

SAFETY DATA SHEET

M49032 - ANSI - EN



INDSPEC Chemical Corporation

A subsidiary of Occidental Petroleum Corporation

BETA-RESORCYLIC ACID

SDS No.: M49032

SDS Revision Date: 01-May-2015

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification:	INDSPEC Chemical Corporation Subsidiary of Occidental Petroleum Corporation 5005 LBJ Freeway P.O. Box 809050 Dallas, Texas 75380-9050
Manufacturing Address:	INDSPEC Chemical Corporation Subsidiary of Occidental Petroleum Corporation 133 Main Street Petrolia, Pennsylvania 16050 USA Information: (+1) 412-826-3666
24 Hour Emergency Telephone Number:	1-800-733-3665 or 1-972-404-3228 (U.S.); CHEMTREC (U.S.): 1-800-424-9300; CHEMTREC Contract No: CCN16186; CANUTEC (Canada): 1-613-996-6666 MEDICAL EMERGENCIES: 1-800-456-7566
To Request an SDS:	MSDS@oxy.com or 1-972-404-3245
Customer Service:	1-800-221-6514 or 1-972-404-3700
Product Identifier:	BETA-RESORCYLIC ACID
Product No.	01-01
Synonyms:	2,4-DIHYDROXYBENZOIC ACID
Product Use:	Starting material for dyes, pharmaceuticals, photographic chemicals, cosmetic preparations, and fine chemicals
Uses Advised Against:	None identified.
Chemical Family:	ORGANIC ACID

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2. HAZARDS IDENTIFICATION

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

EMERGENCY OVERVIEW:

Color: White
Physical State: Solid
Appearance: Crystalline, Powder
Odor: Odorless

Signal Word: **WARNING**

MAJOR HEALTH HAZARDS: CAUSES SERIOUS EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED.

PHYSICAL HAZARDS: Dust (powder) may form explosive mixture in air.

PRECAUTIONARY STATEMENTS: Do not handle until all safety precautions have been read and understood. Avoid contact with eyes. Wear eye and face protection. Wash thoroughly after handling. Do not take internally. Do not eat, drink, or smoke when using this product.

ADDITIONAL HAZARD INFORMATION: Not for use or storage in or around home. Good hygiene and safety practices should be used when handling and working with this material. Good hygiene practices include but are not limited to: wearing suitable gloves and/or eye protection; washing hands and affected skin immediately after handling, before breaks, and at the end of the workday; regularly cleaning work area and clothing; etc.

GHS CLASSIFICATION:

GHS: CONTACT HAZARD - EYE:	Category 2A - Causes serious eye irritation
GHS: ACUTE TOXICITY - INHALATION:	No data available. Not classified.
GHS: ACUTE TOXICITY - ORAL:	Not classified as acutely toxic by oral exposure per OSHA-GHS criteria.
GHS: ACUTE TOXICITY - DERMAL:	Not classified as acutely toxic by dermal exposure per OSHA-GHS criteria.
GHS: CARCINOGENICITY:	Not classified as a carcinogen per GHS criteria. This product is not classified as a carcinogen by NTP, IARC, or OSHA.

Unknown Acute Inhalation Toxicity:

There is no acute inhalation toxicity data available for this material. 100% of this product consists of ingredient(s) of unknown acute inhalation toxicity.

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GHS SYMBOL: Exclamation mark

GHS SIGNAL WORD: **WARNING****GHS HAZARD STATEMENTS:****GHS - Health Hazard Statement(s)**

Causes serious eye irritation

GHS - Precautionary Statement(s) - Prevention

Wear eye and face protection

Wash thoroughly after handling

GHS - Precautionary Statement(s) - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

GHS - Precautionary Statement(s) - Storage

There are no Precautionary-Storage phrases assigned

GHS - Precautionary Statement(s) - Disposal

Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.

Hazards Not Otherwise Classified (HNOC)

None Known

See Section 11: TOXICOLOGICAL INFORMATION

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 2,4-DIHYDROXYBENZOIC ACID

Component	Percent [%]	CAS Number
Benzoic acid, 2,4-dihydroxy-	100	89-86-1

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4. FIRST AID MEASURES

INHALATION: If inhaled and adverse effects occur, remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, contact poison control center or doctor/physician.

