

**Material Safety Data Sheet**

acc. to OSHA and ANSI

Printing date 09/03/2009

Reviewed on 09/02/2009

**1 Identification of substance:****Product details:****Product name:** Phenolphthalein, 0.5% w/v in Alcohol**Stock number:** 38703**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](http://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#)**

Phenolphthalein (CAS# 77-09-8): 0.5%

Ethanol (CAS# 64-17-5): 90%

Methanol (CAS# 67-56-1): 9.5%

**3 Hazards identification****Hazard description:**

T Toxic

F Highly flammable

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

R 45 May cause cancer.

R 11 Highly flammable.

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

R 68/20/21/22 Also harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

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

HEALTH	1
FIRE	3
REACTIVITY	1

Health (acute effects) = 1

Flammability = 3

Reactivity = 1

**GHS label elements****Danger**

2.6/2 - Highly flammable liquid and vapour.

**Danger**

3.6/1A - May cause cancer.

3.8/2 - May cause damage to organs.

**Warning**

3.1/4 - Harmful if swallowed.

3.1/4 - Harmful in contact with skin.

3.1/4 - Harmful if inhaled.

**Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

(Contd. on page 2)

USA

**Material Safety Data Sheet**

acc. to OSHA and ANSI

Printing date 09/03/2009

Reviewed on 09/02/2009

**Product name: Phenolphthalein, 0.5% w/v in Alcohol**

(Contd. of page 1)

Ground/bond container and receiving equipment.  
 Use explosion-proof electrical/ventilating/lighting/equipment.  
 Use only non-sparking tools.  
 Take precautionary measures against static discharge.  
 Do not breathe dust/fume/gas/mist/vapours/spray.  
 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 Wash thoroughly after handling.  
 Do not 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.  
 Use personal protective equipment as required.

**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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 IF exposed or concerned: Get medical advice/attention.  
 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.  
 Call a POISON CENTER or doctor/physician if you feel unwell.  
 Specific measures (see on this label).  
 Rinse mouth.  
 Wash contaminated clothing before reuse.  
 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

**Storage:**

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.

**For safety reasons unsuitable extinguishing agents** Water with full jet.

**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).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Keep away from ignition sources.

(Contd. on page 3)

-USA-

**Material Safety Data Sheet**

acc. to OSHA and ANSI

Printing date 09/03/2009

Reviewed on 09/02/2009

**Product name:** Phenolphthalein, 0.5% w/v in Alcohol

(Contd. of page 2)

**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.

**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:****Ethyl alcohol**

	ppm
ACGIH TLV	1000-STEL; Confirmed animal carcinogen with unknown relevance to humans.
Austria MAK	1000
Belgium TWA	1000
Denmark TWA	1000
Finland TWA	1000; 1250-STEL
France VME	1000; 5000-VLE
Germany MAK	1000
Korea TLV	1000
Netherlands MAC-TGG	500
Norway TWA	500
Poland TWA	1000 mg/m <sup>3</sup> ; 3000 mg/m <sup>3</sup> -STEL
Russia	1000 mg/m <sup>3</sup> -STEL
Sweden NGV	500; 1000-KTV
Switzerland MAK-W	1000
United Kingdom TWA	1000
OSHA PEL	1000

**Methyl alcohol**

	ppm
ACGIH TLV	200; 250-STEL (skin)
Austria MAK	200 (skin)
Belgium TWA	200; 250-STEL, (skin)
Denmark TWA	200 (skin)
Finland TWA	200; 250-STEL (skin)
France VME	200; 1000-VLE
Hungary TWA	50 mg/m <sup>3</sup> ; 100 mg/m <sup>3</sup> -STEL (skin)
Japan OEL	200 (skin)
Korea TLV	200; 250-STEL (skin)
Netherlands MAC-TGG	200 (skin)
Norway TWA	100
Poland TWA	100 mg/m <sup>3</sup> ; 300 mg/m <sup>3</sup> -STEL
Russia TWA	200; 5 mg/m <sup>3</sup> -STEL (skin)
Sweden NGV	200; 250-KTV (skin)
United Kingdom TWA	200; 250-STEL (skin)
OSHA PEL	200

**Additional information:** No data

(Contd. on page 4)

