

SAFETY DATA SHEET
POTASSIUM PHOSPHATE DIBASIC

CATALOG #2083

1. IDENTIFICATION

Product name: POTASSIUM PHOSPHATE DIBASIC

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



Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant
R36/38: Irritating to the eyes and skin.

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

The substance is classified and labeled according to the CLP regulation.

Hazard pictogram



Signal word Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P362 Take off contaminated clothing.

P321 Specific treatment (see on label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation occurs: Get medical advice/attention.

WHMIS classification

D2B – Toxic material causing other toxic effects



Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

Health (acute effects) = 1

Flammability = 0

Physical Hazard = 1

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Substances

CAS # Description:

7778-53-2 Potassium phosphate

Identification number(s):

EC number: 231-907-1

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:
No further relevant information available.

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: Pick up mechanically.

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

Handle under dry protective gas.
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
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: No special requirements.

Information about storage in one common storage facility:

Store away from water/moisture
Store away from oxidizing agents.

Further information about storage conditions:

Store under dry inert gas.
This product is hygroscopic.
Keep container tightly sealed.
Store in cool, dry conditions in well-sealed containers.
Protect from humidity and water.

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:

This product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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.

Recommended filter device for short term use:

Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.

Protection of hands:

Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality.
Quality will vary 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	Granules
Color	White
Odor	Not determined
Odor Threshold	Not determined
pH	Not applicable
Melting point/range	1304°C (2444°F)
Boiling point/range	Not determined
Sublimation temperature / start	Not determined
Inflammability (solid/gaseous)	Not determined
Ignition temperature	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	Not applicable
Density at 20°C (68°F):	2.564 g/cm ³ (21.397 lbs/gal)
Relative Vapor Density	Not applicable
Relative Density	Not determined
Evaporation rate	Not applicable
Solubility in / Miscibility with Water	Soluble
Partition coefficient (n-octanol/water)	Not determined
Dynamic	Not applicable
Kinematic	Not applicable
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: Reacts with strong oxidizing agents

Conditions to avoid: No further relevant information available.

Incompatible materials:

Water/moisture
Oxidizing agents

Hazardous decomposition products:

Carbon monoxide and carbon dioxide
Sodium oxide
Arsenic oxides (As₂O_x)

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:

Dermal – LD50 - >4640 mg/kg (rabbit)

Irritation of eyes – moderate - 10 mg (rabbit)

Skin corrosion/irritation

Causes irritation

Serious eye damage/eye irritation

Causes serious eye damage

Sensitization

No sensitizing effects known.

Germ cell mutagenicity: No effects known.

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

Reproductive toxicity: No effects known.

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.

Additional ecological information;

General notes:

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

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

Avoid transfer into the environment.

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:

Not applicable

Special precautions for user

Not applicable

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

Transport/Additional information:

DOT

Marine Pollutant (DOT) No

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)

Substance is not listed

California Proposition 65

Prop 65 – Chemicals known to cause cancer

Substance is not listed

Prop 65 – Developmental toxicity

Substance is not listed

Prop 65 – Developmental toxicity, female

Substance is not listed

Prop 65 – Developmental toxicity, male

Substance is not listed

Information about limitation of use:

For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

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

Substance is not 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.

Substance is not listed

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

Substance is not listed

REACH – Pre-registered substances

Substance is not listed

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).