MATERIAL (SAFETY DATA SHEET)

PRODUCT MAGNIBOND

I. Product Identification

Product code: 30000, 30001, 30002, 30003, 30004, 30008, 30009, 30500, 30700, 30701, 30881
Synonyms: Polyurethane Oligomer Mixture

Manufacturer/Supplier
Delta Kits Inc.
1090 Bailey Hill Rd. Suite A
Eugene Or. 97402
Tel: 800-548-8332
Fax: (541)345-1591

Chemtel
Emergency Telephone number
(800)-255-3925 US
(813)-248-0585 Int.

II. Hazard identification

Hazard description: Irritant Appearance: Transparent Physical state: Liquid
Classification: OSHA Regulatory Status: This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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

Signal word
DANGER

Target Organ Effects: Skin, EYES, inhalation, ingestion

GHS label elements, including precautionary statements

Hazard statements: Causes skin irritation and serious eye damage. May cause an allergic skin reaction and respiratory irritation. May be harmful if swallowed.

Precautionary Statements - Prevention: Wash face, hands and any exposed skin thoroughly after handling, Wear protective gloves/clothing/eye and face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well ventilated area.

Precautionary Statements - Response: Get medical advice attention if you feel unwell.
IF IN EYES; Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention.
IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
IF SWALLOWED: Rinse mouth.

Precautionary statements - Storage: Store in a well-ventilated place. Keep container tightly closed.

Precautionary Statements - Disposal: Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) : NONE

Unknown acute toxicity: 0% of the mixture consists of ingredients(s) of unknown toxicity

III. Composition

Chemical Name	Weight-%	C.A.S. number	Trade Secret
Isobornyl Acrylate	30 - 60	5888-33-5	*
2-Hydroxyethyl Methacrylate	10 - 30	868-77-9	*
octyl acrylate	5 - 10	2499-59-4	*
decyl acrylate	5 - 10	2156-96-9	*
Acrylic Acid	1-5	79-10-7	*
Photoinitator	1-5	Proprietary	*
Silane Coupling Agent	1-5	Proprietary	*

* The exact percentage (concentration) of composition has been withheld as a trade secret.

IV. First Aid Measures

Eye Irritation: Immediately flush eyes with plenty of water for at least 15 minutes.
Skin Contact: In case of skin contact, wash thoroughly with soap and water.
Inhalation: Remove affected person to fresh air.
Ingestion: Low toxicity; Seek medical attention.
If any symptoms persist seek medical attention.
Note to physicians: Treat symptomatically

V. Fire-Fighting Measures

Suitable extinguishing media: Use CO_2, dry chemical, or foam.
Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical: Carbon dioxide CO_2), carbon monoxide (CO), oxides of nitrogen (NOX), dense black smoke.
Hazardous combustion products: Hazardous decomposition products due to incomplete combustion.
Explosion data: NONE
Protective equipment and precautions for fire fighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

VI. Accidental Release Measure

Personal safety: Ensue adequate ventilation. Wear Suitable gloves and eye/face protection.
Environmental safety: Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses. See Section 12 for additional Ecological Information. Local authorities should be advised if significant spillages cannot be contained.
Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica get, acid binder, universal binder, sawdust.

VII. Storage and Handling Procedures.

Storage: Keep container tightly closed in a dry and well-ventilated place.
Handling: Handle in accordance with good industrial hygiene and safety practices. Ensure adequate ventilation. Protect from light.
Incompatible products: Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers, Thiosulfates.

VIII. Exposure Controls and Personal Protection

Chemical name	ACGIH TLV	OSHA	NIOSH IDLH
Acrylic Acid	TWA: 2PPM S*	(vacated) TWA: 10ppm (vacated) TWA: 30 mg/m³ S*	TWA: 2 ppm TWA: 6 mg/m³

Respiratory: Positive fresh air exhaust should be provided in the work area; respiratory equipment is unnecessary in normal use.
Skin: Avoid skin contact. Wear gloves and impervious protective clothing if frequent direct contact is likely.
Eyes: Do not wear contact lenses. Chemical safety goggles are recommended.

