TBBS

antification of the substance and of the					
entification of the substance and of the	company/undertaking				
1.1 Product identifier:					
Identification on the label/Trade name:	TBBS				
Additional identification:	N-Tertiary Buty1-2-Benzothiazole Sulfenamide				
Identification of the product:	CAS#95-31-8; EC#202-409-1				
Index Number:	Not available				
REACH pre-registration No.:	17-2119870605-33-0000				
1.2 Relevant identified uses of the subs	stance and uses advised against:				
1.2.1 Identified uses:					
Used as rubber accelerator.					
1.2.2 Uses advised against:					
Not available.					
1.3 Details of the supplier of the safety	data sheet:				
REACH O.R.:	REACH COMPLIANCE SERVICES LIMITED				
	Street: Suite 1E, Paramount Court, Corrig Road,				
	Sandyford,Dublin 18, Ireland				
	Tel: +353 1 8899 951				
	Email: reach@reach24h.com				
Supplier(Manufacturer):	Shanghai Rokem Industrial Co., Ltd				
Address:	9D, Double Dove Great Tower, 438, Pudian Road. Shanghai, 20				
	P.R.CHINA				
Contact person(E-mail):	-				
Telephone:	+86-21-50812951				
Fax:	+86-21-58818728				
1.4 Emergency telephone Number:					
+353 41 980 6916					
Available outside office hours?	YES NO X				
azards Identification					
2.1 Classification of the substance					
2.1.1 Classification:					
Hazard classes/Hazard categories	Hazard statement				
Skin Sens. 1	H317				
Aquatic Acute 1	H400				
Aquatic Chronic 1	H410				
For full text of H- phrases: see section 2.2.					
Hazards characteristics	R-Phrases				
Xn	R43				
Ν	R50/53				

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2.1.2.1 The most important a	dverse physicochemic	al effects:				
Not applicable.						
2.1.2.2 The most important a	dverse human health e	ffects:				
May cause an allergic skin reaction.						
2.1.2.3 The most important a	dverse environmental e	effects:				
Very toxic to aquatic life with	ong lasting effects.					
2.2 label elements						
Hazard Pictograms:	!					
Signal Word(S): Hazard Statement:Warning H317 May cause an allergic skin reaction. H410 Very toxic to aquatic life with long lasting effects.Precautionary Statement:P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. P273 Avoid release to the environment. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse. P391 Collect spillage. P501 Dispose of contents/container to local regulations.						
2.3 Other hazards						
Not available (PBT, vPvB, S	Substance is an endocrin	e disruptor etc.)				
Composition/information on Substance/Mixture: S Ingredient(s):	ingredients ubstance					
	Registration No.	CAS No.	EC No.	Concentration		
Chemical Name						

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

4.1.2 In case of skin contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

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4.1.3 In case of eyes contact:

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	Remove contact lenses. Hold eyelids apart. Flush immediately with water for at least 15 minutes. Seek medical attention.
4.1	1.4 In case of ingestion:
1	Rinse mouth. Give water to drink. Induce vomiting. Never induce vomiting in unconscious or confused persons. Always seel medical advice. 2 Most important symptoms and effects, both acute and delayed
4.	May cause an allergic skin reaction.
4.3	3 Indication of any immediate medical attention and special treatment needed If skin irritation or rash occurs, get medical advice/attention.
5 Fire	-Fighting measures
5.	1 Extinguishing media:
	Suitable extinguishing media: Carbon dioxide, appropriate foam or dry chemical, water pray, water mist.
	Unsuitable extinguishing media: Water jet.
5.	2 Special hazards arising from the substance or mixture
	Emits toxic fumes under fire conditions: Carbon monoxide (CO), Sulfur oxides (SOx), nitrous gases (NOx).
5.	3 Advice for fire-fighters:
	Firefighters must wear fire resistant protective equipment. Wear self contained breathing apparatus and protective gloves.
6 Acc	idental release measures
6.	1 Personal precautions, protective equipment and emergency procedures:
6.1	1.1 For non-emergency personnel:
	Remove ignition sources. Provide adequate ventilation. Avoid inhalation of vapor or dust. Avoid skin and eye contact. Wea protective gloves/protective clothing/eye protection/face protection.
6.1	1.2 For emergency responders:
	Wear an appropriate NIOSH/MSHA approved respirator if mist, vapor or dust is generated.
6.	2 Environmental Precautions:
	Avoid disposing into drainage/sewer system or directly into the aquatic environment. Keeping away from drains, surface-and ground-water and soil.
6.	3 Methods for Containment and Cleaning up:
	Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal. Clean up affected area.
6.	4 Reference to other sections:
	See Section 7 for information on safe handling. See section 8 for information on personal protection equipment.
	See Section 13 for information on disposal.
6.	5 Additional information:
	Wet clean or vacuum up solids. Don't use a brush or compressed air for cleaning surfaces or clothing. Clear spills immediately.

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7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

Do not breathe dusts/vapor. Handle in well ventilated areas. Eliminate all sources of ignition, and do not generate flames or sparks. Take precautionary measures against static discharges.

7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Requirements for storage rooms and vessels. Keep in original packaging, tightly closed. Advice on storage assembly. Do not store together with foodstuffs. Do not store together with: Acids and Bases. Further information on storage conditions: Keep container tightly closed and dry in a cool, well-ventilated place.

7.3 Specific end use(s):

Not applicable.

8 Exposure control/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: WEL-TWA: 4 mg/m³ (respirable dust)

OES-TWA: 10.0 mg/m³ (inhalable dust) OES-TWA: 4.0 mg/m³(respirable dust).

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values: Not available.

8.2 Exposure controls

8.2.1Appropriate engineering controls:

Avoid dust generation. Ensure good ventilation and local exhaustion of the working area.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection	Wear appreciate goggles to prevent eye exposure.
Hand protection	Wear appreciate gloves to prevent skin exposure.
Body protection	Wear suitable protective clothing to prevent skin exposure.
Respiratory protection	Avoid breathing dust. In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment. This material and its container must be disposed of as hazardous waste. According to local regulations, Federal and official regulations.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Powder or oiled powder or granular		
Colour:	Pain white		
Odour:	Slight inherent odor		
Odour threshold:	Not available		
pH:	Not determined		
Melting point/range (°C):	~105 °c		
Boiling point/range (°C) :	Not determined		
Flash point (°C) :	Approx. 165 °c		
Evaporation rate:	Not determined		

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Flammability (solid, gas);	Not flammable
Ignition temperature (°C) :	Approx. 340 - 380 °C
Upper/lower flammability/explosive limits:	Not determined
Vapour pressure (20°C) :	Negligible at room temperatures
Vapour density:	Not applicable
Relative Density:	Approx. 1.3 g/cm ³ (20 °C)
Bulk density (kg/m ³) :	Not determined
Water solubility (g/l) :	0.00032 kg/m³ (25 °C)
n-Octanol/Water (log Po/w) :	Log pow = 4.38
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity, dynamic (mPa s) :	Not determined
Explosive properties:	Lower:10-20 g/m ³
Oxidising properties: 9.2. Other information:	Not applicable
Fat solubility(solvent- oil to be specified) etc:	Not available
Surface tension:	Not available
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available
10 Stability and reactivity	
10.1 Reactivity:	
-	
The substance is stable under normal storage	and handling conditions.
10.2 Chemical stability:	
Under normal conditions, the product is stap provisions. Hazardous reactions are not knowr	able. No hazardous reaction when handled and stored according t
10.3 Possibility of hazardous reactions:	
Under normal conditions, not hazardous reaction	ons will occur.
10.4 Conditions to avoid:	
Heating > 100 °C: May catch fire.	
10.5 Incompatible materials:	
No specific recommendations.	
10.6 Hazardous decomposition products:	
Thermal decomposition products: carbon mon	ioxide (CO), nitrous gases (NOx), Sulfur oxides (SOx).
1 Toxicological information	
11.1 Toxicokinetics, metabolism and distribution	on
Non-human toxikological data: Not availab	le
Method: Not availabl	le
Dosis: Not availabl	

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Routes of administration:	Not available	
Results:	Not available	
Absorption:	Not available	
Distribution:	Not available	
Metabolism:	Not available	
Excretion:	Not available	
11.2 Information on toxicological e	ffects	
Acute toxicity:		
LD50(Oral, Rat): LD50(Dermal Rabbit): LD50(Inhalation, Rat):	5000 mg/kg >7940 mg/kg Not available	
Skin corrosion/Irritation:	Not applicable.	
Serious eye damage/irritation:	Not applicable.	
Respiratory or skin sensitization:	May cause an allergic skin reaction.	
Germ cell mutagenicity:	Not classified	
Carcinogenicity:	Not classified	
reproductive toxicity:	Not classified	
STOT- single exposure:	Not classified	
STOT-repeated exposure:	Not classified	
Aspiration hazard:	Not classified	

12 Ecological information

	Acute	toxicity	Time	Species	Method	Evaluation	Remarks
	LC50	1.2 mg/l	96h	Fish	OECD 203	N/A	N/A
	EC50	>100 mg/l	48h	Daphnia	OECD 202	N/A	N/A
	LC50	N/A	96h	Algae	OECD 201	N/A	N/A
Persistence and degradability:		Not	readily bio	odegradable.			
Bioaccumulative potential: No		Not	applicable	9.			
Mobility in soil: Not		available.					
Results of PBT&vPvB assessment: Not		available.					
Other adverse effects: Not		applicable	Э.				

13 Disposal considerations

13.1 Waste treatment methods

Avoid discharge into the environment. This material and its container must be disposed of as hazardous waste. According to local regulations, Federal and official regulations.

13.2 Product / Packaging disposal:

If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

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14 Transport information							
	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)				
UN-Number:	UN3077	UN3077	UN3077				
UN Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (TBBS)		Environmentally hazardous substance, solid, n.o.s. (TBBS)	Environmentally hazardous substance, solid, n.o.s. (TBBS)				
Transport hazard Class:	9	9	9				
Packaging group:	III	111	III				
Environmental hazards:	Environmentally hazardous substances	Environmentally hazardous substances	Environmentally hazardous substances				
Special precautions for user:	See section 2.2	See section 2.2	See section 2.2				
Transport in bulk according to Annex II of MARPOL 73/78 andIBC 08IBC 08IBC 08the IBC CodeIBC 08IBC 08IBC 08							
Relevant information regarding authorization: Not applicable. Relevant information regarding restriction: Not applicable. Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals. Not applicable Other National regulations: Not applicable Chemical Safety Assessment has been carried out? YES NO							
16 Other information 16.1 Indication of changes Version 1.1 Amended by EU No 453/2010 16.2 Relevant R- phrases (number and full text): R43 May cause sensitization by skin contact. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.							
16.3 Training instructions:							
Not applicable.							
16.4 Further information:							
This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.							
16.5 Notice to reader: Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees.							
This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.							