

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 09.02.2008

Revision: 09.02.2008

**1 Identification of substance****Product details****Trade name****Ammonium iodide****Stock number:**A12498  
L09610**Manufacturer/Supplier:**Alfa Aesar GmbH & Co.KG  
Zeppelinstrasse 7  
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com  
www.alfa-chemcat.com**Informing department:**Product safety department.  
Product Safety Department  
Giftnotruf Universität Mainz / Poison Information Center Mainz  
www.giftinfo.uni-mainz.de Telefon: +49(0)6131/19240**Emergency information:****2 Hazards identification****Hazard designation:**

Xi Irritant

**Information pertaining to particular dangers for man and environment**

R 36/37/38 Irritating to eyes, respiratory system and skin.

**3 Composition/information on ingredients****Chemical characterization:**

Ammonium iodide (CAS# 12027-06-4), 100%

**Designation: (CAS#)****Identification number(s):**

234-717-7

**EINECS Number:****4 First aid measures****After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

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

Seek immediate medical advice.

**After swallowing**Rinse opened eye for several minutes under running water. Then consult doctor.  
Seek medical treatment.**5 Fire fighting measures****Suitable extinguishing agents**CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet.**Special hazards caused by the material, its products of combustion or flue gases:**Can be released in case of fire:  
Hydrogen iodide (HJ)

Ammonia

Nitrogen oxides (NO<sub>x</sub>)**Protective equipment:**Wear self-contained breathing apparatus.  
Wear full protective suit.**6 Accidental release measures****Person-related safety precautions:**Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation**Measures for environmental protection:**

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

**Measures for cleaning/collecting:**

Collect mechanically.

**Additional information:**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****Handling****Information for safe handling:**Keep containers tightly sealed.  
Store in cool, dry place in tightly closed containers.  
No special precautions necessary if used correctly.**Information about protection against explosions and fires:**

No special measures required.

**Storage****Requirements to be met by storerooms and containers:**

No special requirements.

**Information about storage in one common storage facility:**Store away from water.  
Do not store together with acids.  
Do not store together with alkalis (caustic solutions).**Further information about storage conditions:**This product is hygroscopic.  
Protect from humidity and keep away from water.  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed containers.**8 Exposure controls and 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.

**Components with critical values that require monitoring at the workplace:**

Not required.

**Additional information:**

No data

**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 the work.  
Use breathing protection with high concentrations.  
Safety glasses  
Protective work clothing.**Breathing equipment:****Eye protection:****Body protection:**

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(Contd. of page 1)

**9 Physical and chemical properties:****General Information**

**Form:** Granulate  
**Colour:** White  
**Smell:** Odourless

**Change in condition**  
**Melting point/Melting range:** 551°C ((sub))  
**Boiling point/Boiling range:** Not determined  
**Sublimation temperature / start:** Not determined

**Flash point:** Not applicable

**Inflammability (solid, gaseous)** Product is not inflammable.

**Ignition temperature:** Not determined

**Decomposition temperature:** Not determined

**Danger of explosion:** Product is not explosive.

**Critical values for explosion:**  
**Lower:** Not determined  
**Upper:** Not determined

**Steam pressure at 210°C:** 1.3 hPa

**Density at 20°C** 2.514 g/cm<sup>3</sup>

**Solubility in / Miscibility with**  
**Water at 100°C:** 1542 g/l

**10 Stability and reactivity**

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

**Materials to be avoided:** Water/moisture  
 Acids  
 Bases  
 Light  
 Interhalogens  
**Dangerous reactions:** Reacts violently with interhalogens.  
**Dangerous products of decomposition:** Ammonia  
 Hydrogen iodide (HI)  
 Nitrogen oxides (NO<sub>x</sub>)

**11 Toxicological information**

**Acute toxicity:**  
**Primary irritant effect:**  
**on the skin:** Irritant for skin and mucous membranes.  
**on the eye:** Irritant effect.  
**Sensitization:** No sensitizing effect known.  
**Additional toxicological information:** To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.  
 No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

**12 Ecological information:**

**General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water.  
 Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.  
 Do not allow material to be released to the environment without proper governmental permits.

**13 Disposal considerations**

**Product:**  
**Recommendation** Consult state, local or national regulations for proper disposal.  
 Hand over to disposers of hazardous waste.  
 Must be specially treated under adherence to official regulations.  
**Uncleaned packagings:**  
**Recommendation:** Disposal must be made according to official regulations.

**14 Transport information****Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**

**ADR/RID-GGVS/E Class:** None

**Maritime transport IMDG/GGVSea:**  
**IMDG/GGVSea Class:** None

**Air transport ICAO-TI and IATA-DGR:**  
**ICAO/IATA Class:** None

**Transport/Additional information:** Not dangerous according to the above specifications.

**15 Regulatory information**

**Designation according to EC guidelines:** Observe the normal safety regulations when handling chemicals

**Code letter and hazard designation of product:**



Xi Irritant

**Risk phrases:** 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety phrases:** 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 37 Wear suitable gloves.

**National regulations**

**Information about limitation of use:** Employment restrictions concerning young persons must be observed.  
 For use only by technically qualified individuals.

(Contd. on page 3)  
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Trade name **Ammonium iodide****Water hazard class:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.

(Contd. of page 2)

**16 Other information:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement 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 data specification**

Health, Safety and Environmental Department.

**sheet:****Contact:**

Paul V. Connolly

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