SKIN CONTACT: Brush off excess material. Flush contaminated areas with plenty of water. If skin irritation occurs: Get medical advice/ attention.

EYE CONTACT: If in eyes, immediately rinse eyes cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

INGESTION: If swallowed, rinse mouth. Contact a Poison Center, or a doctor/physician, or get medical attention if you feel unwell.

Most Important Symptoms/Effects (Acute and Delayed) Prolonged exposure to dust from this material may result in irritation to any contacted tissue.

Acute Symptoms/Effects: Listed below.

Inhalation (Breathing): No known effects.

Skin: Skin Irritation. Exposure of dust to skin may cause redness, mild irritation.

Eye: Eye Irritation. Exposure to eyes may cause severe irritation and redness to the eye lids, conjunctiva, cornea.

Ingestion (Swallowing): No known effects.

Delayed Symptoms/Effects:

- No delayed / chronic effects have been identified

Interaction with Other Chemicals Which Enhance Toxicity: None known.

Medical Conditions Aggravated by Exposure: May aggravate preexisting conditions, such as: eye disorders that decrease tear production or have reduced integrity of the eye; skin disorders that compromise the integrity of the skin.

Protection of First-Aiders: Avoid contact with skin and eyes. Use personal protective equipment. Refer to Section 8 for specific personal protective equipment recommendations. At minimum, treating personnel should utilize PPE sufficient for prevention of bloodborne pathogen transmission.

Notes to Physician: No information is available. This is generally recognized as a safe food additive. This compound is excreted in urine after the consumption of cranberry juice.

5. FIRE-FIGHTING MEASURES

Fire Hazard: Negligible fire hazard.

Explosive properties: Dust (powder) may form explosive mixture in air. Closed containers may explode or rupture when exposed to extreme heat (fire).

Extinguishing Media: Use dry chemical, carbon dioxide, steam or water fog.

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Fire Fighting: Solid or straight stream water may be ineffective. Use water spray or water fog. Wear complete fire service protective equipment, including full-face MSHA/NIOSH approved self-contained breathing apparatus. Use water to cool fire-exposed container/structure/protect personnel.

Hazardous Combustion Products: Oxides of carbon (Carbon monoxide, Carbon dioxide)

Sensitivity to Mechanical Impact: Not sensitive.

Sensitivity to Static Discharge: Not sensitive.

Lower Flammability Level (air): No data available

Upper Flammability Level (air): No data available

Flash point: >149 °C (>300 °F)

Auto-ignition Temperature: Not determined

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Stop leak if possible without personal risk. Stay upwind. Do not get in eyes. Wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS.

Methods and Materials for Containment and Cleaning Up:

Contain spill. Use methods to minimize generation of dust. Shovel back into original dry container or waste receptacle. Flush area with water. Contain runoff from fire control and dilution water.

Environmental Precautions:

Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate regulatory agencies.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Do not use until manufacturer's precautions have been read and understood. Avoid contact with eyes. Wash exposed skin thoroughly after contact and before eating, drinking, using tobacco products or restrooms. Observe good personal hygiene practices and recommended procedures. Wear personal protective equipment as described in Exposure Controls/Personal Protection (Section 8) of the SDS. Minimize generation of dust. Not for use or storage in or around the home.

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Safe Storage Conditions:

Keep container tightly closed and properly labeled. Store in a cool, well-ventilated area away from possible sources of ignition. Protect from physical damage. Keep containers closed when material is not in use. Maintain good housekeeping. Keep separated from incompatible substances (see below or Section 10 of the Safety Data Sheet).

Incompatibilities/ Materials to Avoid:

No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Regulatory Exposure Limit(s): Listed below for the product components that have regulatory occupational exposure limits (OEL's) established.

Component	OSHA Final PEL TWA	OSHA Final PEL STEL	OSHA Final PEL Ceiling
Particles Not Otherwise Regulated (PNOR) 00-00-001	15 mg/m ³ (Total) 5 mg/m ³ (Respirable)	-----	-----

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

NON-REGULATORY EXPOSURE LIMIT(S): Listed below for the product components that have advisory (non-regulatory) occupational exposure limits (OEL's) established.