IX. Physical and Chemical Properties.

Appearance:	Transparent	Density:	Not Determined
Ignition temperature:	214°F (101°C)	Melting point/freezing point	Not Determined
Odor :	Characteristic	Evaporation Rate	Not Determined
Dynamic viscosity :	18 cP	Specific Gravity	Not Determined
Water Solubility Values	Not Determined	Auto Ignition	Not Determined
Explosive properties	Not Determined	Oxidizing properties	Not Determined

X. Stability and reactivity

Stability: Stable under normal conditions.
Hazardous Decomposition Products: None.
Incompatibility: Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers. Protect from light and heat.

XI. Toxicological Information

No Acute toxicity information is available for this product.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Isobornyl Acrylate	= 4890 mg/kg (Rat)	> 5 g/kg (Rabbit)	
2-Hydroxyethyl Methacrylate	= 5050 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	
octyl acrylate	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	
decyl acrylate	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	
Acrylic Acid	= 33500 µg/kg (Rat	= 280 µL/kg (Rabbit)	= 5300 mg/m₃ (Rat) 2 h
Silane Coupling Agent	= 22600 µL/kg (Rat)	= 3970 µL/kg (Rabbit)	

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

Sensitization: May cause sensitization of susceptible persons.

Mutagenic effects: No information available.

Reproductive toxicity: No information available.

Carcinogenicity: Contains no ingredients above reportable quantities listed as a carcinogen.

Numerical measures of toxicity - Product information

Unknown acute toxicity 0% of the mixture consists of ingredients(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	ATEmix (dermal)	ATEmix (inhalation-dust/mist)
4067 mg/kg	4375 mg/kg	10.9 mg/l

XII. Ecological Information

Ecotoxicity: Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
7.2793% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Acute aquatic toxicity

Chemical name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish
Isobornyl Acrylate	ErC 50 = 2.7 mg/L 96 h (Pseudokirchneriella subcapitata)	EC 50 = 1.1 mg/L 48 h (Daphnia magna)	LC 50 = 1.8 mg/L 96 h (Danio rerio)
2-Hydroxyethyl Methacrylate		EC50 > 380 mg/L 48h (Daphnia Magna)	LC50 = 227 mg/L 96 h Pimephales promelas)
Acrylic Acid	EC50 0.17 mg/L 96 h (Pseudokirchneriella subcapitata) EC 50 0.04 mg/L 72 h (Desmodesmus subspicatus)	EC50 = 95mg/L 48h	LC50 = 222 mg/L 96 h (Brachydanio rerio)
Photoinitator	EC50 14.4 mg/L 72 h (Green algae)	EC50 53.9 mg/L 48 h (Daphnia magna)	

Persistence and degradability No information Bioaccumulation No information

Chemical name	log Pow
2-Hydroxyethyl Methacrylate	0.47
Isobornyl Acrylate	0.46

XIII. Disposal considerations

Waste Disposal Methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging: Dispose of in accordance with local regulation.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

XIV. Transportation information

DOT, ICAO/IATA, IMDG/IMO, TDG, MEX: Not Regulated

XV. Regulatory Information.

TSCA	Complies	**AICS**	Not listed
DSL/NDSL	Complies	**ENCS**	Not listed
EINECS/ELINCS	Complies	**NZIoC**	Not listed
IECSC	Not listed	**PICCS**	Not listed
KECL	Complies	**ECSI**	Not listed

US Federal Regulations

OSHA Regulatory Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	Sara 313 - Threshold Values %
Acrylic Acid - 79 10-7	1.0

Sara 311/312 Hazard Categories:

Acute health hazard Yes

Chronic Health Hazard No

Fire hazard No

Sudden release of pressure hazard No

Reactive Hazard No

Cercla: This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	CERCLA/Sara RQ	Hazardous Substances RQ's	Reportable Quantity (RQ)
Acrylic acid 79-10-7		5000 lb.	RQ 5000 lb. final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	New Jersey	Massachusetts	Pennsylvania
decyl acrylate	X	X	X
octyl acrylate			X
Acrylic acid	X	X	X
Methyl alcohol	X	X	X

XVI. Other information

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