



Safety Data Sheet

Issue Date: 16-Dec-2013

Revision Date: 13-Jan-2015

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 | Proprietary |
| 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester | 97-90-5 | Proprietary |
| N,N-DIMETHYL-P-TOLUIDINE | 99-97-8 | Proprietary |
| 4-Methoxyphenol | 150-76-5 | 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 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. |
|-----------------|--|

Indication of any immediate medical attention and special treatment needed

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|---------------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|---------------------------|------------------------|

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

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|----------------------------------|--|
| 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. |
|--------------------------------|--|

Conditions for safe storage, including any incompatibilities

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|-------------------------------|--|
| 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

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|-----------------------------|---|
| Engineering Controls | Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers. |
|-----------------------------|---|

Individual protection measures, such as personal protective equipment

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|---------------------------------|---|
| 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 | Hazardous polymerization may occur. |
|---------------------------------|-------------------------------------|

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

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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