

SAFETY DATA SHEETS

This SDS packet was issued with item:

075542170

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

075538269 075538285 075542105 075542113 075542121 075542139 075542147 075542154 075542162 075542188

075542329 075542337 075542345 075542352 075542360 075542378 075542386 075542394 075542402

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PARKELL PRODUCTS INC.
300 Executive Dr.
Edgewood, NY 11717

Company Telephone Number: (631) 249-1134
24-Hour Emergency Phone: InfoTrac 1-800-535-5053

PRODUCT NAME: SNAP and RELATE MONOMER

MSDS NO: S441, S458M

SECTION 2 – COMPOSITION INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	GAS NUMBER	PEL	TLV	%
Isobutyl Methacrylate Monomer	97-86-9	NE	NE	
Ethylene Glycol Dimethacrylate Monomer	97-90-5	NE	NE	
N,N-Dimethyl-p-Toluidine	99-97-8	NE	NE	
Benzophenone-3	131-57-7	NE	NE	
p-Hydroxyanisole	150-76-5	NE	5 mg/m ³	

SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: May cause irritation.

POTENTIAL HEALTH EFFECTS

EYES: Moderate irritant causing moderate initial pain with tearing, redness, swelling or blurring of vision.
SKIN: 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 concentration causes cyanosis, symptoms include 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. Causes elevated methemoglobin in the blood. Symptoms may include headaches, weakness and dizziness, and can be recognized by the blue color of the lips, fingernails, nose and earlobes. Vapor or mist is irritating to mucous membranes and upper respiratory tract.
INGESTION: Harmful if swallowed. Causes irritation, a burning sensation in the mouth, throat and respiratory tract, and abdominal pain. May cause methemoglobinemia.

CHRONIC EFFECTS:

SIGNS & SYMPTOMS:

CARCINOGENICITY: No NTP? No IARC MONOGRAPHS? No OSHA?
 The Dimethacrylate may contain trace quantities of substances known to the state of California to cause cancer and/or reproductive toxicity. None of the other components of this material are listed by IARC, NTP, OSHA, or ACGIH as carcinogens.

SECTION 4 – FIRST-AID MEASURES

INHALATION: Remove to fresh air. Give oxygen, if breathing is difficult. Get prompt medical attention, if difficulty persists.
EYES: Flush with water for 15 minutes, including under eyelids. Get prompt medical attention.
SKIN: Wash thoroughly with soap and water. If irritation occurs, seek medical attention.
INGESTION: Do not induce vomiting, dilute with water or milk. Never give anything to an unconscious person. Call physician or the Poison Control Center immediately.
NOTE TO PHYSICIANS: Treat symptoms conventionally after decontamination.

SECTION 5 – FIRE-FIGHTING MEASURES

FLASH POINT (TCC): 120°F (49°C) FLAMMABLE LIMIT (air, % by vol.) UPPER: NE LOWER: NE
 FLAMMABILITY CLASSIFICATION (CFR 1910.1200):
 AUTOIGNITION TEMPERATURE: 693°F (367°C)
 EXTINGUISHING MEDIA: Chemical foam, carbon dioxide, dry chemical. Water may be ineffective.
FIRE FIGHTING INSTRUCTIONS: Wear self contained breathing apparatus, and full protective gear. Use water spray to cool containers and minimize vapors. Avoid spreading burning liquid with water used for cooling. Move containers from fire area if it can be done with out risk.
UNUSUAL FIRE & EXPLOSION HAZARDS: Vapors may travel to source of ignition and flash back. Heat can cause polymerization with rapid release of energy which may rupture container explosively. (Spontaneous polymerization may occur on prolonged storage.) Fight fire from protected location. Sensitive to static discharge.
HAZARDOUS COMBUSTION PRODUCTS:

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Evacuate the area. Eliminate sources of ignition. Use self-contained breathing apparatus and protective clothing. Dike and absorb with inert material. Transfer to proper containers for disposal, use non-sparking tools. Contaminated monomer may be unstable, add inhibitor to prevent polymerization. Keep spills and cleaning runoffs out of sewers and open bodies of water. Spills on porous surfaces can contaminate the groundwater.

