NE

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PARKELL, INC. 300 Executive Drive Edgewood, NY 11717

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

PRODUCT NAME: SNAP MONOMER MSDS NO:

S441

SECTION 2 – COMPOSITION INFORMATION ON INGREDIENTS					
HAZARDOUS COMPONENTS	CAS NUMBER	PEL	TLV	9/	
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		

Benzophenone-3 p-Hydroxyanisole	131-57-7 150-76-5	NE NE	NE 5 mg/m ³				
SECTION 3 – HAZARDS IDENTIFICATION							
EMERCENCY OVERVIEW: May across initiation							

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

HAZARDS:

CARCINOGENECITY: No NTP? 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.

Flush with water for 15 minutes, including under eyelids. Get prompt medical attention. EVES: 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: LOWER: 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

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.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION FNGINFERING 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, poale, oily liquid with acrid, fruity odor, SPECIFIC GRAVITY (H2O = 1): 0.861 BOILING POINT: ~ 311 F (155 C) @ 760mm HG 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: PH: ND 0.1/100grams

CONDITIONS TO AVOID: Heat, sources of ignition, aging, contamination and absence of an oxygen containing atmosphere above the product.

MATERIAL SAFETY DATA SHEET

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

HAZARDOUS POLYMERIZATION:

Page 2 of 2

May occur.

UN 2283

REACTIVITY -

2

Unstable INCOMPATIBILITY (Materials to avoid): Avoid strong bases and oxidizing agents. Material has strong solvent properties and can soften paint HAZARDOUS DECOMPOSITION PRODUCTS: Mainly Oxides of Carbon when burned.

SECTION 10 - STABILITY AND REACTIVITY

MSDS No: S441

STORAGE:

STABILITY:

NEPA CODES:

SECTION 11 - TOXICOLOGICAL INFORMATION

SECTION 12 - ECOLOGICAL INFORMATION AQUATIC TOXICITY: Isobutyl Methacrylate Monomer: This compound is slightly toxic. Goldfish LC 50: 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 solu-

ble in water. Predicted to have moderate potential for bioaccumulation. Predicted to have moderate mobility in soil.

SECTION 13 - DISPOSABLE 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 DOT HAZARD LABEL: FLAMMARI E LIQUID UN/NA NUMBER:

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

SECTION 16 - OTHER INFORMATION

HEALTH -WORK/HYGIENIC PRACTICES: Wash hands before eating, drinking or smoking. 04/03/06 DATE PREPARED: 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 warranteed to be whether originating with the company or not.

FLAMMABILITY -

2

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION PARKELL INC Company Telephone Number: (631) 249-1134 300 Executive Drive 24-Hour Emergency Phone: InfoTrac 1-800-535-5053 Edgewood, NY 11717 PRODUCT NAME: SNAP RESIN (POWDER) WITHOUT CADMIUM MSDS NO: SA26 VAR

MATERIAL SAFETY DATA SHEET

CAS NUMBER

9003-42-3

94-36-0

PFI

15 ma/m³

15 mg/m³

5 m/m3

I JARC MONOGRAPHS?

Page 1 of 2

l osha?

NΑ

TIV

10 mg/m³

10 mg/m³

5 m/m³

NΙΔ LOWER:

SECTION 2 - COMPOSITION INFORMATION ON INGREDIENTS

Titanium Diovide (CL 77891) 15 mg/m³ 10 mg/m³ 13463-67-7 Iron Ovides (CL 77499) 12227-89-3 15 mg/m³ 10 mg/m³ Mineral Pigment Blend NIE 15 mg/m³ 10 mg/m³ SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HAZARDOUS COMPONENTS

Polymer

Renzovi Perovide

Particulates Not Otherwise Classified

MSDS No: S426, VAR.

POTENTIAL HEALTH EFFECTS

EVES May cause severe irritation or damage

SKIN May cause drying effect. Non-irritating, although allergies have been noted in humans and guinea pigs.

