Printing date 12/08/2009 Reviewed on 12/07/2009

#### 1 Identification of substance:

Product details:

Product name: 4-Isopropylphenylacetonitrile

Stock number: L10715
Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company Johnson Matthey Catalog Company, Inc.

30 Bond Street

Ward Hill, MA 01835-8099 Emergency Phone: (978) 521-6300

CHEMTREC: (800) 424-9300 Web Site: www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency information:

During normal hours the Health, Safety and Environmental Department. After normal hours call Chemtrec at (800) 424-9300.

#### 2 Composition/Data on components:

Chemical characterization:

Description: (CAS#)

4-Isopropylphenylacetonitrile (CAS# 4395-87-3)

### 3 Hazards identification

#### Hazard description:



Xn Harmful

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

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH	2
FIRE	1
REACTIVITY	1

Health (acute effects) = 2
Flammability = 1
Reactivity = 1

#### GHS label elements



# Danger

3.1/3 - Toxic if inhaled.

3.1/4 - Harmful if swallowed.

3.1/4 - Harmful in contact with skin.

#### Prevention:

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do no eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

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

#### Response:

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician.

Call a POISON CENTER or doctor/physician if you feel unwell.

Specific treatment (see on this label).

Specific measures (see on this label).

Rinse mouth.

Wash contaminated clothing before reuse.

#### Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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#### Disposal:

 ${\it Dispose of contents/container in accordance with local/regional/national/international regulations.}$ 

#### 4 First aid measures

#### After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

#### After skin contact

Immediately 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 a doctor.

After swallowing Seek immediate medical advice.

#### 5 Fire fighting measures

#### Suitable extinguishing agents

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### Special hazards caused by the material, its products of combustion or resulting gases:

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

Hydrogen cyanide (HCN)

#### Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious 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:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

### Additional information:

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### 7 Handling and storage

## Handling

# Information for safe handling:

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: Keep ignition sources away.

#### Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:

Do not store together with acids.

Store away from oxidizing agents.

# Further information about storage conditions:

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 limit values that require monitoring at the workplace: Not required.

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#### Additional information: No data

#### Personal protective equipment General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

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.

#### Material of gloves

The selection of suitable gloves not only depends on the material, but also on quality.

Quality will vary from manufacturer to manufacturer.

Eye protection: Safety glasses

Body protection: Protective work clothing.

#### 9 Physical and chemical properties:

Form:	Liquid
Color:	Colorless
Odor:	Not determined
Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	150°C (302°F) (25 mmHq)
Sublimation temperature / start:	Not determined
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure:	Not determined
Density at 20°C (68°F):	0.96 q/cm³

#### 10 Stability and reactivity

# Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

#### Materials to be avoided:

Acids

Oxidizing agents

Dangerous reactions No dangerous reactions known

#### Dangerous products of decomposition:

Carbon monoxide and carbon dioxide

Nitrogen oxides

Hydrogen cyanide (prussic acid)

#### 11 Toxicological information

### Acute toxicity:

Primary irritant effect:

on the skin: May cause irritation

on the eye: May cause irritation

Sensitization: No sensitizing effects known.

#### Subacute to chronic toxicity:

Many nitriles resemble cyanides in toxicity. Exposure to nitriles may cause increased salivation, flushing of the face, eye and respiratory tract irritation, shallow respiration, nausea, vomiting, weakness, headache and diarrhea. Jaundice, anemia, and leucocytosis have been reported in some cases.

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#### Additional toxicological information:

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

Danger through skin absorption.

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

### 12 Ecological information:

#### General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course 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 to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

#### 14 Transport information

#### DOT regulations:



Hazard class: 6.1
Identification number: UN3276
Packing group: III

Proper shipping name (technical name): NITRILES, TOXIC, LIQUID, N.O.S. (4-

Isopropylphenylacetonitrile)

Gabel 6.1

# Land transport ADR/RID (cross-border)



ADR/RID class: 6.1 (T1) Toxic substances

Danger code (Kemler): 60
UN-Number: 3276
Packaging group: III

Description of goods: 3276 NITRILES, TOXIC, LIQUID, N.O.S. (4-

Isopropylphenylacetonitrile)

#### Maritime transport IMDG:



IMDG Class: 6.1
UN Number: 3276
Label 6.1
Packaging group: III
EMS Number: F-A,S-A
Marine pollutant: No

Proper shipping name: NITRILES, TOXIC, LIQUID, N.O.S. (4-

Isopropylphenylacetonitrile)

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Product name: 4-Isopropylphenylacetonitrile

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#### Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 6.1 UN/ID Number: 3276 Label 6.1 Packaging group: III

NITRILES, TOXIC, LIQUID, N.O.S. (4-Proper shipping name:

Isopropylphenylacetonitrile)

UN "Model Regulation": UN3276, NITRILES, TOXIC, LIQUID, N.O.S., 6.1, III

#### 15 Regulations

#### Product related hazard informations:

#### Hazard symbols:

Xn Harmful

#### Risk phrases:

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Do not breathe fumes

36/37 Wear suitable protective clothing and gloves.

#### National regulations

This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only.

Some or all of the components of this product are not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

Information about limitation of use: For use only by technically qualified individuals.

#### 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 MSDS: Health, Safety and Environmental Department.

# Contact: Zachariah Holt

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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)

HMIS: Hazardous Materials Identification System (USA)

USA