

Safety Data Sheet (SDS)

Turbo Bleach

Section 1: Identification

Product Identifier:	Turbo Bleach
Recommended Use:	Concentrated liquid bleach that cleans and disinfects readily. Biodegradable. Effective against algae, mould and fungi.

This product is made in Singapore in a ISO 22000:2018 compliant facility.

Section 2: Hazards Identification

GHS Classification

Skin Corrosion / Irritation:	Category 2
Acute Toxicity – Oral:	Category 3
Serious Eye Damage / Irritation:	Category 2

GHS Label Elements

Pictograms:



Signal Word: Corrosives

Hazard Statements:

H300:	Fatal if swallowed.
H314:	Causes skin burns and eye damage.
H331:	Toxic if inhaled (Chlorine gas).
H401:	Toxic to aquatic life

Precautionary Statements:

P102:	Keep out of reach of children.
P103:	Read label before use.

P220: Keep away from acids, liberates toxic gas (Chlorine)
P233: Keep container tightly closed.
P261: Avoid breathing vapours
P262: Do not get in eyes, on skin or on clothing.
P271: Use only in well-ventilated area.
P280: Wear protective gloves.
P235 + P410: Keep cool. Protect from sunlight.

Response:

P301 + P330 + P331: If Swallowed: Rinse mouth, Do NOT induce vomiting.
Wash out mouth with water and give 200-300mL of water to drink.
Obtain medical attention
P303 + P361 + P353: If on Skin: Remove/take off immediately all contaminated clothing.
Rinse skin with plenty of water. If symptoms develop, obtain medical attention.
P304 + P340: If Inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if necessary.
P352: (After handling) Wash hands thoroughly with soap and water.
P363: Wash contaminated clothing before reuse.
P305 + P351 + P338: If in eyes: SPEED IS ESSENTIAL! Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention. Remove contact lenses if present and easy to do.

Storage:

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
P410: Protect from sunlight.
P420: Store away from acids.

Disposal:

P501: Dispose of contents / containers in accordance with Singapore regulations.

Section 3: Composition / Information on Ingredients

Component Name	CAS	Composition
Sodium Hypochlorite	7681-52-9	7-8%
Sodium Hydroxide	1310-73-2	<5%

Section 4: First-Aid Measures

General Advice:

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Seek medical advice if you feel unwell. Show this safety data sheet to the doctor in attendance.

Inhalation:

If inhaled, move person into fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if necessary.

Skin Contact:

After handling, wash hands thoroughly with soap and water.
If on skin, remove/take off immediately all contaminated clothing. Rinse skin with plenty of water / shower. Wash contaminated clothing before reuse. If symptoms develop, obtain medical attention.

Eye Contact:

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists, seek medical advice.

Ingestion:

If Swallowed: Rinse mouth, Do NOT induce vomiting. Wash out mouth with water and give 200-300mL of water to drink. Seek medical advice immediately.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific Hazards Arising From the Chemical:

Do not allow run-off from fire fighting to enter drains or water courses.

Special Protective Actions for Fire Fighters:

In event of fire, wear self-contained breathing apparatus.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Measures:

For personal protection, see section 8. Use personal protective equipment (e.g. gloves, boots) and ensure adequate ventilation

Environmental Precautions:

Do not flush into surface or sanitary sewer system. If the product contaminates rivers, reservoirs or drains, inform respective authorities.

Methods and Materials for Containment and Cleaning Up:

Soak up with inert absorbent material (e.g. sawdust). Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Precautions for Safe Handling:

For personal protection, see section 8. Avoid contact with eyes, skin and clothing. Eating, drinking or smoking in work areas is prohibited. After handling, always wash hands thoroughly with soap and water. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed and properly labelled in a dry and well-ventilated place.

Section 8: Exposure Controls/Personal Protection

Control Parameters / Occupational Exposure Limits:

N.A.

Appropriate Engineering Control Measures:

Effective exhaust ventilation system. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protection:**Respiratory Protection:**

In case of vapour formation, use a respirator with an approved filter

Skin Protection:

Wear chemical resistant gloves such as PVC. Also recommended to wear chemical resistant safety boots. Always decontaminate your PPE after every use.

Eye Protection:

Wear safety glasses as a minimum eye protection. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice.

