

# Material Safety Data Sheet



## Potassium Iodide Stabilized

### 1. Product and company identification

**Common name** : Potassium Iodide Stabilized  
**Synonym** : Hydriodic acid, potassium salt.  
**Material uses** : Included in animal feeds.  
**Supplier/Manufacturer** : Pestell Minerals & Ingredients  
141 Hamilton Road  
New Hamburg, Ontario  
Canada, N3A 2H1  
Tel : (519) 662-2877  
Fax : (519) 662-6242  
E-mail: pestellgroup@pestell.com  
**In case of emergency** : CANUTEC (613) 996-6666  
**MSDS authored by:** : Kemika XXI Inc. + 1-450-435-7475

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### 2. Hazards identification

**Physical state** : Solid.  
**Odor** : Odorless.  
**Color** : White.  
**Hazard status** : This material is classified hazardous under OSHA regulations in the United States and the WHMIS Controlled Product Regulation in Canada.  
**Emergency overview** : WARNING !  
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.  
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:  
THYROID.  
Avoid contact with skin and clothing. Avoid breathing dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.  
**Routes of entry** : Dermal contact. Eye contact. Inhalation. Ingestion.  
**Potential acute health effects**  
**Eyes** : Slightly irritating to the eyes.  
**Skin** : Slightly irritating to the skin.  
**Inhalation** : Slightly irritating to the respiratory system.  
**Ingestion** : No known significant effects or critical hazards.  
**Potential chronic health effects** : Carcinogenic effects Classified A4 (Not classifiable for humans or animals.) by ACGIH [Calcium stearate].  
Mutagenic effects Not available.  
Teratogenic effects Classified SUSPECTED for humans [Potassium iodide].  
**Medical conditions aggravated by over-exposure** : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated or prolonged exposure to the substance can produce target organ damage.  
**See toxicological information (section 11)**



### 3 . Composition/information on ingredients

#### United States

Name	CAS number	%
Potassium iodide	7681-11-0	60 - 100
Calcium stearate	1592-23-0	5 - 10

#### Canada

Name	CAS number	%
Potassium iodide	7681-11-0	60 - 100
Calcium stearate	1592-23-0	5 - 10

### 4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.
- Skin contact** : Wash with soap and water. Get medical attention if symptoms occur.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Notes to physician** : No specific antidote. Medical staff must contact Poison Control Center.

### 5 . Fire-fighting measures

- Flammability of the product** : Non-flammable.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
  - Not suitable** : None known.
- Special exposure hazards** : No specific hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### 6 . Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, vacuum or carefully scoop up spilled material and place in an appropriate container for disposal by incineration. Avoid creating dusty conditions and prevent wind dispersal.

### 7 . Handling and storage

- Handling** : Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing dust. Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

## 8 . Exposure controls/personal protection

### United States

**Product name**

Calcium stearate

**Exposure limits**
**ACGIH TLV (United States, 1/2005).**

 TWA: 10 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

### Canada

**Product name**

Calcium stearate

**Exposure limits**
**ACGIH TLV (United States, 1/2005).**

 TWA: 10 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

**Engineering measures**

- : Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Personal protection**
**Eyes**

- : Safety glasses.

**Skin**

- : Lab coat.

**Respiratory**

- : A respirator is not needed under normal and intended conditions of use.

**Hands**

- : Natural rubber (latex).


**HMIS Code/Personal protective equipment**

- : B

**Personal protection in case of a large spill**

- : Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear.

**Hygiene measures**

- : Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.

## 9 . Physical and chemical properties

**Physical state**

- : Solid.

**Color**

- : White.

**Odor**

- : Odorless.

**pH**

- : 6 to 9 (Conc. (% w/w): 5) [Basic.]

**Boiling/condensation point**

- : 1330°C (2426°F)

**Melting/freezing point**

- : 680°C (1256°F)

**Relative density**

- : 3.1 (Water = 1)

**Vapor pressure**

- : The highest known value is 0.1 kPa (1 mm Hg) (at 20°C) (Potassium iodide).

**Solubility**

- : Soluble in cold water, hot water, methanol, acetone.

## 10 . Stability and reactivity

- Stability and reactivity** : The product is stable.
- Incompatibility with various substances** : Reactive with oxidizing materials, reducing materials, acids and alkalis.
- Hazardous decomposition products** : These products are halogenated compounds.
- Hazardous polymerization** : Will not occur.
- Conditions of reactivity** : Not available.

## 11 . Toxicological information

### Toxicity data

Product/ingredient name	Test	Result	Route	Species
Potassium iodide	LD50	1862 mg/kg	Oral	Mouse
	LD50	4800 mg/kg	Oral	Rat

### Acute Effects

- Eyes** : Slightly irritating to the eyes.
- Skin** : Slightly irritating to the skin.
- Inhalation** : Slightly irritating to the respiratory system.
- Ingestion** : No known significant effects or critical hazards.
- Potential chronic health effects** : Carcinogenic effects Classified A4 (Not classifiable for humans or animals.) by ACGIH [Calcium stearate].  
Mutagenic effects Not available.  
Teratogenic effects Classified SUSPECTED for humans [Potassium iodide].
- Target organs** : Contains material which causes damage to the following organs: thyroid.

## 12 . Ecological information

### Ecotoxicity data

Product/ingredient name	Species	Period	Result
Potassium iodide	Oncorhynchus mykiss (LC50)	96 hour(s)	896 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	2190 mg/l

- Environmental precautions** : No known significant effects or critical hazards.
- Products of degradation** : These products are carbon oxides and water, halogenated compounds. Some metallic oxides.
- Toxicity of the products of biodegradation** : The product itself and its products of degradation are not toxic.

## 13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional and local authority requirements.

## 14 . Transport information

### Regulatory information

UN/ IMDG/IATA DOT/TDG : Not regulated.

## 15 . Regulatory information

### United States

**HCS Classification** : Target organ effects

**U.S. Federal regulations** : TSCA 6 proposed risk management: Lead  
 TSCA 8(b) inventory: All components listed.  
 TSCA 12(b) annual export notification: Lead  
 SARA 302/304/311/312 extremely hazardous substances: No products were found.  
 SARA 302/304 emergency planning and notification: No products were found.  
 SARA 302/304/311/312 hazardous chemicals: Potassium iodide  
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Potassium iodide: Immediate (acute) health hazard, Delayed (chronic) health hazard  
 Clean Water Act (CWA) 307: Arsenic; Lead  
 Clean Water Act (CWA) 311: No products were found.  
 Clean Air Act (CAA) 112 accidental release prevention: No products were found.  
 Clean Air Act (CAA) 112 regulated flammable substances: No products were found.  
 Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

**State regulations** : Pennsylvania RTK: Arsenic: (environmental hazard, generic environmental hazard); Lead: (environmental hazard, generic environmental hazard)  
 Massachusetts RTK: Arsenic; Lead  
 New Jersey: Arsenic; Lead

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Lead	Yes.	Yes.	15 µg/day (ingestion)	Yes.
Arsenic	Yes.	No.	0.06 µg/day (inhalation)	No.

### Canada

**WHMIS (Canada)** : Class D-2A: Material causing other toxic effects (Very toxic).



DSL : All components listed.

This product has been classified in accordance with the hazard criteria of the Canadian CPR and the United States OSHA. This MSDS contains all the information required by the CPR and OSHA, the American National Standard Institute (ANSI) Z400.1.

**International lists** : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

## 16 . Other information

**Label requirements (U.S.A.)** : MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.  
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:  
THYROID.

**Hazardous Material Information System (U.S.A.)** :

### HMIS RATING

Health	*	1
Fire hazard		0
Physical Hazard		0
Personal protection		B

### HAZARD RATINGS

4- Extreme  
3- Serious  
2- Moderate  
1- Slight  
0- Minimal

See section 8 for more detailed information on personal protection.

**National Fire Protection Association (U.S.A.)** :



### References

: ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005.

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