

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : RAG2001 Restor-A-Gel Aluminum 30ml  
Product code : RAG2001

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Laboratory chemical

#### 1.3. Supplier

SIRCHIE  
100 Hunter Place  
Youngsville, NC 27596 - USA  
T 919-554-2244; 800-356-7311 - F 919-554-2266; 800-899-8181  
<http://www.sirchie.com>

#### 1.4. Emergency telephone number

Emergency number : 1.800.424.9300 (USA) +1-703-527-3887 (INTL)  
CHEMTREC: 1.800.424.9300

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation
Reproductive toxicity Category 2	H361	Suspected of damaging fertility or the unborn child

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 - If on skin: Wash with plenty of water.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 - If exposed or concerned: Get medical advice/attention.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

No additional information available

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### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
silicon dioxide, amorphous	(CAS-No.) 7631-86-9	<= 2	Not classified
hydrochloric acid	(CAS-No.) 7647-01-0	1.1	Skin Corr. 1A, H314
mercury dichloride	(CAS-No.) 7487-94-7	< 1	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Skin Corr. 1B, H314 Muta. 2, H341 Repr. 2, H361 STOT RE 1, H372

Full text of hazard classes and H-statements : see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

No additional information available

### 4.2. Most important symptoms and effects (acute and delayed)

No additional information available

### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

No additional information available

### 5.2. Specific hazards arising from the chemical

Reactivity : No data available.

### 5.3. Special protective equipment and precautions for fire-fighters

No additional information available

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

No additional information available

### 6.3. Methods and material for containment and cleaning up

No additional information available

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

No additional information available

### 7.2. Conditions for safe storage, including any incompatibilities

No additional information available

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

mercury dichloride (7487-94-7)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup>
silicon dioxide, amorphous (7631-86-9)		
Not applicable		
hydrochloric acid (7647-01-0)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2.98 mg/m <sup>3</sup>
ACGIH	ACGIH TWA (ppm)	2 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	7 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	5 ppm
IDLH	US IDLH (ppm)	50 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	7 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	5 ppm

#### 8.2. Appropriate engineering controls

No additional information available

#### 8.3. Individual protection measures/Personal protective equipment

##### Personal protective equipment:

Gas mask. Gloves. Safety glasses.

##### Personal protective equipment symbol(s):



### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Color	: Colorless
Odor	: Irritating/pungent odour
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Insoluble in water.
Log Pow	: No data available
Auto-ignition temperature	: No data available

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Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Extremely high or low temperatures.

### 10.5. Incompatible materials

metals. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

<b>mercury dichloride (7487-94-7)</b>	
LD50 oral rat	1 mg/kg (Rat, Oral)
LD50 dermal rat	41 mg/kg (Rat, Dermal)
ATE US (oral)	1 mg/kg body weight
ATE US (dermal)	41 mg/kg body weight

<b>silicon dioxide, amorphous (7631-86-9)</b>	
LD50 oral rat	> 10000 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

<b>mercury dichloride (7487-94-7)</b>	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

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### SECTION 12: Ecological information

#### 12.1. Toxicity

<b>mercury dichloride (7487-94-7)</b>	
LC50 fish 1	0.03 mg/l (96 h, Poecilia reticulata)
EC50 Daphnia 1	0.003 mg/l (48 h, Daphnia magna)
<b>silicon dioxide, amorphous (7631-86-9)</b>	
LC50 fish 1	> 10000 mg/l (96 h, Brachydanio rerio, Literature)
EC50 Daphnia 1	> 10000 mg/l (24 h, Daphnia magna, Literature)

#### 12.2. Persistence and degradability

<b>mercury dichloride (7487-94-7)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>silicon dioxide, amorphous (7631-86-9)</b>	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
<b>hydrochloric acid (7647-01-0)</b>	
Persistence and degradability	Biodegradability: not applicable.

#### 12.3. Bioaccumulative potential

<b>mercury dichloride (7487-94-7)</b>	
BCF fish 1	10000 (Pisces)
BCF fish 2	500 - 4620 (Cyprinus carpio, Test duration: 10 weeks)
BCF other aquatic organisms 1	10000 (Ostreidae)
Log Pow	0.1 - 0.22 (Calculated)
Bioaccumulative potential	Potential for bioaccumulation ( $500 \leq \text{BCF} \leq 5000$ ).
<b>silicon dioxide, amorphous (7631-86-9)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>hydrochloric acid (7647-01-0)</b>	
Bioaccumulative potential	Does not contain bioaccumulative component(s).

#### 12.4. Mobility in soil

<b>mercury dichloride (7487-94-7)</b>	
Ecology - soil	No (test)data on mobility of the substance available.
<b>silicon dioxide, amorphous (7631-86-9)</b>	
Ecology - soil	No (test)data on mobility of the substance available.
<b>hydrochloric acid (7647-01-0)</b>	
Ecology - soil	No (test)data on mobility of the components available. May be harmful to plant growth, blooming and fruit formation.

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

No additional information available

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### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Transport document description	: UN1624 Mercuric chloride (TOXIC), 6.1, II
UN-No.(DOT)	: UN1624
Proper Shipping Name (DOT)	: Mercuric chloride TOXIC
Class (DOT)	: 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
Packing group (DOT)	: II - Medium Danger
Hazard labels (DOT)	: 6.1 - Poison



Other information : No supplementary information available.

#### Transportation of Dangerous Goods

#### Transport by sea

#### Air transport

Transport document description (IATA)	: UN UN1624 Mercuric chloride, 6.1, II, ENVIRONMENTALLY HAZARDOUS
UN-No. (IATA)	: UN1624
Proper Shipping Name (IATA)	: Mercuric chloride
Class (IATA)	: 6.1 - Toxic Substances
Packing group (IATA)	: II - Medium Danger

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### RAG2001 Restor-A-Gel Aluminum 30ml

Subject to reporting requirements of United States SARA Section 313

#### 15.2. International regulations

##### CANADA

No additional information available

##### EU-Regulations

##### RAG2001 Restor-A-Gel Aluminum 30ml

Listed on ELINCS (European List of Notified Chemical Substances)

##### National regulations

No additional information available

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### 15.3. US State regulations

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U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

### SECTION 16: Other information

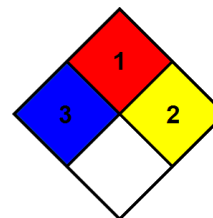
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
- Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.
- Other information : This Safety Data Sheet has been established in accordance with the applicable European Union legislation.

Full text of H-phrases:

H300	Fatal if swallowed
H310	Fatal in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H341	Suspected of causing genetic defects
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure

- NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.
- NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.
- NFPA reactivity : 2 - Materials that readily undergo violent chemical change at elevated temperatures and pressures.



- Hazard Rating
- Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
- Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
- Physical : 2 Moderate Hazard - Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.
- Personal protection : G  
G - Safety glasses, Gloves, Vapor respirator

SDS US (GHS HazCom 2012)

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.*