ITTEHAD CHEMICALS LIMITED

Doc. # NaOCl-TDS-03	Rev. # 00	Effective Date: 01.01.2023

TITLE: TECHNICAL DATA SHEET (TDS) FOR SODIUM HYPOCHLORITE

SECTION ①: PRODUCT INFORMATION

Product Name	CAS #	Chemical Formula	Molar Mass	Boiling Point	Melting Point	Hazard Pictogram
Sodium Hypochlorite	7681-52-9	NaOCl	74.44 g/mol	101°C	18°C	

SECTION ②: SPECIFICATIONS

Appearance	Suspension	Alkalinity as NaOH % w/v	Available Chlorine % w/v	Iron (Fe) ppm
Greenish Yellowish Liquid	NIL	Min. 0.8	Min. 19.5	Max. 5.0

SECTION ③: APPLICATIONS

- It is used as a bleaching agent in the paper and textile industries.
- It is used as an oxidizing and chlorinating agent in the chemical industry.
- It is used for disinfection in water and swimming pool water and also used for waste water treatment.
- It is used as an antimicrobial pesticide.
- It is used for odour control.
- It is used in pharmaceutical, metal and printing industries.

SECTION ④: HAZARD CLASSIFICATION

According to ADR and RID sodium hypochlorite is classified in Class 8 (corrosive substance) on the basis of its main hazardous properties.
Hypochlorite Solution, UN: 1791, Packing Group: III
All further measures to be taken related to transportation can be determined in the knowledge of its hazard classification.

SECTION ⑤: HANDLING AND SAFETY MEASURES

Sodium hypochlorite is considered a strong oxidizer. Products of the oxidation reactions are corrosive.

- Solutions (more than 40% weight) can burn skin and cause eye damage, particularly when used in concentrated forms.
- In case of contact with acids it generates chlorine gas, therefore it should not be stored and transported together with acids.
- Its strong oxidizing nature and alkali content causes swelling and slipperiness of the skin, prolonged exposure leads to changes similar to burns.
- In case of eye contact it instantly causes inflammation of the cornea, ophthalmic and even blindness.
- During handling it is mandatory to wear proper protective clothing, safety goggles and rubber gloves.
- The containers should be kept tightly closed and in a cool ventilated area.

SECTION ⑥: PACKING AND TRANSPORT INFORMATION

Sodium hypochlorite is delivered in rubber-lined steel tankers (Capacity: 10 – 30 MT) and HDPE carboys which are appropriate from the aspect of corrosion protection.