SECTION 7 – HANDLING AND STORAGE

HANDLING: Observe precautions found on the label. Do not breathe vapor or mist. Close container after each use. Ground all metal containers when transferring. Use explosion-proof equipment.

STORAGE: Store in cool dry place away from heat, sparks, flame and direct sunlight. Check inhibitor levels every three months and maintain at original level. Maintain air space inside storage containers, inhibitor requires air contact to function

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Use good, local explosion-proof ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at point of monomer release. Refer to Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists. Local exhaust ventilation is preferred since it prevents contamination dispersion into the work area by controlling it at its source.

EYE/FACE PROTECTION: Safety glasses or chemical splash goggles. Provide eyewash, safety shower and impervious clothing.

SKIN PROTECTION: Impervious, nitrile.

RESPIRATORY PROTECTION: Use self-contained breathing apparatus when needed.

EXPOSURE GUIDELINES:

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, pale, oily liquid with acid, fruity odor.
BOILING POINT: ~ 311°F (155°C) @ 760mm HG **SPECIFIC GRAVITY (H₂O = 1):** 0.861
VAPOR PRESSURE: 3 mm HG @ 68°F, 20°C **PERCENT VOLATILES:** 100%
VAPOR DENSITY (Air = 1): 4.91 @ 15.5 °C, 60 °F **EVAPORATION RATE (Butyl Acetate = 1):** 0.5
SOLUBILITY IN WATER: 0.1/100grams **PH:** ND

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Unstable **HAZARDOUS POLYMERIZATION:** May occur.
CONDITIONS TO AVOID: Heat, sources of ignition, aging, contamination and absence of an oxygen containing atmosphere above the product.
INCOMPATIBILITY (Materials to avoid): Avoid strong bases and oxidizing agents. Material has strong solvent properties and can soften paint and rubber.
HAZARDOUS DECOMPOSITION PRODUCTS: Mainly Oxides of Carbon when burned.

SECTION 11 – TOXICOLOGICAL INFORMATION

SECTION 12 – ECOLOGICAL INFORMATION

AQUATIC TOXICITY: Isobutyl Methacrylate Monomer: This compound is slightly toxic. Goldfish LC₅₀: 124 mg/L/72h. **EFFLUENT TREATMENT:** Isobutyl Methacrylate Monomer: Product is substantially removed in biological treatment process. **ENVIRONMENTAL FATE:** For Isobutyl Methacrylate Monomer: High tonnage material produced in wholly contained systems. Liquid with high volatility. Sparingly soluble in water. Predicted to have moderate potential for bioaccumulation. Predicted to have moderate mobility in soil.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste must be disposed of in accordance with federal, state, and local environmental control regulations.

SECTION 14 – TRANSPORT INFORMATION (not meant to be all-inclusive)

PROPER SHIPPING NAME: ISOBUTYL METHACRYLATE, STABILIZED, SOLUTION **UN/NA NUMBER:** UN 2283
DOT HAZARD LABEL: FLAMMABLE LIQUID

SECTION 15 – REGULATORY INFORMATION (not meant to be all-inclusive)

SECTION 16 – OTHER INFORMATION

NFPA CODES: HEALTH - 2 **FLAMMABILITY -** 2 **REACTIVITY -** 2
WORK/HYGIENE PRACTICES: Wash hands before eating, drinking or smoking.

DATE PREPARED: 07/13/12 **PREPARED BY:** R. Burke

To the best of our knowledge, the information on this MSDS sheet is accurate. However, the information is provided without any warranty, expressed or implied, regarding its correctness or completeness. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This information is not warranted to be whether originating with the company or not.



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.
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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	Hazardous polymerization may occur.
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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: 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



Safety Data Sheet

Issue Date: 16-Dec-2013

Revision Date: 13-Jan-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name SNAP™ and RELATE Powder

Other means of identification

SDS # S426, VAR.

