HURST SCIENTIFIC

Safety Data Sheet
Rapid Cal Immuno

SECTION 1: Identification

GHS Product identifier

Product name	Rapid Cal Immuno
Product number	6089
Brand	BBC Biochemical

Recommended use of the chemical and restrictions on use

Decalcification, Laboratory Reagent

Supplier's details

Name	Hurst Scientific
Address	2/36 Hensbrook Loop 6112 Forrestdale WA Australia
Telephone	1300 778 068
email	sales@hurstscientific.com.au

Emergency phone number

Australian Poisons Information Centre 131 126
Australian Emergency Services 000

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with: Model WHS Regulations 2016

- Acute toxicity, inhalation, Cat. 2
- Skin corrosion/irritation, Cat. 1A
- Eye damage/irritation, Cat. 1

GHS label elements, including precautionary statements.

Pictograms

1. Skull and crossbones; 2. Corrosion

Signal word	**Danger**
Hazard statement(s)	
H330	Fatal if inhaled.
H314	Causes severe skin burns and eye damage.
Precautionary statement(s)	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P284	[In case of inadequate ventilation] wear respiratory protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor/...
P320	Specific treatment is urgent (see … on this label).
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to …
P264	Wash … thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363	Wash contaminated clothing before reuse.
P321	Specific treatment (see … on this label).
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. Water	
Concentration	87 %
CAS no.	7732-18-5
2. Nitric acid (40% to 70%)	
Concentration	10 %
CAS no.	7697-37-2
3. Select Buffers	
Concentration	3 % (volume), Trade secret
4. Select Ethers	
Concentration	Not specified, Trade secret.

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled	Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.
In case of skin contact	Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.
In case of 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.
If swallowed	Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

Most important symptoms/effects, acute and delayed.
Irritation of eyes, skin, nose, throat; skin burns, blisters, dermatitis; lacrimation; rhinorrhoea; cough, dyspneal; nausea; eye redness, pain, burns, blurred vision; pulmonary oedema; metabolic acidosis; unconsciousness, haemolysis, haematuria (blood in the urine); central nervous system depression, headache; vomiting bronchitis [potential occupational carcinogen] ; INGES. ACUTE: Burning sensation, sore throat, abdominal pain, cramps, vomiting, diarrhea

Indication of immediate medical attention and special treatment needed, if necessary
Get medical advice/attention if you feel unwell. Seek medical attention immediately for acute exposure.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Dry chemical, carbon dioxide, alcohol foam, water.

Specific hazards arising from the chemical.
Carbon monoxide and unidentified organic compounds may be formed during combustion.

Special protective actions for fire-fighters
Fire fighters should use self-contained breathing apparatus and protective clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

Environmental precautions
Prevent release to the environment by using barriers.

Methods and materials for containment and cleaning up.
Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

SECTION 7: Handling and storage

Precautions for safe handling
Do not breathe vapours. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities.
Store in a well-ventilated place. Keep container tightly closed. Store locked up. Do not store in metal containers.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 7697-37-2

Nitric acid (40% to 70%)

AU/SWA (Australia): 4 ppm; 10 mg/m3 STEL inhalation; 2 ppm; 5.2 mg/m3 TWA inhalation; Cal/OSHA: 2 ppm, (ST) 4 ppm PEL inhalation; NIOSH: 2 ppm, (ST) 4 ppm REL inhalation; OSHA: 2 ppm PEL inhalation; 5 mg/m3 PEL inhalation

Appropriate engineering controls
Use in a well-ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

Skin protection
Wear gloves, lab coat, eye protection and impervious footwear.

Respiratory protection
If ventilation hood not available wear respirator.
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirators when necessary.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Yellow Liquid
Colour	Yellow
Odor	Pungent
Odor threshold	N/A
Melting point/freezing point	N/A
Boiling point or initial boiling point and boiling range	N/A
Flammability	N/A
Lower and upper explosion limit/flammability limit	N/A
Flash point	N/A
Auto-ignition temperature	N/A
Decomposition temperature	N/A
pH	Less than 1
Kinematic viscosity	N/A

Solubility	N/A
Partition coefficient n-octanol/water (log value)	N/A
Vapor pressure	N/A
Evaporation rate	N/A
Density and/or relative density	N/A
Relative vapor density	N/A

SECTION 10: Stability and reactivity

Reactivity
Not Reactive

Chemical stability
Stable under normal conditions of temperature and pressure

Possibility of hazardous reactions
N/A

Conditions to avoid.
Heat, sources of ignition

Incompatible materials
Oxidizers, Strong Acids, Strong Bases, organic material, Combustible materials, metallic powders, hydrogen sulphide, carbides, alcohols.

Hazardous decomposition products
Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapours (I.e. Carbon monoxide) may be released in a fire.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
N/A

Skin corrosion/irritation
Corrosive to skin, may cause permanent damage, redness, pain and death.

Serious eye damage/irritation
Corrosive to eyes, may cause permanent corneal damage, redness, and pain.

Respiratory or skin sensitization
Inhalation: Toxic by inhalation. May cause bronchitis, severe respiratory distress.
Ingestion: Poison to drink. Very corrosive. May cause burns to mouth, throat, stomach, and gastrointestinal tract.

Carcinogenicity
Corrosive to eyes, may cause permanent corneal damage, redness, and pain.

Additional information

Signs or Symptoms of Exposure: Irritation eyes, skin, nose, throat, mucous membrane; delayed pulmonary oedema, pneumonitis, bronchitis; dental erosion, haemolysis, haematuria (blood in the urine); central nervous system depression, headache; vomiting, dermatitis, bronchitis [potential occupational carcinogen]
Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.
Target Organs Eyes, skin, respiratory system, teeth, central nervous system, hematopoietic system, blood, kidneys, liver, lymphoid system, skin, bladder

SECTION 12: Ecological information

Toxicity
N/A

Persistence and degradability
N/A

Bioaccumulate potential
N/A

Mobility in soil
N/A

Other adverse effects
N/A

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Do not dispose of in drains, check with your local waste authorities.

Packaging disposal
Check with your local waste authorities.

Waste treatment
Consult your local or regional authorities.

Sewage disposal
Consult your local or regional authorities.

SECTION 14: Transport information

UN Number	3264
UN Proper Shipping Name	Corrosive Liquid, Acidic, Inorganic, N.O.S. (Nitric Acid)
Transport hazard class(es)	8
Packing group	III

SECTION 15: Regulatory information

Chemical Safety Assessment
OSHA: N/A

DOT: N/A
EPA: N/A
CPSC: N/A

SECTION 16: Other information

References
1. Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011).
2. Safe Work Australia, National Code of Practice for the Labelling of Workplace Hazardous Chemicals (2015).
3. Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants (2013)
4. National Transport Commission Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code); Can print: Canberra (2007), Volume 1, 7th Edition.
5. Standards Australia, Dangerous Goods Initial Emergency Response Guide: Australian Handbook (SAA/SNZ HB76); Homebush (2004).

Further information/disclaimer
This SDS is prepared in accordance with the Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011). The information contained within is believed to be accurate at the date of preparation/review. Hurst Scientific makes no claims of the accuracy or completeness of the information and excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. It is recommended the user make their own determinations as to the suitability of the information provided to the application in which the product is to be used.

Preparation information