

MATERIAL SAFETY DATA SHEET		
1	IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING	
1.1	Product identifiers	
	Chemical Name	TETRABROMOBISPHENOL A BIS(2,3-DIBROMOPROPYL ETHER)
	CAS NO.	21850-44-2
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	1. It is recommended as an additive flame retardant for polymers and most polyolefin copolymers. 2. It is the most commonly used flame retardant for polypropylene applications such as water discharge pipes passing the class B1 (DIN 4102) and lamp sockets classified V-2 or V-0 (UL 94). 3. It is an additive flame retardant for polyolefins and polymers, including high-density polyethylene (HDPE) and low-density polyethylene (LDPE).	
1.3	Details of the supplier of the safety data sheet	
	COMPANY	POLYMER ADD PTE LTD 77 A, Boat Quay,
2	HAZARDS IDENTIFICATION	
2.1	Classification of the substance or mixture	
	Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]	
	Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008	
	Classification according to EU Directives 67/548/EEC or 1999/45/EC	
	Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.	
	For the full text of the R-phrases mentioned in this section	
2.2	Label elements	The product does not need to be labelled in accordance with EC directives or respective national laws.
	Labelling according Regulation (EC) No 1272/2008 [CLP]	
	Pictogram	No data available.
	Signal word	No data available.
	Hazard statement(s)	
	Precautionary statement(s)	
	Supplemental Hazard Statements	
	According to European Directive 67/548/EEC as amended	No data available.
	Hazard symbol(s)	No data available.
2.3	Other hazards	None.

3	COMPOSITION/INFORMATION ON INGREDIENTS	
3.1	Substances	
	Molecular Formula	C ₂₁ H ₂₀ Br ₈ O ₂
	Molecular Weight	943.62 g/mol.
	Component 1	Tetrabromobisphenol A dibromopropyl ether
	Concentration 1	98 % (Other impurities and unreacted component 2 %)
	CAS-No.	21850-44-2
	EC-No.	244-617-5
4	FIRST AID MEASURES	
4.1	Description of first aid measures	
	General advice	
	No data available.	
	If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
	In case of skin contact	Wash off with soap and plenty of water.
	In case of eye contact	Flush eyes with water as a precaution.
	If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water.
4.2	Most important symptoms and effects, both acute and delayed	
	No data available.	
4.3	Indication of any immediate medical attention and special treatment needed	
	No data available.	
5	FIREFIGHTING MEASURES	
5.1	Extinguishing media	
	Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2	Special hazards arising from the substance or mixture	Carbon oxides, Hydrogen bromide gas.
5.3	Advice for firefighters	Wear self contained breathing apparatus for fire fighting if necessary.
5.4	Further information	No data available.
6	ACCIDENTAL RELEASE MEASURES	
6.1	Personal precautions protective equipment and emergency procedures	

	Avoid dust formation. Avoid breathing vapours, mist or gas.
6.2	Environmental precautions
	No special environmental precautions required.
6.3	Methods and materials for containment and cleaning up
	Sweep up and shovel. Keep in suitable, closed containers for disposal.
6.4	Reference to other sections
	For disposal see section 13.
7	HANDLING AND STORAGE
7.1	Precautions for safe handling
	Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
7.2	Information about protection against explosions and fires
	Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
7.3	Conditions for safe storage including any incompatibilities
	No data available.
7.4	Specific end use(s)
	No data available.
8	EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1	Control parameters
	Components with workplace control parameter
8.2	Exposure control
	No data available.
	Appropriate engineering controls
	General industrial hygiene practice.
	Eye/face protection
	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
	Skin protection
	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
	Body Protection
	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the

