Material Safety Data Sheet acc. to OSHA and ANSI

Printing date 06/11/2009

Reviewed on 06/11/2009

1 Identification of substance:

Product details:

Product name: Anisole

Stock number: A12997 L03948

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#) Anisole (CAS# 100-66-3), 100% Identification number(s): EINECS Number: 202-876-1

3 Hazards identification

Hazard description:



Xi Irritant

Information pertaining to particular dangers for man and environment R 10 Flammable. R 36/37/38 Irritating to eyes, respiratory system and skin. Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) HEALTH 2 Health (acute effects) = 22 Flammability = 2FIRE Reactivity = 1REACTIVITY 1 GHS label elements Warning 2.6/3 - Flammable liquid and vapour. Warning 3.2/2 - Causes skin irritation. 3.3/2A - Causes serious eye irritation. 3.8/3 - May cause respiratory irritation. Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

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Response: IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment (see label). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use for extinction: CO2, powder or water spray. Storage: Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Disposal: 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
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. Information about protection against explosions and fires: Keep ignition sources away.

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Product name: Anisole

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: 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. 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. Avoid contact with the eyes and skin. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves Eye protection: Safety glasses Tightly sealed goggles Full face protection Body protection: Protective work clothing.

General Information	
Form:	Liquid
Color:	Colorless
Odor:	Not determined
Change in condition	
Melting point/Melting range:	
Boiling point/Boiling range:	153-154°C (307-309°F)
Sublimation temperature / start:	
Flash point:	52°C (126°F)
Ignition temperature:	474°C (885°F)
Decomposition temperature:	Not determined
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure at 42°C (108°F):	133 hPa (100 mm Hg)
Density at 20°C (68°F):	0.995 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: Acids Oxidizing agents Dangerous reactions No dangerous reactions known

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Product name: Anisole				
(Contd. of page 3) Dangerous products of decomposition: Carbon monoxide and carbon dioxide				
11 Toxicological in:	formati	on		
Acute toxicity:				
LD/LC50 values that a	are relev	ant for classification:		
Oral	LD50	2800 mg/kg (mouse)		
		3700 mg/kg (rat)		
Inhalative I	LC50	>5000 mg/m3 (rat)		
i i	LC50/2H	3021 mg/m3/2H (mouse)		
Irritation of skin 1	moderate	500 mg/24H (rabbit)		
Primary irritant effe				
		and mucous membranes.		
on the eye: Irritatin Sensitization: No sen				
	5	rimental toxicology):		
5		bserved on tests with laboratory animals.		
Subacute to chronic	-			
Subacute to chronic a	-	se excitability, tremors and convulsions when administered		
orally to laboratory				
Additional toxicological information:				
	nowledge	the acute and chronic toxicity of this substance is not fully		
known.	to on con	ginegania properties of this material is available from the EDA		
IARC, NTP, OSHA or A		cinogenic properties of this material is available from the EPA,		
12 Ecological inform	mation:			
General notes:				

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.

DOT regulations:		
PLANMELE LOOP		
Hazard class:	3	
Identification number:	UN2222	
Packing group:	III	
Proper shipping name (technical	l name): ANISOLE	
Label	3	
Land transport ADR/RID (cross	-border)	
ADR/RID class:	3 (F1) Flammable liquids	
Danger code (Kemler):	30	
UN-Number:	2222	

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Description of goods:	2222 ANISOLE	
Maritime transport IMDG:		
3		
IMDG Class:	3	
UN Number:	2222	
Label	3	
Packaging group:	III	
Proper shipping name:	ANISOLE	
*		
ICAO/IATA Class:	3	
UN/ID Number:	2222	
Label	3	
Packaging group:	III	
	ANISOLE	
Proper shipping name:	1112022	

15 Regulations

Product related hazard informations:

Hazard symbols: Xi Irritant

Risk phrases:

10 Flammable. 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

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: 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) ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent