disposal using non-sparking tools. Contaminated monomer may be unstable, add inhibitor to prevent polymerization. Keep spills and cleaning runoff out of sewers and open bodies of water. Spills on porous surfaces can contaminate the groundwater.

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 eat, drink or smoke when using this product. 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. 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. Observe precautions found on the label.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Maintain air space inside storage containers; inhibitor requires air contact to function. Check inhibitor levels every three months and maintain at original level.
Incompatible Materials	Strong bases. Oxidizing agents. Material has strong solvent properties and can soften paint and rubber.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
4-Methoxyphenol 150-76-5	TWA: 5 mg/m ³	(vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³

Appropriate engineering controls

Engineering Controls	Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Safety glasses.
Skin and Body Protection	Nitrile gloves.
Respiratory Protection	Self-contained breathing apparatus for high concentrations.

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	Acrid, fruity odor
Appearance	Clear, pale, oily 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	155 °C / 311 °F	(at 760 mm Hg)
Flash Point	49 °C / 120 °F	Tag Closed Cup
Evaporation Rate	0.5	(butyl acetate = 1)
Flammability (Solid, Gas)	Liquid-Not applicable	
Upper Flammability Limits	Not established	
Lower Flammability Limit	Not established	
Vapor Pressure	3 mm Hg	@ 20°C (68°F)
Vapor Density	4.91	@ 15.5°C (60°F) (Air=1)
Specific Gravity	0.861	(Water = 1)
Water Solubility	0.1/100 grams	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	367 °C / 693 °F	
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

Unstable.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Self Accelerating Polymerization Temperature (SAPT): 170 °C /338 °F

Conditions to Avoid

Avoid heat, sources of ignition, aging, contamination, and absence of an oxygen-containing atmosphere above the product. Keep separated from incompatible substances. Keep out of reach of children.

Incompatible Materials

Strong bases. Oxidizing agents. Material has strong solvent properties and can soften paint and rubber.

Hazardous Decomposition Products

Carbon oxides.

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. May be harmful in contact with skin.
Inhalation	May cause respiratory irritation.
Ingestion	Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isobutyl methacrylate 97-86-9	= 6400 mg/kg (Rat)	-	-
2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester 97-90-5	= 3300 mg/kg (Rat)	-	-
N,N-DIMETHYL-P-TOLUIDINE 99-97-8	= 1650 mg/kg (Rat)	-	= 1400 mg/m ³ (Rat) 4 h
Benzophenone-3 131-57-7	= 7400 mg/kg (Rat)	-	-
4-Methoxyphenol 150-76-5	= 1600 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	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
STOT - single exposure	May cause respiratory irritation.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Isobutyl methacrylate 97-86-9	0.29: 96 h Pseudokirchneriella subcapitata mg/L EC50	20: 96 h Oncorhynchus mykiss mg/L LC50 flow-through		23: 48 h Daphnia magna mg/L EC50
N,N-DIMETHYL-P-TOLUIDI NE 99-97-8		42 - 50.5: 96 h Pimephales promelas mg/L LC50 flow-through		
4-Methoxyphenol 150-76-5		84.3: 96 h Pimephales promelas mg/L LC50 flow-through 28.5: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	EC50 = 3.66 mg/L 5 min EC50 = 4.30 mg/L 15 min EC50 = 4.61 mg/L 30 min	

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Isobutyl methacrylate 97-86-9	2.01
N,N-DIMETHYL-P-TOLUIDINE 99-97-8	2.81
4-Methoxyphenol 150-76-5	1.34

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.

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 UN2283
Proper Shipping Name Isobutyl methacrylate, stabilized
Hazard Class 3
Packing Group III

IATA

UN/ID No UN2283
Proper Shipping Name Isobutyl methacrylate, stabilized
Hazard Class 3
Packing Group III

IMDG

UN/ID No UN2283
Proper Shipping Name Isobutyl methacrylate, stabilized
Hazard Class 3
Packing Group III
Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Isobutyl methacrylate	Present	X		Present		Present	X	Present	X	X
2-Propenoic acid, 2-methyl-, 1,2-ethanediy l ester	Present	X		Present		Present	X	Present	X	X
N,N-DIMETHYL-P-TOLUIDI NE	Present	X		Present		Present	X	Present	X	X
4-Methoxyphenol	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

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Isobutyl methacrylate 97-86-9	X		
4-Methoxyphenol 150-76-5	X	X	X

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

2

Flammability

2

Instability

2

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical Hazards

Not determined

Personal Protection

Not determined

Issue Date: 16-Dec-2013

Revision Date: 3-April-2019

Revision Note: Added SAPT

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