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Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THECOMPANY/UNDERTAKING

Product Identifier

Perihalan Produk: 4,4'-Isopropylidenediphenol
Product Description: 4,4'-Isopropylidenediphenol

Cat No.: C15824

Synonyms 2,2-Bis-4-hydroxyphenylpropane; 4,4'-(1-Methylethylidene)bisphenol;

4-[2-(4-Hydroxyphenyl)propan-2-yl]phenol; Bisphenol A

CAS No 80-05-7 Molecular Formula C15 H16 O2

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals.
Uses advised against No Information available

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Supplier

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CHEMTREC Malaysia 1-800-815-308 (Malay)

CHEMTREC Malaysia (Kuala Lumpur) +(60)-327884561 (Malay)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Serious Eye Damage/Eye Irritation	Category 1 (H318)
Skin Sensitization	Category 1 (H317)
Reproductive Toxicity	Category 1B (H360F)
Specific target organ toxicity - (single exposure)	Category 3 (H335)
Acute aquatic toxicity	Category 1 (H400)
Chronic aquatic toxicity	Category 1 (H410)

Label Elements



Signal Word Danger

Hazard Statements

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

H360F - May damage fertility

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

P363 - Wash contaminated clothing before reuse

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other Hazards

Contains a known or suspected endocrine disruptor

Contains a substance on the National Authorities Endocrine Disruptor Lists

Toxic to terrestrial vertebrates

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
4,4'-Isopropylidenediphenol	80-05-7	<=100

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

4,4'-Isopropylidenediphenol

symptoms occur.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

Causes severe eye damage. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and fact distributed light bands and the standard several pair or flushing.

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feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO2).

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods and Material for Containment and Cleaning Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid dust formation. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing.

Conditions for Safe Storage, Including any Incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives area.

Specific End Uses

Use in laboratories.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Component	European Union	The United Kingdom	Germany
4,4'-Isopropylidenediphenol	TWA: 2 mg/m³ (8h)	STEL: 6 mg/m ³ 15 min	TWA: 5 mg/m³ (8 Stunden). AGW -
		TWA: 2 mg/m ³ 8 hr	exposure factor 1
		_	TWA: 5 mg/m³ (8 Stunden). MAK
			Höhepunkt: 5 mg/m ³

Exposure Controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Goggles

Hand Protection Protective gloves
Skin and body protection Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators

Recommended Filter type: Particulates filter conforming to EN 143

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

When RPE is used a face piece Fit Test should be conducted

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

system Local authorities should be advised if significant spillages cannot be contained

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance White
Physical State Solid
Odor aromatic

Odor Threshold

pH

No data available

No information available

Melting Point/Range 155 - 158 °C / 311 - 316.4 °F

Softening Point No data available

Boiling Point/Range 220 °C / 428 °F @ 4 mmHg

Flash Point 227 °C / 440.6 °F Method - No information available

Evaporation Rate Not applicable Solid

Flammability (solid,gas)

No information available

Explosion Limits

No information available

Lower 30 Vol%

Vapor Pressure 0.86 mbar @ 190 °C

Vapor Density Not applicable Solid

Specific Gravity / Density

Bulk DensityNo data availableWater Solubilitypractically insolubleSolubility in other solventsNo information available

Partition Coefficient (n-octanol/water)

Component log Pow 4,4'-Isopropylidenediphenol 3.4

Autoignition Temperature 510 °C / 950 °F

Decomposition Temperature > 260°C

Viscosity Not applicable Solid

Explosive PropertiesNo information available
No information available

Molecular FormulaC15 H16 O2Molecular Weight228.29

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None known, based on information available.

Chemical Stability

Stable under normal conditions.

4,4'-Isopropylidenediphenol

Possibility of Hazardous Reactions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

Conditions to Avoid

Incompatible products.

Incompatible Materials

Strong oxidizing agents. Strong bases. Acid anhydrides. Acid chlorides.

Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Product Information

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation		
4,4'-Isopropylidenediphenol	LD50 = 3300 mg/kg (Rat)	LD50 = 3000 mg/kg (Rabbit)	LC50 > 170 mg/m ³ (Rat) 6 h		

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory No data available Skin Category 1

No information available

(e) germ cell mutagenicity; No data available

Not mutagenic in AMES Test

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Category 1B
Reproductive Effects May impair fertility.