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 Fine beige powder

Physical State Solid

Odor Faint odor in bulk

Classification

Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1

Hazards Not Otherwise Classified (HNOC)

May form combustible dust concentrations in air

Signal Word

Warning

Hazard Statements

Causes serious eye irritation
May cause an allergic skin reaction



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN: Wash with plenty of soap and water
 Wash contaminated clothing before reuse
 If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Titanium Dioxide	13463-67-7	Proprietary
Benzoyl peroxide	94-36-0	Proprietary
Mineral Pigment Blend	Proprietary	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. If eye irritation persists: Get medical advice/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 to fresh air. Get medical attention if symptoms persist.
Ingestion	Rinse mouth thoroughly with water. If a large amount is swallowed, get medical attention.

Most important symptoms and effects

Symptoms	Acute Effects: Eye contact causes serious eye irritation. Skin contact may cause a drying effect and an allergic skin reaction. Inhalation may cause irritation of nose, throat, lungs, and respiratory tract; may cause temporary drying effect or irritation of mucous membranes. Ingestion causes no known specific effects; may cause nausea, metallic taste in mouth, or muscular weakness. Chronic Effects: Long term exposure to silica (contained within the Mineral Pigment Blend) causes silicosis, a form of pulmonary fibrosis. Continued exposure to silica can lead to cardiopulmonary impairment.
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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. Carbon dioxide (CO₂). Dry chemical.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Polymer dust is combustible. The explosive limits of the polymer particles suspended in air are approximately those of coal dust.

Hazardous Combustion Products Carbon oxides. Methacrylate monomer.

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. Avoid extinguishing methods which may generate dust clouds. Water stream can disperse dust into air producing a fire hazard and possible explosion hazard if exposed to ignition source.

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 Sweep up to avoid slipping hazard. Keep airborne particulates at a minimum when cleaning up spills.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Use only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in cool, dry place away from incompatible materials. Keep container closed to prevent water absorption and contamination.

Incompatible Materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium Dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 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 Use safety glasses or chemical splash goggles.

Skin and Body Protection Wear impervious, Nitrile gloves if hot plastic is handled.

Respiratory Protection Use respiratory protection for Particulates Not Otherwise Classified if 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	Solid	Odor	Faint odor in bulk
Appearance	Fine beige powder	Odor Threshold	Not determined
Color	Beige		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not applicable	
Flash Point	304 °C / 580 °F	Tag Closed Cup (butyl acetate = 1)
Evaporation Rate	3.0	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not applicable	
Lower Flammability Limit	Not applicable	
Vapor Pressure	Not applicable	
Vapor Density	Not applicable	
Specific Gravity	1.25	(Water = 1)
Water Solubility	Insoluble in water	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not established	
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.

Conditions to Avoid

Keep separated from incompatible substances. Avoid heating above 240°C (464°F). Keep out of reach of children.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon oxides. Methacrylate monomer.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Eye Contact	Causes serious eye irritation.
Skin Contact	May cause an allergic skin reaction.
Inhalation	Avoid inhalation of dust.
Ingestion	Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium Dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
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 Titanium dioxide is a possible carcinogen when it appears as a respirable dust.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium Dioxide 13463-67-7		Group 2B		X
Benzoyl peroxide 94-36-0		Group 3		

Legend

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

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

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

X - Present

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

Not available

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

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.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
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

Not regulated

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Titanium Dioxide	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

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

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Benzoyl peroxide - 94-36-0	94-36-0	Proprietary	1.0

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 contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Titanium Dioxide - 13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Titanium Dioxide 13463-67-7	X	X	X
Benzoyl peroxide 94-36-0	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 1	Flammability 1	Instability 0	Special Hazards Not determined
<u>HMIS</u>	Health Hazards Not determined	Flammability Not determined	Physical Hazards Not determined	Personal Protection Not determined

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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