	concentration and amount of the dangerous substance at the specific workplace.	
	Respiratory protection	
	Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).	
9	PHYSICAL AND CHEMICAL PROPERTIES	
	Information on basic physical and chemical properties	
	a) Appearance	Form : Granule
	Colour : White	
	b) Odour	No data available.
	c) Odour Threshold	No data available.
	d) pH (% solution in water)	
	pH	No data available.
	e) Melting point/freezing point	100 °C
	f) Initial boiling point and boiling range	No data available.
	g) Flash point	No data available.
	h) Evaporation rate	No data available.
	i) Flammability (solid or gas)	No data available.
	j) Upper/lower flammability or explosive limits	No data available.
	k) Vapour pressure	No data available.
	l) Vapour density	No data available.
	m) Relative density	No data available.
	n) Water solubility	0.1 gm/100 ml
	o) Partition coefficient: n-octanol/water	No data available.
	p) Autoignition temperature	No data available.
	q) Decomposition temperature	No data available.
	r) Viscosity	No data available.
	s) Explosive properties	No data available.
	t) Oxidizing properties	No data available.
9.2	Other safety information	
	Bulk Density	No data available.
10	STABILITY AND REACTIVITY	

10.1	Reactivity	No data available.
10.2	Chemical stability	No data available.
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to avoid	No data available.
10.5	Incompatible materials	Strong oxidizing agents.
10.6	Hazardous decomposition products	No data available.
11	TOXICOLOGICAL INFORMATION	
11.1	Information on toxicological effects	
	Acute toxicity	No data available.
	Acute oral toxicity	No data available.
	Acute Inhalation toxicity	No data available.
	Acute dermal toxicity	No data available.
	Acute Irritation / corrosion toxicity	No data available.
	Skin corrosion/irritation	No data available.
	Serious eye damage/eye irritation	No data available.
	Respiratory or skin sensitization	No data available.
	Germ cell mutagenicity	No data available.
	Carcinogenicity	No data available.
	IARC	No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
	Reproductive toxicity	No data available.
	Specific target organ toxicity - single exposure	No data available.
	Specific target organ toxicity - repeated exposure	No data available.
	Signs and symptoms of exposure	No data available.
	Route of exposure	No data available.
	Aspiration hazard	No data available.
	Potential health effects	No data available.
	Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
	Ingestion	May be harmful if swallowed.

	Skin	May be harmful if absorbed through skin. May cause skin irritation.	
	Eyes	May cause eye irritation.	
	Additional Information		
	RTECS	No data available.	
12	ECOLOGICAL INFORMATION		
12.1	Toxicity	No data available.	
12.2	Persistence and degradability	No data available.	
	Biodegradation	No data available.	
12.3	Bio accumulative potential	No data available.	
12.4	Mobility in soil	No data available.	
12.5	Results of PBT and vPvB assessment	No data available.	
12.6	Other adverse effects	No data available.	
13	DISPOSAL CONSIDERATIONS		
13.1	Waste treatment methods		
	Product		
	Offer surplus and non-recyclable solutions to a licensed disposal company.		
	Contaminated packaging		
	Dispose of as unused product.		
14	TRANSPORT INFORMATION		
14.1	UN number		
	ADR/RID	IMDG	IATA
	-	-	-
14.2	UN proper shipping name		
	ADR/RID	IMDG	IATA
	Not dangerous goods	Not dangerous goods	Not dangerous goods
14.3	Transport hazard class(es)		
	ADR/RID	IMDG	IATA
	-	-	-
14.4	Packaging group		
	ADR/RID	IMDG	IATA
	-	-	-

14.5	Environmental hazards		
	ADR/RID	IMDG Marine pollutant	IATA
	No	No	No
14.6	Special precautions for user		No data available.
15	REGULATORY INFORMATION		
	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.		No data Available.
15.1	Safety health and environmental regulations/legislation specific for the substance or mixture		
	No data available.		
15.2	Chemical Safety Assessment		
	No data available.		
16	OTHER INFORMATION		
	Further information		
	The information contained herein is based on the present state of knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. Month of Creation :- April 2015 Month of Revision :- April 2018		