Component	CAS Number	ACGIH TWA	ACGIH STEL	ACGIH Ceiling	OSHA TWA (Vacated)	OSHA STEL (Vacated)	OSHA Ceiling (Vacated)
Particulates Not Otherwise Specified (PNOS)	Not Assigned	10 mg/m ³ (Inhalable) 3 mg/m ³ (Respirable)	-----	-----	-----	-----	-----

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).

- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

Additional Advice: Good hygiene and safety practices should be used when handling and working with this material. Good hygiene practices include but are not limited to: wearing suitable gloves and/or eye protection; washing hands and affected skin immediately after handling, before breaks, and at the end of the workday; regularly cleaning work area and clothing; etc.

ENGINEERING CONTROLS: Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below applicable exposure limits and to keep area dust levels below explosive dust concentrations.

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PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear safety glasses with side-shields. If eye contact is likely, wear chemical resistant safety goggles and/or face-shield when appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin and Body Protection: As a good hygiene practice, wear protective clothing to minimize skin contact such as standard industrial work clothes, coveralls, safety footwear. In dusty areas, wear necessary resistant protective apparel, including necessary head, hand, and foot protection. Contaminated clothing should be removed and laundered before reuse.

Hand Protection: As a good hygiene practice, wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove.

Protective Material Types: Butyl rubber, Natural rubber

Respiratory Protection: Not required under normal use conditions. A NIOSH/MSHA approved respirator with air purifying organic vapor cartridge/canister with particulate filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. The added protection of a full face-piece respirator is required when visible dusty conditions are encountered and eye irritation may occur. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Appearance:	Crystalline, Powder
Color:	White
Odor:	Odorless
Chemical Family:	ORGANIC ACID
Boiling Point/Range:	Not applicable to solids
Freezing Point/Range:	No data available.
Melting Point/Range:	220 °C (428 °F)
Vapor Pressure:	Not applicable
Vapor Density (air=1):	Not applicable
Relative Density/Specific Gravity (water=1):	No data available
Density:	No data available
Bulk Density:	46 lb./ft ³
Water Solubility:	<0.5% in water
pH:	2-3 (25:75 acetone/water)
VOC Content (%):	>1% by volume
Volatility:	No data available
Evaporation Rate (ether=1):	Not applicable
Partition Coefficient (n-octanol/water):	No data available

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Flash point:	>149 °C (>300 °F)
Flammability (solid, gas):	No data available
Lower Flammability Level (air):	No data available
Upper Flammability Level (air):	No data available
Auto-ignition Temperature:	Not determined
Viscosity:	Not applicable

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal temperatures and pressures.

Chemical Stability: Stable at normal temperatures and pressures.

Possibility of Hazardous Reactions:

Closed containers may explode or rupture when exposed to extreme heat (fire).

Conditions to Avoid:

(e.g., static discharge, shock, or vibration) -. None known.

Incompatibilities/ Materials to Avoid:

No information available.

Hazardous Decomposition Products: Oxides of carbon (Carbon monoxide, Carbon dioxide)

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

IRRITATION DATA: As listed below

Standard Draize (Eye): Score - 43 @ 24 hrs., 38 @ 48 hrs., and 34 @ 72 hrs. (Rabbit)

Standard Draize (Skin): Score - 0.6 (Rabbit - 24 hrs.)

TOXICITY DATA:

PRODUCT TOXICITY DATA: BETA-RESORCYLIC ACID

Note: The test material for the toxicological studies was beta-resorcylic acid.

LD50 Oral: 7100 mg/kg (Rat)	LD50 Dermal: >3980 mg/kg (Rabbit)	LC50 Inhalation: No data available
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COMPONENT TOXICITY DATA:

Note: The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

Component	LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
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Benzoic acid, 2,4-dihydroxy- 89-86-1	-----	-----	-----
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POTENTIAL HEALTH EFFECTS:

Eye contact: Eye exposure may cause severe eye irritation and redness to the eye lids, conjunctiva, and cornea.

