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## MATERIAL SAFETY DATA SHEET

: According to EC-directive 2001/58/EC

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Rubber Accelerator TBzTD

HS Code: 29309090.90

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### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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<b>Product label name</b>	Tetrabenzyl Thiuram Disulfide
<b>Supplier</b>	Qingdao YLSCH Industry&Trade Co.,Ltd Room 501,2-3 Unit. No.8,Zhengzhou Road, Qingdao,China. TEL: +86 18661665800
<b>Emergency telephone</b>	TEL: +86 18661665800
<b>Intended use</b>	Rubber Vulcanization Accelerator

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

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<b>Chemical name</b>	二硫化四苄基秋兰姆 Tetrabenzyl Thiuram Disulfide
<b>CAS NO.</b>	10591-85-2
<b>Chemical description</b>	Light yellow powder
<b>TSCA NO.</b>	none
<b>EINECS NO.</b>	none
<b>Other information</b>	$C_{30}H_{28}N_2S_4$

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### 3. HAZARDS IDENTIFICATION

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May cause long-term adverse effects in the aquatic environment.

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### 4. FIRST AID MEASURES

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<b>Symptoms and effects</b>	May cause alcohol intolerance.
<b>First aid</b>	
<b>General</b>	Do not drink alcohol after exposure.

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<b>Inhalation</b>	Not applicable.
<b>Skin</b>	Wash off with plenty of soap and water.
<b>Eye</b>	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to Ensure thorough rinsing. Seek medical advice if irritation develops.
<b>Ingestion</b>	Rinse mouth, give water to drink.
<b>Advice to physician</b>	No specific recommendations.

## 5. FIRE-FIGHTING MEASURES

<b>Extinguishing media</b>	Waterspray, water mist, foam, dry chemical powder, CO <sub>2</sub>
<b>Unsuitable extinguishing media</b>	None known.
<b>Special exposure hazards</b>	Emits toxic fumes under fire conditions.
<b>Hazardous decomposition/combustion products</b>	Hydrogen cyanide (HCN), sulphur dioxide (SO <sub>2</sub> ), nitrous gases (NO <sub>x</sub> ).
<b>Protective equipment</b>	Wear self contained breathing apparatus.
<b>Other information</b>	Do not allow run-off from fire fighting to enter drains or water courses.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	For personal protection see Section 8. Avoid dust generation.
<b>Environmental precautions</b>	Do not flush into public water courses. Collect as much as possible in a clean container for
<b>Methods for cleaning up</b>	(preferable) reuse or disposal.

## 7. HANDLING AND STORAGE

<b>Handling</b>	The usual precautions for handling chemicals should be observed.
<b>Fire and explosion prevention</b>	No specific recommendations.
<b>Storage requirements</b>	Store in a dry and cool place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION



<b>Engineering controls</b>	No specific recommendations.
<b>Exposure limits</b>	
<b>Name:</b> Tetrabenzyl Thiuram Disulfide	10.0 mg/m <sup>3</sup> (total inhalable dust)
<b>Personal protection</b>	
<b>Respiratory</b>	No specific recommendations.
<b>Hand</b>	Wear suitable gloves.
<b>Eye</b>	Wear safety goggles.
<b>Skin and body</b>	Wear suitable protective clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Light yellow powder	<b>Colour</b>	Light-yellow
<b>Odour</b>	Odorless	<b>Boiling point</b>	----
<b>Melting point</b> ≥	128℃	<b>Flash point</b>	147-149℃
<b>Flammability</b>	----	<b>Explosion limits</b>	----
<b>Explosive properties</b>		<b>Auto ignition temperature</b>	----
<b>Oxidizing properties</b>	----	<b>Vapour pressure</b>	----
<b>Density</b>	1.50g/cm <sup>3</sup> (20℃)	<b>Bulk density</b>	----
<b>Solubility in water</b>	Insoluble in water	<b>Solubility in other solvents</b>	Not determined
<b>pH value</b>	----	<b>Partition coefficient</b>	----
<b>Residues (150um)% Max</b>	0.1(Max)	<b>Relative vapour density</b>	----
<b>Viscosity</b>	----	<b>Assay content %</b> ≥	96
<b>Strength of grain(N)</b>	----	<b>Zinc content %</b>	----

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable under recommended storage and handling conditions (see section 7).
<b>Conditions to avoid</b>	No specific recommendations.
<b>Materials to avoid</b>	Oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products known.

## 11. TOXICOLOGICAL INFORMATION

<b>Name</b>	Tetrabenzyl Thiuram Disulfide
<b>Acute toxicity</b>	
<b>Oral LG50</b>	rat: > 5000 mg/kg.
<b>Dermal LD50</b>	rat 4 hours: >5 mg/l.
<b>Irritation</b>	
<b>Skin</b>	Practically non-irritating.
<b>Eye</b>	Practically non-irritating.

## 12. ECOLOGICAL INFORMATION

<b>Name</b>	Tetrabenzyl Thiuram Disulfide
<b>Ecotoxicity</b>	
<b>fish</b>	96h-LC50 (Poecilia reticulata): > 32 mg/l. 48h-LC50 (Poecilia reticulata):
<b>daphnia</b>	48h-EC50 (Daphnia magna): > 100 mg/l.
<b>Degradation Biotic</b>	Not readily biodegradable.

## 13. DISPOSAL CONSIDERATIONS

<b>Product</b>	Avoid discharge into the environment Small quantities: According to local regulations. Large quantities: Consult YLSCH Chemical for special advice.
<b>Contaminated packaging</b>	According to local regulations. Waste code number: Please refer to your specific industry
<b>Other information</b>	in the European Waste Catalogue.

## 14. TRANSPORT INFORMATION

### Land transport (ADR/ RID)

<b>ADR class</b>	9	<b>RID class</b>	9
<b>ADR/RID packing group</b>	----	<b>Hazard Identification No.</b>	90
<b>Substance Identification No.</b>	3077	<b>UN number</b>	3077
<b>Proper Shipping Name</b>	Environmentally hazard us substance, solid, n.o.s. (Tetrabenzyl Thiuram Disulfide )		
<b>Sea transport (IMDG-code/ IMO)</b>			

<b>Correct technical name</b>	----	<b>IMDG Class</b>	
<b>UN Number</b>	----	<b>Packaging group</b>	
<b>EMS Number</b>	----		
<b>Air transport (ICAO-TI/ IATA-DGR)</b>			
<b>ICAO-TI/IATA-DGR Class</b>	9	<b>UN number</b>	3077
<b>Packing group</b>	Environmentally hazardous substance, solid, n.o.s.		
<b>Correct technical name</b>	(Tetrabenzyl Thiuram Disulfide)		

## 15. REGULATORY INFORMATION

<b>Chemical description</b>	Tetrabenzyl Thiuram Disulfide
<b>Labelling according to EC directives</b>	
<b>EC-number</b>	See section 2
<b>Classification based on</b>	Annex-1 to directive 67/548/EEC
<b>R(isk) phrase(s)</b>	R 43 May cause sensitization by skin contact May cause long-term adverse effects in the aquatic environment
<b>S(afety) phrase(s)</b>	S 24 Avoid contact with skin S 37 Wear suitable gloves S 60 This material and its container must be disposed of as hazardous waste S 61 Avoid release to the environment. Refer to special instruction /Safety data sheets
<b>Other information</b>	To be displayed on the label: "EC label".
<b>Wassergefährdungsklasse (WGK)</b>	2 (VwVwS Anhang 4 Nr. 3)

## 16. OTHER INFORMATION

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.