

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 03/27/2007

Reviewed on 03/27/2007

Product name: Catechol

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Label

6.1

Land transport ADR/RID (cross-border)



ADR/RID class:	6.1 (T2) Toxic substances
Danger code (Kemler):	60
UN-Number:	2811
Packaging group:	III
Description of goods:	2811 TOXIC SOLID, ORGANIC, N.O.S. (catechol)

15 Regulations

Product related hazard informations:

Hazard symbols:

Xn Harmful

Risk phrases:

21/22 Harmful in contact with skin and if swallowed.

36/38 Irritating to eyes and skin.

Safety phrases:

22 Do not breathe dust.

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.

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: Paul V. Connolly

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1 Identification of substance:

Product details:

Product name: Catechol

Stock number:

A10164

L03533

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#)

Catechol (CAS# 120-80-9), 100%

Identification number(s):

EINECS Number: 204-427-5

EU Number: 604-016-00-4

3 Hazards identification

Hazard description:



Xn Harmful

Information pertaining to particular dangers for man and environment

R 21/22 Harmful in contact with skin and if swallowed.

R 36/38 Irritating to eyes and skin.

Classification system

NFPA Ratings (scale 0-4)



Health = 2

Fire = 1

Reactivity = 0

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH	2
FIRE	1
REACTIVITY	1

Health (acute effects) = 2

Flammability = 1

Reactivity = 1

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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 (CO)

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:

Dispose contaminated material as waste according to item 13.

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 dust.

Information about protection against explosions and fires:

No special measures required.

Storage

Requirements to be met by storerooms and receptacles:

No special requirements.

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Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials.
Store away from air.

Keep away from heat and direct sunlight.

Further information about storage conditions:

Avoid contact with air/oxygen.
Protect from exposure to light.
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:

Catechol

	ppm
ACGIH TLV	5; A3
Belgium TWA	5
Finland TWA	5; 10-STEL
France TWA	5
Ireland TWA	5
Netherlands TWA	5
Switzerland TWA	5
United Kingdom TWA	5

Components with limit values that require monitoring at the workplace:

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

Body protection: Protective work clothing.

9 Physical and chemical properties:

General Information

Form:	Crystalline
Color:	White
	Brown
Odor:	Light

Change in condition

Melting point/Melting range:	104-106°C (219-223°F)
Boiling point/Boiling range:	245°C (473°F)

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Sublimation temperature / start:	Not determined
Flash point:	137°C (279°F)
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	1.97 Vol %
Upper:	Not determined
Vapor pressure at 118°C (244°F):	13 hPa (10 mm Hg)
Density at 20°C (68°F):	1.341 g/cm ³
Solubility in / Miscibility with Water:	Soluble

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

Air

Light

Bases

Acid chlorides

Acid anhydrides

Dangerous reactions Reacts with acids

Dangerous products of decomposition: Carbon monoxide and carbon dioxide

Additional information: Turns brown on exposure to light.

11 Toxicological information

Acute toxicity:

LD/LC50 values that are relevant for classification:

Oral	LD50	100 mg/kg (cat)
		130 mg/kg (dog)
		210 mg/kg (gpg)
		240 mg/kg (mam)
		260 mg/kg (mus)
		260 mg/kg (rat)
Dermal	LD50	800 mg/kg (rbt)

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization: Sensitization possible through skin contact.

Other information (about experimental toxicology):

Mutagenic effects have been observed on tests with laboratory animals.

Mutagenic effects have been observed on tests with bacteria.

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Mutagenic effects have been observed with humans.
Reproductive effects have been observed on tests with laboratory animals.
Subacute to chronic toxicity:
Ingestion of catechol may cause convulsions and respiratory failure. May cause blood and CNS disorders. May cause allergic skin reactions.
Reproductive effects in laboratory animals and human mutagenic effects have been reported.

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.

IARC-2B: Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.

ACGIH A3: Animal carcinogen: Agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) not considered relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence suggests that the agent is not likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

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:

6.1

Identification number:

UN2811

Packing group:

III

Hazardous substance:

100 lbs, 45.4 kg

Proper shipping name (technical name):

TOXIC SOLID, ORGANIC, N.O.S. (catechol)

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