Section 9: Physical and Chemical Properties

Appearance at 25°C: Light Yellow liquid

Odour: Chlorine

Property:

pH:	13 (+/- 0.5)
Freezing point:	N.A.
Initial boiling point / range:	Not available
Flashpoint:	Not available
Evaporation Rate:	Not available
Flammability:	N.A.
Upper/lower flammability:	N.A.
Vapour Pressure:	Non volatile
Vapour Density:	N.A.
Relative Density:	1.157
Solubility in water at 25°C:	Completely soluble
Partition Coefficient:	N.A.
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

Section 10: Stability and Reactivity

Reactivity:

Oxidising agent.

Chemical Stability:

The product is stable if stored in cool room in tightly closed container.

Possibility of Hazardous Reactions:

Contact with acids liberates toxic gas (Chlorine). Reacts with ammonia solutions and amines to form explosive compounds. Can react violently if in contact with methanol. Decomposition with evolution of oxygen is accelerated by light and heat and also by contact with many metals particularly copper, iron and nickel. Thermal decomposition will evolve toxic chlorine gas. Oxidising agent, may assist combustion.

Conditions to Avoid:

Direct light and heat sources.

Incompatible Materials:

Acids, ammonia solutions & amines, methanol, many metals – copper, iron, nickel etc

Hazardous Decomposition Products:

Chlorine

Section 11: Toxicological Information

Inhalation:

Mist and vapour are corrosive to the respiratory tract and may cause bronchial irritation. Gas produced under fire or acidic conditions is toxic by inhalation.

Skin:

Causes burns. Repeated and/or prolonged contact to dilute solutions may cause dermatitis. May cause skin sensitisation in some cases.

Eyes:

Risk of serious damage to eyes. Extremely severe irritant/corrosive causing severe initial pain. May cause permanent damage if eye is not immediately irrigated.

Ingestion:

May cause irritation to mucous membranes.

May cause corrosion or damage to gastrointestinal tract.

Section 12: Ecological Information

Ecotoxicity Effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Product is soluble in water. Toxic to aquatic organisms. Very toxic to fish.

Persistence and Degradability

The product decomposes quickly in soil or water and fully biodegradable.

Bioaccumulative Potential

The ingredients used demonstrate low potential for bioaccumulation

Mobility in Soil

No available information

Other Adverse Effects

N.A.

Section 13: Disposal Considerations

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from the clean-up operations may be hazardous wastes and therefore, subject to specific regulations. Use only licensed transporters and permitted facilities for waste disposal.

Section 14: Transport Information

This product follows IATA regulations.
UN Number: 1791 Class 8, packing group III

Section 15: Regulatory Information

Applicable National Regulations:

Workplace Safety and Health Act and Workplace Safety and Health (General Provisions) Regulations:
This product is subject to the SDS, labelling and other requirements in the Act/Regulations.

Environmental Protection and Management Act: This product is subject to the requirements in the Act/Regulations.

Section 16: Other Information

Usage information

Recommended Dilution

Floor Cleaning:	Normal cleaning, dilute 250ml to 20L of water, Heavy cleaning, dilute 400ml to 20L of water.
Laundry Wash:	General cleaning, dilute 1:10 with water, Heavy cleaning, sponge directly on stain. Rinse well.
Wiping down and mopping:	Dilute 1:70 with water (equivalent to 1000 ppm sodium hypochlorite)
Disinfection:	General disinfection, dilute 1:100 Heavy Duty disinfection, dilute 1:70 (equivalent to 1000 ppm sodium hypochlorite)

Dilution rate and the corresponding concentration of sodium hypochlorite

Dilution ratio	Concentration of sodium hypochlorite (rounded number)
1:4	14000 ppm
1:9	7000 ppm
1:49	1400 ppm
1:70	1000 ppm
1:100	700 ppm

Expiry date: 1 year from the date of production (unopened cap, intact seal, stored in normal temperature away from high heat and direct sunlight).

Date Created and Latest Revision(s)

22 December 2011: Date of issue of SDS.

7 May 2012: Added Usage information for Recommended Dilution.

17 July 2012: Updated with ISO 22000 compliant facility.

13 March 2013: Updated ingredient list.

31 December 2014: Updated Section 14

4 May 2015: Updated Section 3 and Section 9

1 January 2017: Date of review of SDS

2 October 2017: Last review without changes
29 December 2017: Updated Section 16
13 March 2018: Last review without changes
23 November 2018: Updated Section 1
15 March 2019: Date of review of SDS without any changes
13 May 2020: Updated Section 16
11 June 2020: Date of review of SDS without any changes
19 June 2020: Updated Section 3
30 September 2020: Updated Section 14
10 November 2020: Updated Section 1
16 December 2020: Updated Section 16
22 December 2020: Updated Section 1

Product proudly manufactured in Singapore.

~ End of SDS ~