SRI LANKA STANDARD 822:1988

UDC 628.393:677

TOLERANCE LIMITS FOR EFFLUENTS FROM TEXTILE INDUSTRY

SRI LANKA STANDARDS INSTITUTION

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SLS 822:1988

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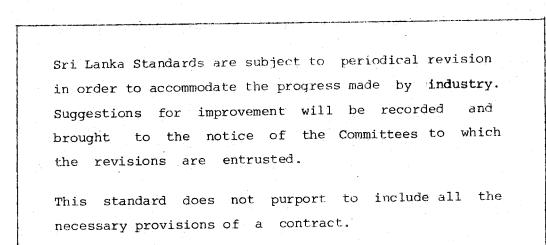
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SRI LANKA STANDARD TOLERANCE LIMITS FOR EFFLUENTS FPOM TEXTILE INDUSTRY

FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 1988-08-25, after the draft, finalized by the Drafting Committee on Industrial Effluents, had been approved by the Chemicals Divisional Committee.

The tolerance limits prescribed in this standard are intended to guide the local authorities in framing rules regarding disposal of effluents from textile factories. In arriving at a decision on the tolerance limits and site selection the authorities shall be in consultation with the Central Environmental Authority (CEA), and shall give due consideration to the local conditions.

The tolerance limit for odour has not been prescribed in this standard. It is recommended that as far as practicable, unpleasant odours shall not be present in effluents. Effluents shall also be free from caroinogenic compounds and foam producing surfactants.

The standard values given in this standard are in SI units.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or an analysis shall be rounded off in accordance with CS 102. The number of significant places retained in the rounded off value shall be the same as that of the specified value in this standard.

In the preparation of this standard the assistance obtained from the publications of the World Health Organization and the American Public Health Association is gratefully acknowledged.

1 SCOPE

This standard prescribes tolerance limits and methods of sampling and test

for effluence from textile factories after treatment before dilution at the point of discharge into inland surface waters.

2 REFERENCES

APHA-AWWA-WPCF	Standard methods for	the examination of	water and waste
	water.		
· · · · · · · · · · · · · · · · · · ·			
UNESCO/WHO	Global environmental	monitoring systems	water operational

CS 102 Presentation of numerical values.

guide.

SLS 652 Tolerance limits for industrial effluents discharged into inland surface waters.

3 REQUIREMENTS

Effluents from textile factories shall comply with the tolerance limits specified in the following table.

4 SAMPLING

Representative samples of the effluent shall be obtained as prescribed in 4 of SLS 652 : 1984.

5 METHODS OF TEST

5.1 Samples obtained as described in 4 shall be tested for the relevant requirements of the standard as prescribed in the following publications:

a) American Public Health Association (APHA), American Water Works Association (AWWA) and water Pollution Control Federation (WPCF).

Standard methods for the examination of water and waste water : 15th ed. New York, APHA.

b) UNESCO/WHO

Global environmental monitoring systems water operational quide, 1978.

5.2 For certain determinants two test methods have been given in the table. The reference method shall be used in case of dispute.

TABLE - Tolerance limits for effluents from textile factories

S1. No.	Determinant	Tolerance limit	Method of test (Reference to publication in Clause 5)	Technique of the method
(1)	(2)	(3)	(4)	(5)
i)	pH value at ambie- nt temperature	6.5 to 8.5	a	Electrometry by means of pH meter with a glass electrode (Reference method)
ii)	Temperature, ^{*0} C,		b	Colorimetry Thermometric
iii)	max. Total suspended	40	b	thermometer
	solids, mg/1,max.	50	a	Glass fibre filtration, 103 °C to 105 °C post washing of residue
iv)	Biochemical oxy- gen demand (BOD), mg/1, max.	60	b	Incubation for 3 days at ambient temperature Incubation for 5 days at 20 ^O C (Reference method)
v)	Chemical oxygen demand (COD)		a	Dichromate reflux
	mg/1, max.	250		
vi)	Oils and grease, mg/1, max.	10.0	a	Gravimetric, liquid extraction with tri- chlorotrifluoro ethane
vii)	Phenolic compounds (as phenolic OH), mg/1, max.	1.0	a	Colorimetry -chloro- form extraction method
viii)	Sulfides, mg/1,max.	2.0	a	Titrimetric-iodine method
ix)	Chromium total, mg/1, max.	2.0	а	Atomic absorption spectrophotometric method
x)	Hoxavalent chro- mium, mg/1, max.	0.5	a	Colorimetry-diphenyl carbaside method
xi)	Copper, total mg/l, max.	3.0	a	Atomic absorption spectrophotometric method
xii)	Zinc total, mg/l, max.	5.0	a	Atomic absorption spectrophotometric method
xiii)	Ammoniacal nitrogen, mg/l, max.	60	a	Nesslerization method
xiv)	Chloride (as u) mg/l, max.	70	a	Titrimetry - silver nitrate method (Reference method) Titrimetry-mercuric nitrate method

* The temperature shall be measured at the site of sampling.

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