

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION:

B9R-BIO-MICRO

B9 BIORES Micro Precision

North America:

B9Creations, LLC

2828 Plant St, Suite 2

Rapid City, SD 57702

605 787 0771 Phone

Emergency Phone (United States):

800-424-9300

CHEMTREC

Europe:

B9Creations, LLC

2828 Plant St, Suite 2

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Asia:

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CHEMTREC

SECTION 2 HAZARDS IDENTIFICATION:

Classification of the product:

Skin irritation, Category 2, H315

Eye Irritation, Category 2, H319

Dermal sensitization, Category 1, H317

Chronic aquatic toxicity, Category 2, H411

GHS Label elements:

Hazard pictograms:



Hazard Statements:

H315 Causes skin irritation

H319 Causes serious eye irritation

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H317 May cause an allergic skin reaction
H411 Toxic to aquatic life with long lasting effects

Precautionary statements:

Prevention:

P264 Wash hands/skin thoroughly after handling
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P321 Specific treatment (see supplemental first aid instructions on this label)
P332+P313 IF SKIN irritation occurs: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 IF eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.

Disposal:

P501 Dispose of contents/container to an approved waste disposal plant.

GENERAL HEALTH EFFECTS: Irritant to skin, eyes and respiratory tract. Effects may be delayed for several hours.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: No data available. Repeated and prolonged overexposure may increase the potential for adverse health effects.

SECTION 3 INGREDIENTS:

COMMON NAME	CHEMICAL NAME	PERCENT BY WEIGHT	CAS#	EXPOSURE LIMITS	Classification	EINECS#
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					Regulation (EC) 1272/2008	
Acrylated Monomer, CTFA	(5-ethyl-1,3-dioxan-5-yl)methyl acrylate	10 – 70%	66492-51-1	Not Established	Skin irrit. Cat 2 H315, Eye irrit. Cat 2 H319, Skin sensit. Cat 1 H317, Chron aq tox Cat 2 H411	266-380-7
Acrylated Oligomers	Trade Secret	50 – 90%	n/a	Not Established		Proprietary
Photoinitiator BAPO	Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-	1 – 5%	162881-26-7	Not Established	Skin sensit. Cat 1 H317, Chron aq tox Cat 4 H413	423-340-5
Pigments	Propoxylated neopentylglycol diacrylate	.1 – 2%	84170-74-1	Not Established	Skin sensit. Cat 1 H317, Chron aq tox Cat 2 H411	617-546-6

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES:

SKIN CONTACT: Remove and isolate contaminated clothing and shoes. Remove excess material from skin with clean cloth. Flush skin with running lukewarm water. Wash affected areas using mild soap.

EYE CONTACT: Flush the eye and under lids with warm water for 15 minutes. Remove any contact lenses during the flushing. Get immediate medical attention if symptoms persist.

INHALATION: Move subject to fresh air and keep warm. If subject is not breathing, administer artificial respiration. If breathing is difficult, have qualified personnel administer oxygen and get medical attention.

INGESTION: If appreciable quantities are swallowed, seek immediate medical attention.

SECTION 5 FIRE FIGHTING MEASURES:

FLAMMABLE/EXPLOSIVE LIMITS (Volume % in air): Not established

EXTINGUISHING METHOD: Water fog, carbon dioxide (CO₂) or dry chemical

Evacuate area of all non-emergency personnel. Fire fighters must wear full emergency equipment with self-contained breathing apparatus. At elevated temperatures hazardous polymerization may occur causing container rupture and in extreme cases, explosion. Fight fires from upwind and cool intact containers with water spray or stream at maximum range.

SECTION 6 ACCIDENTAL RELEASE MEASURES:

Remove all sources of ignition and ventilate area. Avoid skin and eye contact. Use respiratory protection. Absorb with inert materials such as dry clay or sand and place in closed container for disposal as solid waste in accordance with all applicable regulations.

Environmental Precautions: Do not empty into drains. Do not discharge into drains/surface waters/groundwater.

