

BBC Biochemical

MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Information

Common Name:	RegularCal•Immuno™	Code:	6080
Supplier:	BBC Biochemical PO Box 1320 409 Eleanor Lane Mount Vernon, WA 98273 1-800-635-4477	MSDS#:	6080
Synonym:	None.	Validation Date:	4-20-09
Trade Name:	Not available.	Print Date:	4-20-09
Material Uses:	Not available.	Responsible Name:	Dr. B
Manufacturer:	BBC Biochemical PO Box 1320 409 Eleanor Lane Mount Vernon, WA 98273 1-800-635-4477	In Case of Emergency: 1-800-424-9300 Chemtrec USA 1-202-483-7616 Chemtrec Intrl 1-800-635-4477	

Section 2. Composition and Information on Ingredients

Name	CAS#	% by Weight	OSHA PEL/TWA	ACGIH TLV/STEL
1) Water	7732-18-5	Percentage composition withheld as trade secret.	Data not available.	Data not available.
2) Formic Acid 90%	64-18-8		5 ppm	10 ppm
3) Selected buffers	Not available		Data not available.	Data not available.
4) Selected ethers	Not available		Data not available.	Data not available.

Section 3. Hazards Identification

Physical State and Appearance	Clear yellow liquid.
Emergency Overview	Not available.
Routes of Entry	Eye contact, inhalation, ingestion, skin contact.
Potential Acute Health Effects	
Eyes	Corrosive, irritation, and inflammation.
Skin	Corrosive, irritation with itching and local redness.
Inhalation	Corrosive, irritation, and inflammation to mucous membranes.
Ingestion	Corrosive, toxic. May cause headaches, dizziness, nausea, and general weakness.
Potential Chronic Health Effects	
Medical Conditions	Respiratory conditions.
Aggravated by	
Overexposure	
Overexposure/ Signs/Symptoms	

Section 4. First Aid Measures

Eye Contact	Immediately flush with water for at least 15 minutes.
Skin Contact	Immediately flush with large amounts of water. Remove contaminated clothing.
Inhalation	Remove to fresh air; give artificial respiration if breathing has stopped.
Ingestion	Dilute with large amounts of water, get immediate medical attention.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	Not available.
Auto-ignition Temperature	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
Products of Combustion	Not available.
Fire Hazards in Presence	Not available.

Of Various Substances

Explosion Hazards in Presence of Various Substances	Not available.
Fire Fighting Media and Instructions	Alcohol or all purpose-type foam for large fires, carbon dioxide or dry chemical for small fires. Water spray to cool containers and disperse vapors.
Protective Clothing (Fire)	Use self-contained breathing apparatus and protective clothing.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	

Section 6. Accidental Release Measures

Small Spill and Leak	Flush small spills with large amounts of water. Evacuate the area of all unnecessary personnel. Wear suitable protective clothing listed in section VIII. Contain the release and eliminate it's source, if this can be done without risk. Neutralize, take up and containerize for proper disposal as described under Waste Disposal Method. Comply with Federal, State, and local regulations on reporting releases.
Large Spill and Leak	Same as above.

Section 7, Handling and Storage

Handling	Material should be handled in a fume hood with adequate ventilation. Do not breathe vapors. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.
Storage	Keep container closed. Avoid metal containers. Store at controlled room temperature.

Section 8. Exposure Controls / Personal Protection

Engineering Controls	
Personal Protection	
Eyes	Safety glasses with side shields should be worn at all times. Eye wash and safety equipment should be available.
Body	Wear impervious protective clothing to prevent skin contact.
Respiratory	If workplace exposure limit(s) of product or any component is exceeded, a NIOSH/MAHA approved air supplied respirator is advised in absence of proper environmental control.
Hands	Protective gloves should be worn to prevent skin contact (Neoprene or equivalent).
Feet	Wear impervious protective footwear to prevent skin contact.
Personal Protection in Case of a Large Spill	Safety glasses with side shields, impervious clothing and footwear, respirator advised in absence of proper environmental control, protective gloves.

Product Name Exposure Limits

- 1)
- 2)
- 3)

Consult Local authorities before acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Not applicable.	Odor:	Not available.
Molecular Weight	Not applicable.	Taste:	Not available.
Molecular Formula	Not applicable.	Color:	Clear yellow liquid.
pH (1%/Water)	Not applicable.		
Boiling/Condensation Point	Not applicable.		
Melting/Freezing Point	Not applicable.		
Critical Temperature	Not applicable.		
Specific Gravity	Not applicable.		
Vapor Pressure	Not applicable.		
Vapor Density	Not applicable.		
Volatility	Not applicable.		
Odor Threshold	Not applicable.		
Evaporation Rate	Not applicable.		
VOC	Not available.		
Viscosity	Not available.		
Ionicity (in water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Soluble in water.		
Physical Chemical Comments	Not available.		

Section 10. Stability and Reactivity

Stability and Reactivity	Stable.
Conditions of Instability	Avoid sources of ignition.
Incompatibility with Various Substances	Bases, oxidizers, H ₂ O ₂ , P ₂ O ₅ .
Hazardous Decomposition Products	CO _x , Na ₂ O.
Hazardous Polymerization	Not available.

Section 11. Toxicological Information

Toxicity to Animals	LD50: Not available. LC50: Not available. Tests on laboratory animals indicate formic acid may produce adverse mutagenic effects.
Chronic Effects on Humans	
Other Toxic Effects on Humans	
Special Remarks on Toxicity to Animals	Tests on laboratory animals indicate formic acid may produce adverse mutagenic effects.
Special Remarks on Chronic Effects on Humans	Formic Acid DeMinimis/SARA 313% - 1.0
Special Remarks on Other Toxic Effects on Humans	Not available.

Section 12. Ecological Information

Ecotoxicity	Not available.
BODS and COD	Not available.
Biodegradable/OEDC	Not available.
Mobility	Not available.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on The Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Information	Not available.
Waste Stream	Not available.
Consult your local or regional authorities.	

Section 14. Transport Information

DOT Classification	Corrosive Liquid, UN3264 Corrosive Liquid, Acidic, Inorganic, n.o.s, (Formic Acid and Hydrochloric Acid), 8. II
Marine Pollutant	Corrosive Liquid
Hazardous Substances Reportable Quantity	Not available.
Special Provisions for Transport	Corrosive Liquid
TDG Classification	Corrosive Liquid, UN3264 Corrosive Liquid, Acidic, Inorganic, n.o.s, (Formic Acid and Hydrochloric Acid), 8. II
ADR/RID Classification	Corrosive Liquid, shipping information not available.
IMO/IMDG Classification	Corrosive Liquid, shipping information not available.
ICAO/IATA Classification	See IATA Regulations, Corrosive Liquid, UN3264 Corrosive Liquid, Acidic, Inorganic, n.o.s, (Formic Acid and Hydrochloric Acid), 8. II

Section 15. Other Information

Label requirements	
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Hazardous Material Information System (U.S.A.)	Health	2	National Fire Protection Association (U.S.A.)	
	Fire Hazard	1		
	Reactivity	0		
	Personal Protection			
References				
Other Special Considerations				
Notice to Reader				
<p><i>To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.</i></p>				