SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-T-51674
Product Name	Decabromodiphenyl Oxide
CAS No.	1163-19-5
Category	Building Blocks
Synonyms	Decabromodiphenyl ether
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Serious eye damage/eye irritation (Category 2)
Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning

Hazard Statement(s)

Code	Statement
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H413	Not available

H320	Not available
H335	Not available
H351	Not available
H360	Not available
H362	Not available
H373	Not available
H316	Not available
H341	Not available

Precautionary Statement(s)

Code	Statement
P264	Wash hands thoroughly after handling.
P264+P265	Not available
P270	Not available
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P317	Not available
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if presen
P330	Not available
P337+P317	If eye irritation persists: Get medical help.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio
P203	Not available
P260	Not available
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P263	Not available
P271	Use only outdoors or in a well-ventilated area.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P318	Not available
P319	Get medical help if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

P405	Store locked up.
P332+P317	If skin irritation occurs: Get medical help.

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Decabromodiphenyl Oxide
CAS Number : 1163-19-5
Molecular Formula : C12Br10O
Molecular Weight : 959.16
Parent Chemical : -
Synonyms : Decabromodiphenyl ether
Concentration : Not available

SECTION 4: First aid measures

Not available

SECTION 5: Firefighting measures

Not available

SECTION 6: Accidental release measures

Not available

SECTION-7: Handling and storage

Not available

SECTION 8: Exposure controls / personal protection

Not available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available

Test	Result
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

Not available

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: Decabromodiphenyl ether (deca-BDE) is poorly absorbed and does not easily penetrate the cell wall. Its acute and chronic toxicities are relatively low, with the liver and the thyroid as the primary targets, though there is some evidence of carcinogenicity.

- Skin corrosion/irritation: In 50 human subjects, repeated application of a suspension of 5% DBDPO in petrolatum 3 times a week for 3 weeks and challenged two weeks subsequent to the last induction application did not result in skin sensitization. Skin irritation was observed in 9 out of the 50 persons. In 200 human volunteers treated with 9 induction patches of 2 batches of DBDPO, 15 subjects showed some slight irritation reactions (very slight erythema, mild erythema, very slight edema).
- Serious eye damage/eye irritation: Deca-BDE did not cause primary eye irritation in rabbits.
- Respiratory or skin sensitization: Deca-BDE did not produce skin sensitization in human subjects. Studies in human subjects did not reveal any evidence of skin sensitization with test materials.
- Germ cell mutagenicity: Deca-BDE induced DNA damage in human neuroblastoma cells. Deca-BDE was not genotoxic in Salmonella typhimurium TA98-100-1535-1537 and Escherichia coli WP2 uvr with or without activation. It was also not mutagenic in the mouse lymphoma L5178y/TK + or - assay in the presence or absence of metabolic activation. Tests for cytogenetic effects in Chinese hamster ovary cells indicated that this chemical does not cause chromosomal aberrations or sister chromatid exchanges either in the presence or absence of activation.
- Carcinogenicity: In NTP 2-year feeding studies, there was some evidence of carcinogenicity for male and female rats (increased incidences of neoplastic nodules of the liver in low dose males and high dose groups of each sex). There was equivocal evidence of carcinogenicity for male mice (increased incidences of hepatocellular adenomas or carcinomas (combined) in the low dose group and of thyroid gland follicular cell adenomas or carcinomas (combined) in both dosed groups). There was no evidence of carcinogenicity for female mice receiving 25,000 or 50,000 ppm in the diet. Evaluation: No epidemiological data relevant to the carcinogenicity of decabromodiphenyl oxide. There is limited evidence in experimental animals for the carcinogenicity of decabromodiphenyl oxide. Overall evaluation: Decabromodiphenyl oxide is not classifiable as to its carcinogenicity to humans (Group 3).
- Reproductive toxicity: Significant correlation was seen between length of employment and concentrations of follicle stimulating hormone in workers exposed to deca-BDE; an abnormal follicle stimulating hormone value was found in only one worker. A testicular cyst was found in one exposed worker, and epididymal nodules in two others; no testicular or epididymal nodules were seen among comparisons. Thyroid and reproductive dysfunction was investigated in workers exposed for at least 240 hr to decabromobiphenyl and decabromobiphenyloxide over a 4 yr period; thyroid nodules were seen in 3 of 18 workers exposed for 3 yr or longer.
- STOT-single exposure: No data available.
- STOT-repeated exposure: A health assessment of workers exposed for at least 6 weeks to polybromodiphenyls and polybromodiphenyl oxides, including deca-BDE, during manufacture revealed a higher than normal prevalence of primary hypothyroidism with elevated serum concentrations of thyrotropin and low or borderline-low serum T4 and free thyroxine indexes in 4 of the 35 occupationally exposed vs. 0 of the 89 control subjects. A significant reduction in sensory and fibula motor velocities was also observed. This primary hypothyroidism was partially reversible in 1 of the 3 workers re-evaluated one year after the initial study; the 2 other workers reassessed still exhibited low free thyroxine indexes and high thyrotrophin values. Several non-neoplastic lesions were observed at increased incidences in animal studies, the most notable being thyroid gland follicular cell hyperplasia in male mice. Several in vivo and in vitro studies have also demonstrated effects of deca-BDE on thyroid hormone homeostasis.
- Aspiration hazard: No data available.

Likely routes of exposure
- No data available.

Symptoms related to the physical, chemical and toxicological characteristics
- Primary hypothyroidism with elevated serum concentrations of thyrotropin and low or borderline-low serum T4 and free thyroxine indexes was observed in occupationally exposed workers; a significant reduction in sensory and fibula motor velocities was also observed. Skin irritation (erythema/edema) was observed in some human subjects in patch testing.

SECTION 12: Ecological information

Not available

SECTION 13: Disposal considerations

Not available

SECTION 14: Transport information

Not available

SECTION 15: Regulatory information

Not available

SECTION 16: Other information

Not available

DISCLAIMER

This MSDS is system-generated. Please verify and confirm all data, statements, and values with the Support Team before use or distribution.