Printing date 24.01.2019 Version number 3 Revision: 24.01.2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Product name: 1000 ppm Total Hardness Standard

· Catalog number: IN2100100

- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation: Reagent for water analysis
- · 1.3 Details of the supplier of the safety data sheet
- · Supplier:

Tintometer India Private Limited Door No. 7-2-C-14, 2nd, 3rd & 4th Floor Sanath Nagar Industrial Estate, Hyderabad TG 500018 INDIA

· Informing department: indiaoffice@tintometer.com

· 1.4 Emergency telephone number:

040-23883300, Toll Free Number: 1800 599 3891 (sales)

Languages: Hindi & English

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The product is not classified as hazardous according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · 2.3 Other hazards No further relevant information available.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · Description: aqueous solution
- · Dangerous components: Void
- · Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information Instantly remove any clothing soiled by the product.
- · After inhalation Supply fresh air.
- \cdot After skin contact Instantly wash with water and soap and rinse thoroughly.
- · After eye contact

Rinse opened eye for several minutes under running water (at least 15 min). If symptoms persist, consult doctor.

· After swallowing

Rinse out mouth and then drink 1-2 glasses of water.

In case of persistent symptoms consult doctor.

- · 4.2 Most important symptoms and effects, both acute and delayed: No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · 5.2 Special hazards arising from the substance or mixture

The product is not combustible.

Printing date 24.01.2019 Version number 3 Revision: 24.01.2019

Product name: 1000 ppm Total Hardness Standard

(Contd. of page 1)

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

· Additional information

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Ambient fire may liberate hazardous vapours.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures
- · Advice for non-emergency personnel: No special measures required.
- · Advice for emergency responders: Protective equipment: see section 8
- 6.2 Environmental precautions: Do not allow product to reach sewage system or water bodies.
- · 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, universal binders).

Dispose of contaminated material as waste according to item 13.

· 6.4 Reference to other sections

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling
- · Advice on safe handling: No special precautions necessary if used correctly.
- · Hygiene measures:

The usual precautionary measures should be adhered to general rules for handling chemicals.

Wash hands during breaks and at the end of the work.

Do not eat, drink or smoke when using this product.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and containers: Store in cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Protect from heat and direct sunlight.

Protect from the effects of light.

Protect from humidity and keep away from water.

- · Recommended storage temperature: 20°C +/- 5°C
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the compilation were used as basis.
- · Engineering measures:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See item 7.

- · Personal protective equipment
- · Breathing equipment: Not required.
- · Protection of hands:

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

· Material of gloves

nitrile rubber, NBR

Printing date 24.01.2019 Version number 3 Revision: 24.01.2019

Product name: 1000 ppm Total Hardness Standard

(Contd. of page 2)

Recommended thickness of the material: ≥ 0.11 mm

· Penetration time of glove material

Value for the permeation: Level = 1 (< 10 min)

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Safety glasses

use against the effects of fumes / dust

- · Body protection: Protective work clothing.
- · Limitation and supervision of exposure into the environment: No further relevant information available.

SECTION 9: Physical and chemical properties

	mon properties		
	· 9.1 Information on basic physical and chemical properties		
· Appearance:			
Form / Physical state:	Fluid		
Colour:	Colourless		
· Odour:	Odourless		
· Odour threshold:	Not applicable		
	• • • • • • • • • • • • • • • • • • • •		
· pH-value at 25°C:	6		
· Melting point/Freezing point:	0°C		
· Initial boiling point and boiling range:	: Not applicable		
· Flash point:	Not applicable		
•	•		
· Flammability (solid, gas):	Not applicable.		
· Decomposition temperature:	Not determined.		
· Auto-ignition temperature:	Product is not self-igniting.		
· Explosive properties:	Product is not explosive.		
· Flammability or explosive limits:	•		
Lower:	Not applicable		
Upper:	Not applicable		
• • •	• • •		
· Oxidising properties:	none		
· Vapour pressure:	Not determined.		
· Density at 20°C:	~1 g/cm³		
Relative density:	Not determined.		
· Vapour density:	Not determined.		
· Evaporation rate:	Not determined.		
•			
· Solubility(ies):	All and the second seco		
Water:	Not miscible or difficult to mix		
· Partition coefficient: n-octanol/water:	Not determined.		
· Viscosity:	Not determined.		
· Solvent content:			
Water:	> 99 %		
Solids content:	<1%		
	No further relevant information evailable		
· 9.2 Other information	No further relevant information available.		

SECTION 10: Stability and reactivity

- · 10.1 Reactivity see section 10.3
- 10.2 Chemical stability Stable at ambient temperature (room temperature).
- · 10.3 Possibility of hazardous reactions

Violent reactions possible with:

The generally known reaction partners of water.

- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.

(Contd. on page 4)

Printing date 24.01.2019 Version number 3 Revision: 24.01.2019

Product name: 1000 ppm Total Hardness Standard

· 10.6 Hazardous decomposition products: see section 5

(Contd. of page 3)

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) The following statements refer to the mixture:
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT (specific target organ toxicity) -single exposure Based on available data, the classification criteria are not met.
- · STOT (specific target organ toxicity) -repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability .
- · Other information:

Mixture of inorganic compounds.

Methods for the determination of biodegradability are not applicable to inorganic substances.

- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information		
· 14.1 UN-Number · ADR, IMDG, IATA	Void	
14.2 UN proper shipping name		
· ADR, IMDG, IATA	Void	
· 14.3 Transport hazard class(es)		
· ADR, IMDG, IATA · Class	Void	
· 14.4 Packing group · ADR, IMDG, IATA	Void	
· 14.5 Environmental hazards:	Not applicable.	

(Contd. on page 5)

Printing date 24.01.2019 Version number 3 Revision: 24.01.2019

Product name: 1000 ppm Total Hardness Standard

(Contd. of page 4)

	(Conta. of page 4)
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol a the IBC Code	nd Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Information about limitation of use: Not required.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

STOT: specific target organ toxicity

SE: single exposure RE: repeated exposure

EC50: half maximal effective concentration IC50: half maximal inhibitory concentration

NOEL or NOEC: No Observed Effect Level or Concentration

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of

Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

- · Sources Data arise from safety data sheets, reference works and literature.
- · * Data compared to the previous version altered.

IN -