SECTION 7 HANDLING AND STORAGE:

HANDLING: Avoid any unnecessary contact. Use protective clothing specified in Section 8.

STORAGE: Store away from heat and sunlight to prevent polymerization. Polymerization initiators include peroxides, strong oxidizers, aluminum, copper, copper alloys, carbon steel, iron, rust, and strong bases.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION:

HAND PROTECTION: Use nitrile, butyl, neoprene or other gloves that are resistant to chemicals in Section 2. Replace immediately if punctured or torn or when a change of appearance (color, elasticity, shape) occurs. RadTech recommends a minimum of 0.45mm thick, nitrile gloves for long duration exposure (up to 4 hours on most UV/EB-curing acrylates) or mechanical handling activities. Single use, disposable nitrile gloves are recommended by RadTech for short duration exposures not exceeding 30 minutes, in situations where only splashes are likely.

EYE PROTECTION: Use splash-proof safety goggles, safety glasses, or face shields that are ANSI approved to prevent eye contact. Eyewash availability is also recommended.

SKIN PROTECTION: Protective or disposable outer clothing is recommended. Protective clothing must be cleaned thoroughly after each use.

RESPIRATORY PROTECTION: Use local exhaust to control vapors and mists. Use of NIOSH approved respirators for organic vapors, is recommended where TLV is exceeded.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE, PHYSICAL STATE AND ODOR: Black Viscous Liquid, mild odor

Viscosity: 600 cps @77 F

BOILING POINT (°F): Not available

SPECIFIC GRAVITY: 1.06

VAPOR PRESSURE (mm Hg): <0.1 mm Hg

SOLUBILITY IN WATER: Practically insoluble

pH: Not available

Auto-ignition Temperature: Not Established

Density: 9 – 9.5 Lbs/Gallon

FREEZING POINT: Not available

EVAPORATION RATE: <1

VAPOR DENSITY: Not established

VOC: < 0 grams/liter

Flash Point: > 200F

SECTION 10 REACTIVITY / STABILITY HAZARD DATA:

STABILITY: This material is stable under recommended storage and handling conditions. Refer to section 7.

CONDITIONS TO AVOID: Excessive heat, ignition sources, exposure to sunlight and contamination with dirt and other foreign materials.

SUBSTANCES TO BE AVOIDED: Polymerization initiators including peroxides, strong oxidizing agents, copper, copper alloys, carbon steel, iron, rust and strong bases

INCOMPATIBILITY: No data available

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal oxidation or pyrolysis (as in fire) may yield carbon dioxide, carbon monoxide and volatile organic fragments which are flammable, irritating or toxic.

HAZARDOUS POLYMERIZATION: Under certain conditions (excess temperatures and contamination) hazardous polymerization may occur. Avoid high temperature and contamination with foreign materials.

SECTION 11 TOXICOLOGICAL INFORMATION:

TOXICOLOGICAL DATA: Slightly toxic by ingestion. Prolonged or repeated exposure may result in sensitization.

LD50 – Not determined **LC50** – Not determined

REPRODUCTIVE TOXICITY: Not determined **TERATOGENICITY:** Not determined **MUTAGENICITY:** Not determined

CARCINOGENICITY: **IARC?** No **NTP?** No **OSHA?** No

Components:

Data from available scientific literature on the components of this material which have been identified as hazardous chemicals under the criteria of the OSHA Hazard Communications Standard (29 CFR 1910.1200) or the Canadian Hazardous Act are discussed below:

Acute inhalation toxicity	No data available
Acute dermal toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/ Eye irritation	No data available
Respiratory or skin sensitisation	No data available
Target Organ Systemic Toxicant – Repeated exposure	No data available
Skin corrosion/irritation	No data available

SECTION 12 ECOLOGICAL INFORMATION:

No determination has been made on ecological impact. However, it is highly recommended to prevent contamination of the environment with this product, i.e. soil, landfills, drains, sewers, surface waters, etc.

