	MATERIAL SAFETY DATA SHEET	
1	**IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**	
1.1	**Product identifiers**	
	Chemical Name	BIS(T-BUTYLPEROXY ISOPROPYL)BENZENE
	CAS NO.	25155-25-3
1.2	**Relevant identified uses of the substance or mixture and uses advised against**	
	1. BIPB is a widely used curing agent for plastics and rubbers, such as CPE, EPDM, EVA, silicone rubber, NBR and fluorubber. 2. Compared with DCP, BIPB is more efficient at less dosage and much lower odour in the processing and final products. 3. Also can used as degradation agent for PP.	
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]	
	Organic peroxides (Type D), H242 For the full text of the H-Statements mentioned in this Section, see Section 16.	
	Classification according to EU Directives 67/548/EEC or 1999/45/EC	
	For the full text of the R-phrases mentioned in this section	
2.2	**Label elements**	
	Labelling according Regulation (EC) No 1272/2008 [CLP]	
	Pictogram	No data available.
	Signal word	Danger
	Hazard statement(s)	
	H242	Heating may cause a fire.
	Precautionary statement(s)	
	P220	Keep/Store away from clothing/ combustible materials.
	P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
	P412	Do not expose to temperatures exceeding 50 °C/ 122 °F.
	P420	Store away from other materials.

	Supplemental Hazard Statements	
	According to European Directive 67/548/EEC as amended	No data available.
	Hazard symbol(s)	No data available.
	none	
2.3	Other hazards	none
3	**COMPOSITION/INFORMATION ON INGREDIENTS**	
3.1	**Substances**	
	Molecular Formula	$C_{20}H_{34}O_4$
	Molecular Weight	338.48 g/mol
	Component 1	[1,3(or 1,4)-phenylenebis(1-methylethylidene)]bis[tert-butyl] peroxide
	Concentration 1	<= 100 %
	CAS-No.	25155-25-3
	EC-No.	246-678-3
4	**FIRST AID MEASURES**	
4.1	**Description of first aid measures**	
	General advice	
	Consult a physician. Show this safety data sheet to the doctor in attendance.	
	If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
	In case of skin contact	Wash off with soap and plenty of water. Consult a physician.
	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. Consult a physician.
4.2	**Most important symptoms and effects, both acute and delayed**	
	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11	
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
5.3	**Advice for firefighters**	Wear self-contained breathing apparatus for firefighting if necessary.
5.4	**Further information**	Use water spray to cool unopened containers.
6	**ACCIDENTAL RELEASE MEASURES**	
6.1	**Personal precautions protective equipment and emergency procedures**	
	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.	
6.2	**Environmental precautions**	
	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.	
6.3	**Methods and materials for containment and cleaning up**	
	Sweep up and shovel.\'20 Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.\'20 Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).	
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.Keep away from sources of ignition - No smoking.Keep away from heat and sources of ignition. For precautions see section 2.2.	
7.2	**Information about protection against explosions and fires**	
	No data available.	
7.3	**Conditions for safe storage including any incompatibilities**	
	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature 2 - 8 °C Storage class (TRGS 510): Combustible Solids	
7.4	**Specific end use(s)**	
	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated	
8	**EXPOSURE CONTROLS/PERSONAL PROTECTION**	
8.1	**Control parameters**	

	Components with workplace control parameter	
	Appropriate engineering controls	
	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.	
	Eye/face protection	
	Safety glasses with side-shields conforming to EN166 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.	
	Body Protection	
	Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.	
	Respiratory protection	
	Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).	
	Control of environmental exposure	
	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.	
9	**PHYSICAL AND CHEMICAL PROPERTIES**	
	Information on basic physical and chemical properties	
	a)Appearance	Form: Wax like
	Colour: yellow	
	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	Melting point/range: 44 - 48 °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	insoluble
	o)Partition coefficient: n-octanol/water	log Pow: 7.3 at 20 °C
	p)Autoignition temperature	No data available
	q)Decomposition temperature	>50°c
	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	Stable under recommended storage conditions.
10.3	Possibility of hazardous reactions	No data available
10.4	Conditions to avoid	Heat, flames and sparks.
10.5	Incompatible materials	Organic materials, Powdered metals, Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents, Heavy metal salts, Alkali metal salts
10.6	Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available In the event of fire: see section 5
11	**TOXICOLOGICAL INFORMATION**	
11.1	**Information on toxicological effects**	
	Acute toxicity	LD50 Oral - Rat - > 2,000 mg/kg([1,3(or 1,4)-phenylenebis(1-methylethylidene)]bis[tert-butyl] peroxide) (OECD Test Guideline 423)
	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	Skin - Rabbit([1,3(or 1,4)-phenylenebis(1-methylethylidene)]bis[tert-butyl] peroxide) Result: No skin irritation (OECD Test Guideline 404)
	Serious eye damage/eye irritation	Eyes - Rabbit([1,3(or 1,4)-phenylenebis(1-methylethylidene)]bis[tert-butyl] peroxide) Result: No eye irritation (OECD Test Guideline 405)
	Respiratory or skin sensitization	- Mouse([1,3(or 1,4)-phenylenebis(1-methylethylidene)]bis[tert-butyl] peroxide) Did not cause sensitisation on laboratory animals. (OECD Test Guideline 429)
	Germ cell mutagenicity	in vitro assay([1,3(or 1,4)-phenylenebis(1-methylethylidene)]bis[tert-butyl] peroxide) S. typhimurium Result: negative
	Carcinogenicity	No data available.
	IARC	No component of this product present 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([1,3(or 1,4)-phenylenebis(1-methylethylidene)]bis[tert-butyl] peroxide)
	Specific target organ toxicity - single exposure	No data available([1,3(or 1,4)-phenylenebis(1-methylethylidene)]bis[tert-butyl] peroxide)
	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	No data available.
	Ingestion	No data available.
	Skin	No data available.
	Eyes	No data available.
	Additional Information	
	RTECS	SD8431900
	Signs And Symptoms of Exposure	

	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.([1,3(or 1,4)-phenylenebis(1-methylethylidene)]bis[tert-butyl] peroxide)		
12	**ECOLOGICAL INFORMATION**		
12.1	Toxicity	No data available	
12.2	**Persistence and degradability**	No data available.	
	Biodegradation		
12.3	Bio accumulative potential	No data available	
12.4	Mobility in soil	No data available([1,3(or 1,4)-phenylenebis(1-methylethylidene)]bis[tert-butyl] peroxide)	
12.5	Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted	
12.6	Other adverse effects	No data available	
13	**DISPOSAL CONSIDERATIONS**		
13.1	**Waste treatment methods**		
	Product		
	Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. 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
	3106	3106	3106
14.2	**UN proper shipping name**		
	ADR/RID	IMDG	IATA
	ORGANIC PEROXIDE TYPE D, SOLID DI-(tert-BUTYLPEROXYISOPROPYL)BENZENE(S)	ORGANIC PEROXIDE TYPE D, SOLID (DI-(tert-BUTYLPEROXYISOPROPYL)BENCENE)	Organic peroxide type D, solid (Di-(tert-butylperoxyisopropyl) benzene(s))
14.3	**Transport hazard class(es)**		
	ADR/RID	IMDG	IATA
	5.2	5.2	5.2
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**		
15.1	**Safety health and environmental regulations/legislation specific for the substance or mixture**		
	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.		
15.2	**Chemical Safety Assessment**		
	For this product a chemical safety assessment was not carried out		
16	**OTHER INFORMATION**		
	H242	Heating may cause a fire.	
	H413	May cause long lasting harmful effects to aquatic life.	
	Further information		
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