

Material Safety Data Sheet
acc. to OSHA and ANSI

Printing date 11/11/2008

Reviewed on 11/11/2008

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1 Identification of substance:

Product details:

Product name: Isopentyl nitrite
Stock number: L13909
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

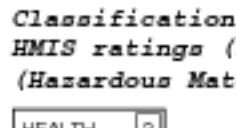
Information Department: Health, Safety and Environmental Department
Emergency information:
During normal hours the Health, Safety and Environmental Department.
After normal hours call Chemtrec at (800) 424-9300.

2 Composition/Data on components:

Chemical characterisation:
Description: (CAS#)
Isopentyl nitrite (CAS# 110-46-3): 100%
Identification number(s):
EINCS Number: 203-770-8
Index number: 007-020-00-9

3 Hazards identification

Hazard description:



Xn Harmful
F Highly flammable

Information pertaining to particular dangers for man and environment
R 11 Highly flammable.
R 20/22 Harmful by inhalation and if swallowed.

Classification system
HMS ratings (scale 0-4)
(Hazardous Materials Identification System)

HEALTH	2	Health (acute effects) = 2
FIRE	3	Flammability = 3
REACTIVITY	1	Reactivity = 1

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.

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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)

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
Keep away from ignition sources

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.
Keep away from ignition sources.

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.
Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.

Storage

Requirements to be met by storerooms and receptacles:
Store in a cool location.

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Information about storage in one common storage facility:
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.

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.

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:

General Information

Form: Liquid
Color: Colorless
Odor: Not determined

Change in condition

Boiling point/Boiling range: Not determined
Boiling point/Boiling range: 95-100°C (203-212°F)
Sublimation temperature / start: Not determined

Flash point: -20°C (-4°F)

Ignition temperature: Not determined

Decomposition temperature: Not determined

Explosion limits:

Lower: Not determined
Upper: Not determined

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Vapor pressure: Not determined

Density at 20°C (68°F): 0.875 g/cm³

Solubility in / Miscibility with
Water: Not miscible or difficult to mix

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: Oxidizing agents

Dangerous reactions No dangerous reactions known

Dangerous products of decomposition:
Carbon monoxide and carbon dioxide
Nitrogen oxides

11 Toxicological information

Acute toxicity:

Primary irritant effect:
on the skin: Irritant to skin and mucous membranes.
on the eye: Irritating effect.

Sensitization: No sensitizing effects known.

Other information (about experimental toxicology):
Mutagenic effects have been observed on tests with bacteria.
Mutagenic effects have been observed on tests with laboratory animals.

Subacute to chronic toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals:

Behavioral - general anesthetic.
Behavioral - altered sleep time (including change in righting reflex).
Behavioral - excitement.

Behavioral - changes in motor activity (specific assay).
Behavioral - convulsions or effect on seizure threshold.

Lungs, Thorax, or Respiration - cyanosis.

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:

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.

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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: 3
Identification number: UN1113
Packing group: II

Proper shipping name (technical name): AMYL NITRITE
Label: 3

Land transport ADR/RID (cross-border)



ADR/RID class: 3 (F1) Flammable liquids
Danger code (Kemler): 33

UN-Number: 1113
Packaging group: II
Description of goods: 1113 AMYL NITRITE

Maritime transport IMDG:



IMDG Class: 3
UN Number: 1113

Label: 3
Packaging group: II
Proper shipping name: AMYL NITRITE

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 3
UN/ID Number: 1113

Label: 3

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Packaging group: II
Proper shipping name: AMYL NITRITE

15 Regulations

Product related hazard informations:

Hazard symbols:
Xn Harmful
F Highly flammable

Risk phrases:

11 Highly flammable.
20/22 Harmful by inhalation and if swallowed.

Safety phrases:

16 Keep away from sources of ignition - No smoking.
24 Avoid contact with skin.
36 Wear suitable protective clothing.

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).

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: Paul V. Connolly

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