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(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system.

(i) STOT-repeated exposure; No data available

Target Organs None known.

(j) aspiration hazard; Not applicable

Solid

delayed

Symptoms / effects, both acute and Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

Endocrine Disrupting Properties

Assess endocrine disrupting properties for human health

Contains a substance on the National Authorities Endocrine Disruptor Lists

Component	EU National Authorities Endocrine Disruptor Lists - Health		
4,4'-Isopropylidenediphenol 80-05-7 (<=100)	List I		

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity effects The product contains following substances which are hazardous for the environment. Very

toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

	Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Ī	4,4'-Isopropylidenediphenol	LC50: 4.0 - 5.5 mg/L,	EC50: 9.2 - 11.4 mg/L,	EC50: = 2.5 mg/L, 96h	
١		96h static (Pimephales	48h Static (Daphnia	(Pseudokirchneriella	
1		promelas)	magna)	subcapitata)	
1		LC50: = 4 mg/L, 96h	EC50: = 3.9 mg/L, 48h		
١		(Oncorhynchus mykiss)	(Daphnia magna)		
1		LC50: 3.6 - 5.4 mg/L,	EC50: = 10.2 mg/L, 48h		
1		96h flow-through	(Daphnia magna)		
1		(Pimephales promelas)			
1		LC50: = 9.9 mg/L, 96h			
-		static (Brachydanio			
-		rerio)			
١					

Persistence and degradability

Expected to be biodegradable

Persistence

Persistence is unlikely.

Degradation in sewage

treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Rioaccumulative notential Rioaccumulation is unlikely

bioaccumulative potential	Dioaccumulation is unlikely	
Component	log Pow	Bioconcentration factor (BCF)
4.4'-Isopropylidenediphenol	3.4	5.1 - 13.8 dimensionless

Mobility in soil Spillage unlikely to penetrate soil. . Is not likely mobile in the environment due its low water

solubility.

Endocrine Disruptor Information

Assess endocrine disrupting Contains a substance on the National Authorities Endocrine Disruptor Lists.

4,4'-Isopropylidenediphenol

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properties for the environment		
Component	EU - Endocrine Disruptors - Evaluated	
•	•	Substances
4,4'-Isopropylidenediphenol	Group I Chemical	High Exposure Concern

EU National Authorities Endocrine Disruptor Lists - Environment	Japan - Endocrine Disruptor Information
List I	
	Disruptor Lists - Environment

Other adverse effects No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues/Unused

Products

Waste is classified as hazardous Dispose of in accordance with the European Directives on waste and hazardous waste Dispose of in accordance with local regulations Should not be

released into the environment

Contaminated Packaging Dispose of this container to hazardous or special waste collection point.

Other Information Do not flush to sewer Waste codes should be assigned by the user based on the

application for which the product was used Do not empty into drains Do not let this chemical

enter the environment

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

UN-No UN3077
Hazard Class 9
Packing Group III

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. 4,4'-Isopropylidenediphenol

Road and Rail Transport

UN-No UN3077
Hazard Class 9
Packing Group III

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. 4,4'-Isopropylidenediphenol

<u>IATA</u>

UN-No UN3077
Hazard Class 9
Packing Group III

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. 4,4'-Isopropylidenediphenol

Special Precautions for User No special precautions required

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories X = listed

4,4'-Isopropylidenediphenol

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Component	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	IECSC	AICS	KECL
4,4'-Isopropylidenediphenol	201-245-8	X	Х	Х	Х	X	Χ	Χ	KE-23982

National Regulations

Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 16: OTHER INFORMATION

Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b)

Substances/EU List of Notified Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances **IECSC** - Chinese Inventory of Existing Chemical Substances

ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

KECL - Korean Existing and Evaluated Chemical Substances

TWA - Time Weighted Average

WEL - Workplace Exposure Limit **ACGIH** - American Conference of Governmental Industrial Hygienists

IARC - International Agency for Research on Cancer

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% POW - Partition coefficient Octanol:Water

LD50 - Lethal Dose 50% EC50 - Effective Concentration 50%

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association**

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Health, Safety and Environmental Department Prepared By

Revision Date 01-Apr-2025

Revision Summary SDS sections updated.

In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

Disclaimer

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End of Safety Data Sheet