

Material Safety Data Sheet

4,4'-Isopropylidenediphenol, 97%

ACC# 43975

Section 1 - Chemical Product and Company Identification

MSDS Name: 4,4'-Isopropylidenediphenol, 97%

Catalog Numbers: AC158240000, AC158240020, AC158241000, AC158245000, AC9472612

Synonyms: Bisphenol A; p,p'-Dihydroxydiphenyl-dimethylmethane; 2,2-Bis(4-hydroxyphenyl)-propane; 2,2-(4,4'-Dihydroxydiphenyl)propane; 4,4'-Dihydroxy-2,2-diphenylpropane; 4,4'-Dihydroxydiphenyldimethylmethane; 4,4'-Isopropylidenebisphenol; Bisphenol, 4,4'-(1-methylethylidene)-; Dimethylmethylene-p,p'-diphenol; Phenol, 4,4'-(1-methylethylidene)bis-

Company Identification:

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
80-05-7	4,4'-Isopropylidenediphenol	97	201-245-8

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white powder.

Warning! Causes severe eye irritation. Causes respiratory tract irritation. Causes mild skin irritation. May cause digestive tract irritation. This substance has caused adverse reproductive and fetal effects in animals. Possible sensitizer.

Target Organs: Kidneys, liver, eyes, skin, bladder.

Potential Health Effects

Eye: May result in corneal injury. Causes severe eye irritation and possible injury.

Skin: Causes mild skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts may produce central nervous system depression, headache, dizziness, diarrhea, and possible hemorrhagic gastroenteritis.

Inhalation: Causes upper respiratory tract irritation. Causes irritation of the mucous membrane. Inhalation of dust may cause irritation of the nose and throat. Inhalation may cause liver, kidney, and bladder effects.

Chronic: Animal studies have reported that fetal effects/abnormalities may occur when maternal toxicity is seen. Laboratory experiments have resulted in mutagenic effects. Repeated skin exposure may produce photoallergic contact dermatitis with persistent light reactivity.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively. Individuals with chronic respiratory disorders may be more susceptible to the effects of this product. Persons with pre-existing skin disorders may be more susceptible to dermatitis. To treat corneal damage, careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Dusts may be combustible when exposed to heat, flame, or oxidizing agents.

Extinguishing Media: Use agent most appropriate to extinguish fire. Use dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 227 deg C (440.60 deg F)

Autoignition Temperature: 510 deg C (950.00 deg F)

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
4,4'-Isopropylidenediphenol	none listed	none listed	none listed

OSHA Vacated PELs: 4,4'-Isopropylidenediphenol: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Powder

Appearance: white

Odor: phenol-like - mild odor

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 220 deg C @ 4.00mm Hg

Freezing/Melting Point: 150 - 159 deg C

Decomposition Temperature: Not available.

Solubility: Insoluble.

Specific Gravity/Density: 1.195 @ 25°C

Molecular Formula: C₁₅H₁₆O₂

Molecular Weight: 228.29

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, dust generation, excess heat, strong oxidants.

Incompatibilities with Other Materials: Oxidizing agents, bases, acid anhydrides, acid chlorides.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, aldehydes.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 80-05-7: SL6300000

LD50/LC50:

CAS# 80-05-7:

Draize test, rabbit, eye: 250 ug/24H Severe;

Draize test, rabbit, skin: 500 mg/24H Mild;

Oral, mouse: LD50 = 2400 mg/kg;

Oral, mouse: LD50 = 2500 mg/kg;

Oral, rabbit: LD50 = 2230 mg/kg;

Oral, rat: LD50 = 3250 mg/kg;

Oral, rat: LD50 = 1200 mg/kg;

Skin, rabbit: LD50 = 3 mL/kg;

Carcinogenicity:

CAS# 80-05-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: Oral, rat: TDLo = 10 gm/kg (female 6-15 day(s) after conception) Effects on Embryo or Fetus - fetotoxicity (except death, e.g., stunted fetus).; Intraperitoneal, rat: TDLo = 1275 mg/kg (female 1-15 day(s) after conception) Specific Developmental Abnormalities - musculoskeletal system).; Intraperitoneal, rat: TDLo = 1275 mg/kg (female 1-15 day(s) after conception) Specific Developmental Abnormalities - Central Nervous System.

Reproductive Effects: Oral, rat: TDLo = 15 gm/kg (female 6-15 day(s) after conception) Fertility - post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants).; Intraperitoneal, rat: TDLo = 1875 mg/kg (female 1-15 day(s) after conception) Fertility - litter size (e.g. # fetuses per litter; measured before birth).; Oral, mouse: TDLo = 12500 mg/kg (female 6-15 day(s) after conception) Maternal Effects - uterus, cervix, vagina.

Mutagenicity: DNA Damage: Rat, Liver = 200 umol/L.; DNA Adduct: Oral, rat = 800 mg/kg/4D (Continuous).; Micronucleus Test: Hamster, Lung = 200 umol/L.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: Fish: Fathead Minnow: LC50 = 4.6 mg/L; 96 Hr; Flow-through bioassay Water flea Daphnia: EC50 = 10 mg/L; 48 Hr; Unspecified 4,4'-Isopropylidenediphenol is expected to show moderate to low soil mobility and will biodegrade in soil under aerobic conditions following acclimation. In acclimated water, biodegradation will be the dominant fate process with a half-life of 4 days. In nonacclimated water, this product may biodegrade after a sufficient adaptation period and may adsorb extensively to suspended solids and sediments or it may photolyze. 4,4'-Isopropylidenediphenol is not expected to bioaccumulate significantly in aquatic organisms, volatilize or undergo chemical hydrolysis from soil or water surfaces.

Environmental: In the atmosphere, 4,4'-Isopropylidenediphenol exists primarily in the particulate phase and is removed by dry deposition and photolysis. The small portion that exists in the vapor phase reacts with photochemically produced hydroxyl radicals with a half-life of 4 hours or may photolyze.

Physical: No information available.

Other: No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 80-05-7 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 80-05-7: Effective 6/28/84, Sunset 6/28/94

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 80-05-7: immediate.

Section 313

This material contains 4,4'-Isopropylidenediphenol (CAS# 80-05-7, 97%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 80-05-7 can be found on the following state right to know lists: New Jersey, Pennsylvania, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XI

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 43 May cause sensitization by skin contact.

Safety Phrases:

S 24 Avoid contact with skin.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37 Wear suitable gloves.

WGK (Water Danger/Protection)

CAS# 80-05-7: 2

Canada - DSL/NDSL

CAS# 80-05-7 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 80-05-7 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 5/06/1999

Revision #4 Date: 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.