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SAFETY DATA SHEET **CATALOG #2109**
SODIUM CACODYLATE, TRIHYDRATE **98% crystalline powder**

1. IDENTIFICATION

Product name: SODIUM CACODYLATE, TRIHYDRATE

Relevant identified uses of the substance or mixture and uses advised against.
Identified use: SU24 Scientific research and development

COMPANY IDENTIFICATION
TOUSIMIS RESEARCH CORP.
2211 LEWIS AVENUE
ROCKVILLE,
MARYLAND 20851
UNITED STATES

Company Contact Information:
301-881-2450
trc@tousimis.com

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: 1-800-222-1222

2. HAZARDS IDENTIFICATION

Hazard classification
Classification according to Regulation (EC) No 1272/2008
The substance is not classified as hazardous to health or the environment according to CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC
Not applicable
Information concerning particular hazards for human and environment:
Not applicable
Other hazards that do not result in classification No information known.

Label elements
Labelling according to Regulation (EC) No 1272/2008 Not applicable
Hazard pictograms Not applicable
Signal word Not applicable
Hazard statements Not applicable
WHMIS classification Not controlled

Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)
Health (acute effects) = 1
Flammability = 0
Physical Hazard = 0

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures
Dangerous components:
6131-99-3 Cacodylic acid sodium salt trihydrate - 2.14%
T R23/25
N R50/53
Acute Tox. 3
H301
Acute Tox. 3, H331

Additional information None known.

Non-Hazardous Ingredients
7647-01-0 Hydrochloric acid - <0.1%
C R34
Xi R37
Skin Corr. 1B; Eye Dam. 1; STOT SE 3, H335

7732-18-5 Water – 97.76%

4. FIRST AID MEASURES

Description of first aid measures
After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.

After skin contact
Instantly wash with water and soap and rinse thoroughly.
Seek immediate medical advice.

After eye contact
Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing
Seek medical treatment.

Information for doctor
Most important symptoms and effects, both acute and delayed No further relevant information available.
Indication of any immediate medical attention and special treatment needed No further relevant information available.

5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing agents Product is not flammable. Use fire-fighting measures that suit the surrounding fire.

Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Sodium oxide
Arsenic oxides (AS2Ox)

Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

Environmental precaution
Do not allow material to be released to the environment without proper governmental permits.
Do not allow product to reach sewage system or any water course.
Do not allow to penetrate the ground/soil.

Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Prevention of secondary hazards: No special measures required.

Reference to other sections
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Keep in container tightly sealed.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires: The product is not flammable

Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and containers: Refrigerate
Information about storage in one common storage facility:
Protect from heat.
Water reacts with many metals to give hydrogen, often violently. Water is also incompatible with many reactive organic and inorganic chemicals.

Further information about storage conditions:
Keep container tightly sealed.
Refrigerate

Specific end use(s) No further information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute

Control parameters
Components with critical values that require monitoring at the workplace:
7647-01-0 Hydrochloric acid (<0.1%)
PEL (USA) – Ceiling limit value: 7 mg/m^3, 5 ppm
REL (USA) – Ceiling limit value: 7 mg/m^3, 5 ppm
TLV (USA) – Ceiling limit value: 2.98 mg/m^3, 2 ppm
EL (Canada) – Ceiling limit value: Short-term value: C 2 ppm

Additional information: No data

Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of work.
Maintain an ergonomically appropriate working environment.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands:
Impervious gloves

Check protective gloves prior to each use for their proper condition.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material (in minutes) Not determined

Eye protection: Safety glasses

Body protection: Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties
General Information
Appearance

Form	Liquid
Color	Colorless
Odor	Not determined
Odor Threshold	Not determined
pH	Not applicable
Melting point/range	Not determined
Boiling point/range	Not determined
Sublimation temperature / start	Not determined
Inflammability (solid/gaseous)	Not determined
Decomposition temperature	Not determined
Self-inflammability	Product is not selfigniting.
Danger of explosion	Not determined
Critical values for explosion:	
Lower	Not determined
Upper	Not determined
Vapor Pressure at 20ºC	(68°F) 23 hPa (17 mm Hg)
Density	Not determined
Relative Vapor Density	Not determined
Relative Density	Not determined
Evaporation rate	Not determined
Solubility in / Miscibility with Water	
Fully miscible	
Partition coefficient	
(n-octanol/water)	Not determined
Dynamic	Not determined
Kinematic	Not determined

Other information

No further relevant information available

10. STABILITY AND REACTIVITY

Reactivity: No information known.

Chemical stability: Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

Possibility of hazardous reactions:
Water reacts violently with alkali metals.
Water reacts with many metals to give hydrogen, often violently. Water is also incompatible with many reactive organic and inorganic chemicals.

Conditions to avoid: No further relevant information available.

Incompatible materials: Heat

Hazardous decomposition products:
Carbon monoxide and carbon dioxide
Sodium oxide
Arsenic oxides (As2Ox)

11. TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

Information on toxicological effects

Acute toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this product.

LD/LC50 values that are relevant for classification: No data

Skin corrosion/irritation
May cause irritation

Serious eye damage/eye irritation
May cause irritation

Sensitization
No sensitizing effect known.

Germ cell mutagenicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for components in this product.

Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

Reproductive toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for components in this product.

Specific target organ system toxicity – repeated exposure: No effects known

Specific target organ system toxicity – single exposure: No effects known.

Aspiration hazard: No effects known.

Subacute to chronic toxicity: No effects known.

Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

12. ECOLOGICAL INFORMATION

Ecotoxicological information on this product or its components appear in this section when such data is available.

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Bioaccumulative potential

No further relevant information available.

Mobility in soil

No further relevant information available.

Ecotoxical effects:

Remark: Harmful to aquatic organisms

Additional ecological information;

General notes:

Do not allow product to reach ground water, water course or sewage system.

Do not allow material to be released to the environment without proper governmental permits.

Danger to drinking water if even small quantities leak into the ground.

May cause long lasting harmful effects to aquatic life.

Avoid transfer into the environment.

Harmful to aquatic organisms

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Recommendation
Consult state, local or national regulations for proper disposal.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleaning agent: Water, if necessary with cleaning agents.

14. TRANSPORT INFORMATION

UN-Number
DOT, ADN, IMDG, IATA Not applicable

UN proper shipping name
DOT, ADN, IMDG, IATA Not applicable

Transport hazard class(es)
DOT, ADR, ADN, IMDG, IATA Class Not applicable

Packing group
DOT, IMDG, IATA Not applicable

Environmental hazards: No
Marine pollutant (IMDG)

Special precautions for user Not applicable

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable

UN "Model Regulation" **-**

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

Safety health and environmental regulations/legislation specific for the substance or mixture

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARASection 313 (specific toxic chemical listings)

7647-01-0 Hydrochloric acid

California Proposition 65

Prop 65 – Chemicals known to cause cancer

None of the ingredients are listed.

Prop 65 – Developmental toxicity

None of the ingredients are listed.

Prop 65 – Developmental toxicity, female

None of the ingredients are listed.

Prop 65 – Developmental toxicity, male

None of the ingredients are listed.

Information about limitation of use:

For use only by technically qualified individuals.

This product is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and 40CFR372.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.

None of the ingredients are listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

None of the ingredients are listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use)

None of the ingredients are listed.

REACH – Pre-registered substances

7647-01-0 Hydrochloric acid
7732-18-5 Water

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department
Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
DOT: US Department of Transportation
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA).