



SUPERBRITE BTM 450

ICI Pakistan Ltd.

5 WEST WHARF KARACHI

EMERGENCY TELEPHONE: 111-100-200

SECTION NUMBER AND HEADING

1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND THE COMPANY
2. COMPOSITION/ INFORMATION ON INGREDIENTS
3. HAZARDS IDENTIFICATION
4. FIRST AID MEASURES
5. FIRE FIGHTING MEASURES
6. ACCIDENTAL RELEASE MEASURES
7. STORAGE AND HANDLING
8. EXPOSURE CONTROLS/ PERSONAL PROTECTION
9. PHYSICAL/ CHEMICAL PROPERTIES
10. STABILITY AND REACTIVITY
11. TOXICOLOGICAL INFORMATION
12. ECOLOGICAL INFORMATION
13. DISPOSAL CONSIDERATIONS
14. TRANSPORT INFORMATION
15. REGULATORY INFORMATION
16. OTHER INFORMATION

1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND THE COMPANY

- | | | |
|-----|------------------------|---------------------|
| 1.1 | CHEMICAL PRODUCT | SUPERBRITE BTM 450 |
| 1.2 | APPLICATION | OPTICALBRIGHTENER |
| 1.3 | COMPANY IDENTIFICATION | I.C.I Pakistan Ltd. |
| 1.4 | EMERGENCY TELEPHONE | 111-100-200 |

2. COMPOSITION/ INFORMATION ON INGREDIENTS

- | | | |
|-----|---------------------------------------|---|
| 2.1 | CHEMICAL DESCRIPTION | DIAMINO STILBENE DERIVATIVE, TETRA SULFO TYPE |
| 2.2 | CHEMICAL COMPOSITION | OPTICAL BRIGHTENER POWDER. |
| 2.3 | DOESNOT CONTAINANYHAZARDOUSMATERIALS. | |



2.4	HAZARDOUS INGREDIENTS	C.P.L CLASS	CAS No.	EINECS NO	WT %
	TETRASODIUM 4,4'-BIS [[4-[BIS(2-HYDROXY ETHYL)AMINO]-6-(4- SULPHONATOANILINO) -1,3,5-TRIAZIN-2-YL] AMINO]STILBENE-2,2'-DISULPHONATE]	N.A	16470-24-9	N.A	%50-%90

3. HAZARDS IDENTIFICATION

PRODUCT DOES NOT HAVE ANY IDENTIFIED HAZARDS.

4. FIRST AID MEASURES

4.1	EYE CONTACT	IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR AT LEAST 15 MINUTES, SEEK MEDICAL ATTENTION IF IRRITATION OCCURS.
4.2	SKIN CONTACT	WASH WITH PLENTY OF WATER. REMOVE CONTAMINATED CLOTHING
4.3	INGESTION	WASH MOUTH AND THROAT WITH PLENTY OF WATER. SEEK MEDICAL ATTENTION.
4.4	INHALATION	REMOVE VICTIM TO FRESH AIR. SEEK MEDICAL ATTENTION IF NECESSARY.
4.5	OTHER	TREAT SYMPTOMATICALLY.

5. FIRE EXTINGUISHING MEDIA

5.1	EXTINGUISHING MEDIA	WATER, FOAM, CARBONDIOXIDE, AND DRY CHEMICAL POWDER TYPE EXTINGUISHERS ARE USED. USE PROTECTIVE GAS MASK IN CASE OF FUMING.
5.2	FIRE AND EXPLOSION HAZARDS	PRODUCT IS NOT FLAMMABLE.
5.3	PROTECTIVE MEASURES	NO SPECIAL PROTECTION REQUIRED.



6. ACCIDENTAL RELEASE MEASURES

- | | | |
|-----|----------------------|--|
| 6.1 | PERSONAL PRECAUTIONS | USE PROTECTIVE EQUIPMENT |
| 6.2 | ENVIRONMENTAL | NONE. |
| 6.3 | CLEANING UP | CONTAIN SPILL, SMALL SPILLS MAY BE FLUSHED TO THE SEWER OR ABSORBED ON SUITABLE ABSORBENTS. LARGER SPILLS SHOULD BE COLLECTED AS LIQUID OR ABSORBED. CLEAN-UP MAY BE ACCOMPLISHED BY FLUSHING WITH WATER IF APPROPRIATE OR REMOVE CONTAMINATED SOILS, PLACE IN APPROPRIATE CONTAINERS. |

7. STORAGE AND HANDLING

- | | | |
|-----|------------------------|---|
| 7.1 | STORAGE | STORE IN A COOL AND DRY PLACE IN CLOSED CONTAINERS. DO NOT STORE IN GALVANIZED METAL CONTAINERS. KEEP ABOVE 0°C. PROVIDE VENTILATION. |
| 7.2 | RECOMMENDED SHELF LIFE | MIN. 1 YEAR. |
| 7.3 | HANDLING | HANDLE IN ACCORDANCE WITH GOOD HYGIENE PRACTISES AND USUAL SAFETY MEASURES |

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

- | | | |
|------|-------------------------------|---|
| 8.1 | EXPOSURE LIMITS | NOT ASSESSED |
| 8.2 | ENGINEERING MEASURES | NONE |
| 8.3 | PERSONAL PROTECTIVE EQUIPMENT | |
| | RESPIRATOR PROTECTION | NONE REQUIRED IN NORMAL USE OF PRODUCT |
| | HAND PROTECTION | BUTYL RUBBER, PVC OR NEOPRENE GLOVES |
| | EYE PROTECTION | SAFETY GLASSES OR CHEMICAL SPLASH GOGGLES. |
| | OTHER PROTECTIVE EQUIPMENT | RUBBER APRON |
| | OTHER REQUIREMENTS | LOCAL VENTILATION RECOMMENDED. |
| 8.4. | VENTILATION: | USE LOCAL EXHAUST TO CONTROL TO RECOMMENDED |



9. PHYSICAL/ CHEMICAL PROPERTIES

9.1	APPEARANCE	OFF WHITE TO YELLOW POWDER
9.2	ODOUR	ODORLESS
9.3	PH (1%)	7-9
9.4	VISCOSITY	N.A
9.5	FREEZING POINT	NOT ASSESSED
9.6	FREEZE THAW RECOVERY	NOT ASSESSED
9.7	BOILING POINT	N.A
9.8	MELTING POINT	N.A
9.9	FLASH POINT	N.A
9.10	AUTOFLAMMABILITY	NOTAPPLICABLE
9.11	EXPLOSIVE PROPERTIES	NOTAPPLICABLE
9.12	VAPOUR PRESSURE	NOT ASSESSED
9.13	VAPOUR DENSITY	NOT ASSESSED
9.14	RELATIVE DENSITY	NOT ASSESSED
9.15	SOLUBILITY	DISPERSIBLE IN WATER
9.16	PARTITION COEFFICIENT	NOT ASSESSED

10. STABILITY AND REACTIVITY

10.1	STABILITY	STABLE
10.2	CONDITIONS TO AVOID	AVOIDHIGH PRESSUREWASHING.
10.3	CEHMICALS TOAVOID	STRONG OXIDIZING AGENTS
10.4	RECOMMENDED MATERIALS FOR EQUIPMENT	COMPATIBLE WITH MOST MATERIALS
10.5	HAZARDOUS DECOMPOSITION PRODUCTS	NONE KNOWN
10.6	HAZARDOUS DEGRADATIONPRODUCTS	NONE IF USED NORMALLY. DEGRADATION



PRODUCTS MAY CONTAIN NITROGEN, SULPHUR,
CARBON OXIDES

10.7 HAZARDOUS POLYMERIZATION WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

11.1 SHORT TERM EFFECTS

EYE CONTACT IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR AT
LEAST 15 MINUTES, SEEK
MEDICAL ATTENTION IF IRRITATION OCCURS.

SKIN CONTACT WASH WITH PLENTY OF WATER. REMOVE CONTAMINATED
CLOTHING.

INGESTION WASH MOUTH AND THROAT WITH PLENTY OF WATER. SEEK
MEDICAL ATTENTION

INHALATION REMOVE VICTIM TO FRESH AIR. SEEK MEDICAL ATTENTION IF
NECESSARY

11.2 ACUTE ORAL TOXICITY LD50 (ORAL RAT) > 15000 mg/kg

ACUTE DERMAL TOXICITY LD50 (DERMAL, RAT) > 2000 mg/kg

SKIN IRRITATION NON-IRRITATING

EYE IRRITATION NON-IRRITATING

12. ECOLOGICAL INFORMATION

12.1 LC50 N.A

12.2 BOD N.A

12.3 COD 360 mg/g

12.4 BIODEGRADATION N.A

13. DISPOSAL CONSIDERATIONS

SMALL QUANTITIES MAY BE TREATED IN AEROBIC WASTEWATER TREATMENT SYSTEMS.

LARGER QUANTITIES MAY BE INCINERATED OR LAND FILLED AFTER SOLIDIFICATION IN

PERMITTED SYSTEMS.



14. TRANSPORT INFORMATION

14.1 PACKAGING

14.2	FREIGHT CLASSIFICATIONS	NOT APPLICABLE
	UN NUMBER	NOT APPLICABLE
	ADR NUMBER	NOT APPLICABLE
	IMDG NUMBER	NOT APPLICABLE
	PACKING GROUP	NOT APPLICABLE
	TERM CARD	NOT APPLICABLE

TRANSPORT HAZARD INFORMATION:NOT CONSIDERED HAZARDOUS FOR TRANSPORT.

15. REGULATORY INFORMATION

15.1 CLASSIFICATION

HAZARD SYMBOLS

R-PHRASES

S- PHRASES

S28WASH WITHPLENTYOFWATERAND SOAP
UPON CONTACTWITHSKIN.

15.2 OTHER N.A

16. OTHER INFORMATION

THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATION TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES. IN NO EVENT SHALL ENKIMTEKS BE LIABLE FOR ANY CLAIMS, LOSSES, OR DAMAGES OF ANY THIRD PARTY OR FOR LOST PROFITS OR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, HOWSOEVER ARISING, EVEN IF ENKIMTEK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.