INHALATION: May cause irritation of nose, throat and lungs. May cause mild irritation to the Respiratory Tract. May cause temporary drying effect or irritation of mucus membranes

INGESTION: No known specific effects. May cause nausea or metallic taste in mouth. Considered to be non-toxic. May produce muscular weakness CHRONIC EFFECTS: For Mineral Pigment Blend: Long term exposure to silica causes silicosis, a form of pulmonary fibrosis. Continued

SIGNS & SYMPTOMS: CARCINOGENECITY 1 NTP2 Mineral Pigment Blend contains more than 0.1% crystalline silica and is considered to be a carcinogen by IARC, IARC and NIOSH lists'

Titanium Dioxide as not classifiable as to carcinogenicity to humans. IARC lists Benzoyl Peroxide as not classifiable as to carcinogenicity to humans. None of the other components of this material are listed by IARC, NTP, OSHA, or ACGIH as carcinogens.

SECTION 4 - FIRST-AID MEASURES

ΙΝΗΔΙ ΔΤΙΟΝ: Remove to fresh air. Get medical help if discomfort persists EYES: Flush with water for 15 minutes, including under evelids. Get medical help if discomfort perwsists.

SKIN Wash with soap nd water. Get medical help if discomfort persists INGESTION: Rinse mouth out with water. Call doctor if amount was large

exposure to silica can lead to cardiopulmonary impairment.

NOTE TO PHYSICIANS Treat symptoms conventionally, after thorough decontamination

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT (TCC):

AUTOIGNITION TEMPERATURE EXTINGUISHING MEDIA:

FIRE FIGHTING INSTRUCTIONS:

UNUSUAL FIRE & EXPLOSION

580°F (304°C) FLAMMABLE LIMIT (air % by vol.) UPPER:

Water carbon dioxide dry chemical

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. Firefighters should

wear self-contained breathing apparatus. Polymer dust is combustible. The explosive limits of the polymer particles suspended in air

are approximately those of coal dust

HAZARDS HAZARDOUS COMBUSTION PRODUCTS: Methacrylate Monomer and Oxides of Carbon when burned

SECTION 6 - ACCIDENTAL RELEASE MEASURES

at a minimum when cleaning up spills

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Sweep up to avoid slipping hazard. Keep airborne particulates

SECTION 7 - HANDLING AND STORAGE

contamination

HANDLING: Use in well ventilated areas. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use good personal hygiene

and housekeeping. STORAGE: Store in cool dry place away for incompatible materials. Keep container closed to prevent water absorption and

MSDS No: S426, VAR.	MATERIAL SAFETY DATA SHEE	T Page 2 of 2
SECTION 8 - EXPOSURE CONTRO	S / PERSONAL PROTECTION	
eyewash, safety shower and impervio EYE/FACE PROTECTION: SKIN PROTECTION: Impervious, RESPIRATORY PROTECTION: U: EXPOSURE GUIDELINES:	od, local exhaust at processing equipment, including buffers, sar is olothing are recommended. High temperature processing equifety glasses or chemical splash goggles. Intifie, if hot plastic is handled. e type for Particulates Not Otherwise Classified, if needed.	nders, grinders and polishers. Provide uipment should be well ventilated.
SECTION 9 - PHYSICAL AND CHEM	CAL PROPERTIES	
	Fine beige powder, faint odor in bulk. SPECIFIC GRAVITY (H _P O = 1): PERCENT VOLATILES: NA EVAPORATION RATE (Butyl Acetate toluble PH:	1.25 NA 3.0 ND
SECTION 10 - STABILITY AND REA	CTIVITY	
STABILITY: Stable CONDITIONS TO AVOID: Heating ab INCOMPATIBILITY (Materials to avoid HAZARDOUS DECOMPOSITION PR		Will not occur.
SECTION 11 - TOXICOLOGICAL IN	ORMATION	
SECTION 12 – ECOLOGICAL INFOR	MATION	
SECTION 13 - DISPOSABLE CONS	DEDATIONS.	

Waste must be disposed of in accordance with federal, state, and local environmental control regulations. Do not reuse containers,

SECTION 16 - OTHER INFORMATION

SECTION 14 - TRANSPORT INFORMATION (not meant to be all-inclusive) PROPER SHIPPING NAME: Synthetic Gum Resin Granular, NOIBN DOT HAZARD LABEL: NA

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

UN/NA NUMBER:

NA

FLAMMABILITY -REACTIVITY -NEPA CODES: HEALTH -WORK/HYGIENIC PRACTICES: Wash face and hands thoroughly with soap and water after use and before eating, drinking, smoking or applying cosmetics. DATE PREPARED: 04/03/06 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 warranteed to be whether originating with the company or not.