- USA -

**Material Safety Data Sheet**

acc. to OSHA and ANSI

Printing date 09/03/2009

Reviewed on 09/02/2009

**Product name:** Phenolphthalein, 0.5% w/v in Alcohol

(Contd. of page 3)

**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

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**

<b>Form:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Alcohol-like

**Change in condition****Melting point/Melting range:** Not determined**Boiling point/Boiling range:** Not determined**Sublimation temperature / start:** Not determined**Flash point:** 17°C (63°F)**Ignition temperature:** Not determined**Decomposition temperature:** Not determined**Explosion limits:****Lower:** Not determined**Upper:** Not determined**Vapor pressure:** Not determined**Density:** Not determined**Solubility in / Miscibility with****Water:** Fully miscible**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**11 Toxicological information****Acute toxicity:****LD/LC50 values that are relevant for classification:**

Methanol (CAS# 67-56-1)

ORL-RAT LD50: 5628 MG/KG

ORL-MUS LD50: 7300 MG/KG

SKN-RBT LD50: 15800 MG/KG

ORL-HMN LDLo: 143 MG/KG

**Primary irritant effect:****on the skin:** No irritant effect.**on the eye:** Causes mild irritant effect.**Sensitization:** No sensitizing effects known.**Subacute to chronic toxicity:**

Ethyl alcohol is rapidly oxidized in the body and is less toxic than methyl alcohol. Exposure to high vapor concentrations may cause upper respiratory tract irritation and eye irritation.

It is a central nervous system depressant and ingestion leads to drowsiness, lassitude, loss of appetite and inability to concentrate. Mutagenic and teratogenic data

(Contd. on page 5)

USA

**Material Safety Data Sheet**

acc. to OSHA and ANSI

Printing date 09/03/2009

Reviewed on 09/02/2009

**Product name:** Phenolphthalein, 0.5% w/v in Alcohol

(Contd. of page 4)

have been reported.

Symptoms of methanol overexposure may include intoxication, headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma and death. It is a defatting agent and can cause skin and eye irritation. Absorption through the skin is possible. Chronic exposure may cause liver and eye injury.

**Additional toxicological information:**

Danger through skin absorption.

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

ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for components in this product.

**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.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14 Transport information****DOT regulations:****Hazard class:**

3

**Identification number:**

UN1987

**Packing group:**

II

**Proper shipping name (technical name):** ALCOHOLS, N.O.S. (Ethanol/Methanol solution)

**Label**

3

**Land transport ADR/RID (cross-border)****ADR/RID class:**

3 (F1) Flammable liquids

**Danger code (Kemler):**

33

**UN-Number:**

1987

**Packaging group:**

II

**Description of goods:**

1987 ALCOHOLS, N.O.S. (Ethanol/Methanol solution)

**Maritime transport IMDG:****IMDG Class:**

3

**UN Number:**

1987

**Label**

3

**Packaging group:**

II

**Marine pollutant:**

No

(Contd. on page 6)

USA

**Material Safety Data Sheet**

acc. to OSHA and ANSI

Printing date 09/03/2009

Reviewed on 09/02/2009

**Product name:** Phenolphthalein, 0.5% w/v in Alcohol

(Contd. of page 5)

**Proper shipping name:** ALCOHOLS, N.O.S. (Ethanol/Methanol solution)**Air transport ICAO-TI and IATA-DGR:**

<b>ICAO/IATA Class:</b>	3
<b>UN/ID Number:</b>	1987
<b>Label</b>	3
<b>Packaging group:</b>	II
<b>Proper shipping name:</b>	ALCOHOLS, N.O.S. (Ethanol/Methanol solution)

**UN "Model Regulation":** UN1987, ALCOHOLS, N.O.S., 3, II**15 Regulations****Product related hazard informations:****Hazard symbols:**

T Toxic  
F Highly flammable

**Risk phrases:**

45 May cause cancer.  
11 Highly flammable.  
20/21/22 Also harmful by inhalation, in contact with skin and if swallowed.  
68/20/21/22 Also harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

**Safety phrases:**

53 Avoid exposure - obtain special instructions before use.  
45 In case of accident or if you feel unwell, seek medical advice immediately.

**National regulations**

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.  
This product contains a chemical known to the state of California to cause cancer or reproductive toxicity.

**Information about limitation of use:**

For use only by technically qualified individuals.  
This product is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and 40CFR372.

**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: 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)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

USA