



Material Safety Data Sheet

Product Name: Ammonium Iodide

Section 1-Product Information

Formula : NH₄I
Molecular weight : 144.95
CAS No : 12027-06-4
HS Code : 28276000
Synonym's : None

Section 2-Composition, Information on Ingredients

Ingredient : Ammonium Iodide
Hazardous : No
CAS No : 12027-06-4
EINECS-NR : 234-717-7
Percent : 100%

Section 3-Hazards Identification

Emergency Overview

Warning! Harmful if swallowed or inhaled. May cause irritation to skin, eyes and respiratory tract.

SAF-T-DATA(tm) Ratings (Provided here for your convenience)

Health Rating : 2 - Moderate (Life)
Flammability Rating : 0 - None
Reactivity Rating : 1 - Slight
Contact Rating : 1 - Slight
Lab Protective Equip : GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES
Storage Color Code : Green (General Storage)

Potential Health Effects

Irritation is due to the hygroscopic nature of ammonium iodide.

Inhalation: May cause irritation to the respiratory tract.

Ingestion: May cause temporary enlargement of salivary glands or lymph glands. No fatalities have been reported from iodide poisoning.

Skin Contact: May cause irritation.

Eye Contact: May cause irritation.

Chronic Exposure: Prolonged or repeated exposure through ingestion may cause Iodism. Symptoms include salivation, sneezing, conjunctivitis, headache, fever, bronchitis, stomatitis, and skin rashes. Prolonged or repeated skin contact may cause dermatitis.

Aggravation of Pre-existing Conditions: No information found.



Section 4-First Aid Measure

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

Skin Contact: Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact: Wash thoroughly with running water. Get medical advice if irritation develops.

Section 5-Fire fighting procedure

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Section 6-Accidental Release Measure

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.

Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

Section 7-Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Keep out of light to improve shelf-life. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

Section 8-Exposure control/Personal protection

Airborne Exposure Limits:

-ACGIH (TWA) for Iodides:

0.01 ppm for inhalable fraction and vapor.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.



Personal Respirators (NIOSH Approved):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear protective gloves and clean body-covering clothing.

Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9-Physical Chemical Properties

Appearance	: White tetragonal crystals.
Odor	: Odorless.
Solubility	: 154.2 g/100cc @ 0C; 230.3 g/100cc @ 100C
Specific Gravity	: 2.51
pH	: 4.6 Aqueous solution: (0.1M)
% Volatiles by volume @ 21C (70F)	: No information found.
Boiling Point	: 220C (428F) In vacuum.
Melting Point	: 551C (1024F) Sublimes.
Vapor Density (Air=1)	: No information found.
Vapor Pressure (mm Hg)	: 1 @ 211C (412F)
Evaporation Rate (BuAc=1)	: No information found.

Section 10-Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage. Darkens on exposure to air. Very hygroscopic.

Hazardous Decomposition Products: When heated to decomposition, emits very toxic fumes of hydrogen iodide, ammonia and nitrogen oxides.

Hazardous Polymerization: Will not occur.

Incompatibilities: Bromine trifluoride, iodine heptafluoride, and potassium.

Conditions to Avoid: Air, moisture, light and incompatibles.

Section 11-Toxicity Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

-----\Cancer Lists\-----			
	---NTP Carcinogen---		
Ingredient	Known	Anticipated	IARC Category

Ammonium Iodide (12027-06-4)	No	No	None



Section 12-Ecological Information

Environmental Fate: No information found.
Environmental Toxicity: No information found.

Section 13-Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14-Transport Information

Not regulated.

Section 15-Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Ammonium Iodide (12027-06-4)	Yes	Yes	Yes	Yes
-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	--Canada-- DSL	NDSL	Phil.
Ammonium Iodide (12027-06-4)	Yes	Yes	No	Yes
-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302- RQ	TPQ	-----SARA 313----- List	Chemical Catg.
Ammonium Iodide (12027-06-4)	No	No	No	No
-----\Federal, State & International Regulations - Part 2\-----				
Ingredient	CERCLA	-RCRA- 261.33	-TSCA 8(d)	
Ammonium Iodide (12027-06-4)	No	No	No	
Chemical Weapons Convention: No TSCA 12(b): No CDTA: No				
SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No				
Reactivity: No (Pure / Solid)				

Australian Hazchem Code: None allocated.
Poison Schedule: None allocated.



WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Section 16-Additional Information

NFPA Ratings: Health: **1** Flammability: **0** Reactivity: **1**

Label Hazard Warning:

WARNING! HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

Label Precautions:

Wash thoroughly after handling.
Avoid contact with eyes, skin and clothing.
Avoid breathing dust.
Use with adequate ventilation.
Keep container closed.

Label First Aid:

If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Product Use: Laboratory Reagent.

Revision Information:

MSDS Section(s) changed since last revision of document include: 8.

Disclaimer:

Pantheon Fze provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, PANTHEON FZE WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.