SECTION 13 DISPOSAL CONSIDERATIONS:

Dispose of this product in accordance with all applicable laws and regulations.

SECTION 14 TRANSPORTATION INFORMATION:

Transport this product in accordance with all applicable laws and regulations. This product, as supplied, is not regulated nor classified as a hazardous material/dangerous good by United States Department of Transportation (DOT), the International Civil Aviation Organization (ICAO), the International Maritime Organization (IMO), the Canadian Transportation of Dangerous Goods Act (TDG), or the International Air Transport Association (IATA).

SECTION 15 REGULATORY INFORMATION:

This Material Safety Data Sheet has been formatted to the best of our ability in accordance with American National Standards Institute (ANSI), European Communities (EC), and contains hazard criteria and all information required by the Canadian Controlled Products Regulation (CPR) in regard to this product.

INTERNATIONAL REGULATIONS

Canadian Inventory Status: All components of this product are currently listed on the Canadian Domestic Substance List (DSL) or the Canadian Non-Domestic Substance List NDSL.

European Inventory Status: All components of this product are listed on the European Inventory of Existing Commercial Substances (EINICS) or the European List of Notified Chemical Substances (ELINCS). This product is classified and labeled in accordance with EC directives.

U.S. FEDERAL REGULATIONS

California Proposition 65 Right-To-Know (RTK): This product does not knowingly contain substance (s) known to the state of California to cause cancer and/or reproductive toxicity.

Clean Air Act- Hazardous Air Pollutants (HAP): This product and its components do not contain any Hazardous Air Pollutants.

Clean Air Act – Ozone Depleting Substances (ODS): This product and its components do not contain Ozone Depleting Substances.

Clean Water Act – Priority Pollutants (PP): This product and its components do not contain Priority Pollutants.

Clean Air Act- Hazardous Air Pollutants (HAP): This product and its components do not contain any Hazardous Air Pollutants.

Clean Air Act – Ozone Depleting Substances (ODS): This product and its components do not contain Ozone Depleting Substances.

Clean Water Act – Priority Pollutants (PP): This product and its components do not contain Priority Pollutants.

Coalition of Northeastern Governors (CONEG): This product meets the requirements of CONEG pertaining to heavy metals total content of no more than 100 PPM. No heavy metals are added as a part of the formulation, but raw materials may contain residual parts per million as naturally occurring elements.

Food and Drug Administration (FDA) Food Packaging Status: This product has not been cleared by the FDA for use in food packaging and/or other applications as an indirect food additive.

Occupational Safety and Health Act (OSHA): Refer to Section 11 for OSHA hazardous classification of components.

Resource Conservation and Recovery Act (RCRA): This product is not regulated as a hazardous substance under 40 CFR 261.

SARA Title III Section 302 – Extremely Hazardous Substances (EHS): This product is not regulated as an EHS.

SARA Title III Section 304 – CERCLA: This product is not regulated for emergency release notification.

SARA Title III Section 311/312 – Hazard Communication Standard (HCS): Some components of this product are classified under SARA Title III Section 311/312 as an immediate (acute) hazard and a reactive hazard.

SARA Title III Section 313 – Toxic Chemical List (TCL): This product and its components are not listed under the Toxic Chemical Release Reporting requirements.

Toxic Substances Control Act (TSCA) Section 5(e): This product is not regulated under the Consent Order/Significant New Use Rule.

Toxic Substances Control Act (TSCA) Section 8(b) – Inventory Status: All chemicals in this product are TSCA listed or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

SECTION 16 OTHER INFORMATION:

Revision History:

2/18/2019 – Original issue

Disclaimer: To the best of our knowledge, the product information contained herein is based upon data believed to be reliable, however makes no warranty and disclaims any liability whatsoever for its accuracy or completeness. Since the actual use of the product is beyond our control, no guarantee expressed or implied, is made by B9Creations as to the effects of such uses nor does B9Creations assume liability arising out of the use of this product by others. It remains the responsibility of the user to ensure that the use of the product herein is in accordance with all applicable laws and regulations.