acc. to OSHA and ANSI

Printing date 11/10/2008

Reviewed on 11/10/2008

1 Identification of substance:

Product details:

Product name: Isododecane

Stock number: A14235

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#)
Isododecane (CAS# 31807-55-3): 100%
Identification number(s):
EINECS Number: 250-816-8
```

3 Hazards identification

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Hazard description: Not applicable
Information pertaining to particular dangers for man and environment
R 10 Flammable.
Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)
```

HEALTH 1 FIRE 2 REACTIVITY 1

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Health (acute effects) = 1
Flammability = 2
Reactivity = 1
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4 First aid measures

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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.
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(Contd. on page 2)

acc. to OSHA and ANSI

Printing date 11/10/2008

Reviewed on 11/10/2008

Product name: Isododecane

(Contd. of page 1)

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 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). 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. Prevent formation of aerosols. 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: No special requirements. 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.

(Contd. on page 3)

USA

acc. to OSHA and ANSI

Printing date 11/10/2008

Reviewed on 11/10/2008

Product name: Isododecane

	(Contd. of page 2)
8 Exposure controls and personal prote	ction
Additional information about design of techn Properly operating chemical fume hood design and having an average face velocity of at lo	ned for hazardous chemicals
Components with limit values that require m Not required. Additional information: No data	onitoring at the workplace:
Personal protective equipment General protective and hygienic measures The usual precautionary measures for handlin followed. Keep away from foodstuffs, beverages and fea Remove all soiled and contaminated clothing Wash hands before breaks and at the end of w Breathing equipment: Use suitable respirator when high concentrat Protection of hands: Impervious gloves Check protective gloves prior to each use for Material of gloves The selection of suitable gloves not only de also on quality. Quality will vary from man Eye protection: Safety glasses Body protection: Protective work clothing.	ed. immediately. work. tions are present. or their proper condition. epends on the material, but
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:	170-195°C (338-383°F)
Sublimation temperature / start:	Not determined
Flash point:	42°C (108°F)
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure:	Not determined
Density at 20°C (68°F):	0.74 g/cm ³

(Contd. on page 4)

acc. to OSHA and ANSI

Printing date 11/10/2008

Reviewed on 11/10/2008

Product name: Isododecane

(Contd. of page 3)

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

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. Subacute to chronic toxicity: Other than potential irritation (see above), no information on illness or injury to humans from acute or chronic exposure to this product is available. 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.

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: With the second secon

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Printing date 11/10/2008

Reviewed on 11/10/2008

Product name: Isododecane

	(Contd. of page 4)
Packing group:	III
Proper shipping name (technical	
name): Label	HYDROCARBONS, LIQUID, N.O.S. 3
Land transport ADR/RID (cross-border)	
3	
ADR/RID class:	3 (F1) Flammable liquids
Danger code (Kemler):	30
UN-Number:	3295
Packaging group:	III
Description of goods:	3295 HYDROCARBONS, LIQUID, N.O.S.
Maritime transport IMDG:	
IMDG Class:	3
UN Number:	3295
Label	3
Packaging group:	III
Proper shipping name:	HYDROCARBONS, LIQUID, N.O.S.
Air transport ICAO-TI and IATA-	DGR :
ICAO/IATA Class:	3
UN/ID Number:	3295
Label	3
Packaging group:	III
Proper shipping name:	HYDROCARBONS, LIQUID, N.O.S.
15 Regulations	
Product related hazard informat	ions:
Risk phrases: 10 Flammable.	
<pre>Safety phrases: 23 Do not breathe gas/fumes/vapour/spray. 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 37 Wear suitable gloves.</pre>	
	(Contd. on page 6)
	- USA -

USA

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 11/10/2008

Reviewed on 11/10/2008

Product name: Isododecane

National regulations

(Contd. of page 5)

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory. 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: Paul V. Connolly