Skin contact: Exposure to skin may cause redness, mild irritation.

Inhalation: No effects expected.

Ingestion: No effects expected.

Chronic Effects: None known.

SIGNS AND SYMPTOMS OF EXPOSURE:

Inhalation (Breathing): No known effects.

Skin: Skin Irritation. Exposure of dust to skin may cause redness, mild irritation.

Eye: Eye Irritation. Exposure to eyes may cause severe irritation and redness to the eye lids, conjunctiva, cornea.

Ingestion (Swallowing): No known effects.

Interaction with Other Chemicals Which Enhance Toxicity: None known.

GHS HEALTH HAZARDS:

GHS: ACUTE TOXICITY - ORAL: Not classified as acutely toxic by oral exposure per OSHA-GHS criteria.

GHS: ACUTE TOXICITY - DERMAL: Not classified as acutely toxic by dermal exposure per OSHA-GHS criteria.

GHS: ACUTE TOXICITY - INHALATION: No data available. Not classified.

GHS: CONTACT HAZARD - EYE: Category 2A - Causes serious eye irritation

GHS: CARCINOGENICITY:

Not classified as a carcinogen per GHS criteria. This product is not classified as a carcinogen by NTP, IARC, or OSHA.

12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

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ECOTOXICITY:

No data available

FATE AND TRANSPORT:

BIODEGRADATION: No data available

PERSISTENCE: No data available

BIOACCUMULATIVE POTENTIAL: No data available.

MOBILITY IN SOIL: No data available.

13. DISPOSAL CONSIDERATIONS

Waste from material:

Reuse or recycle if possible. Dispose of in accordance with federal, state and local regulations.

Container Management:

Dispose of container in accordance with applicable local, regional, national, and/or international regulations. Container rinsate must be disposed of in compliance with applicable regulations.

14. TRANSPORT INFORMATION

IMPORTANT: The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

LAND TRANSPORT

U.S. DOT 49 CFR 172.101:

Status: Not regulated

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

Status: Not regulated.

MARITIME TRANSPORT (IMO / IMDG) :

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Status - IMO / IMDG: Not Regulated

AIR TRANSPORT (ICAO / IATA) :

Status - ICAO/IATA: Not Regulated

15. REGULATORY INFORMATION

U.S. REGULATIONS

OSHA REGULATORY STATUS:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

Not regulated.

SARA EHS Chemical (40 CFR 355.30)

Not regulated

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):

Acute Health Hazard

EPCRA SECTION 313 (40 CFR 372.65):

Not regulated.

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):

Not regulated

NATIONAL INVENTORY STATUS

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): All components are listed or exempt.

TSCA 12(b): This product is not subject to export notification.

Canadian Chemical Inventory: All components of this product are listed on either the DSL or the NDSL.

STATE REGULATIONS

California Proposition 65:

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

CANADIAN REGULATIONS

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• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

WHMIS - Classifications of Substances:

• D1B - Poisonous and Infectious Material; Materials causing immediate and serious toxic effects - Toxic material

16. OTHER INFORMATION

Prepared by: OxyChem Corporate HESS - Product Stewardship

Rev. Date: 01-May-2015

HMIS: (SCALE 0-4) (Rated using National Paint & Coatings Association HMIS: Rating Instructions, 2nd Edition)

Health Rating: 1

Flammability Rating: 0

Reactivity Rating: 0

NFPA 704 - Hazard Identification Ratings (SCALE 0-4)

Health Rating: 1

Flammability: 0

Reactivity Rating: 0

Reason for Revision:

- Changed the SDS format to meet the GHS requirements of the revised 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
- Authored safety data sheet using the WERCS software

IMPORTANT:

The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, storage, disposal and other factors that may involve other or additional legal, environmental, safety or performance considerations, and INDSPEC Chemical Corporation assumes no liability whatsoever for the use of or reliance upon this information. While our technical personnel will be happy to respond to questions, safe handling and use of the product remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patents or to violate any Federal, State, local or foreign laws.

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees

End of Safety Data Sheet