SAFETY DATA SHEET

1. Identification

Product identifier **Huwa-San DW TR25 Shock**

Other means of identification None

Recommended use Drinking water sanitizer/oxidizer

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name SanEcoTec Ltd.

Address 5636 Manotick Main Street
AVIVE House
Ottawa, ON K4M 1B3
Canada

Telephone Phone: 613-491-0525
Fax: 613-491-0524

e-mail info@sanecotec.com

Emergency phone number CANUTEC 613-996-6666

Supplier See above.

2. Hazard identification

Physical hazards	Oxidizing liquids	Category 2
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1

Environmental hazards Not classified.

Label elements

Signal word Danger

Hazard statement May intensify fire; oxidizer. Causes severe skin burns and eye damage.

Precautionary statement

Prevention Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist or vapour. Wash thoroughly after handling.

Response In case of fire: Use appropriate media to extinguish.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Specific treatment (see information on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards None known.

Supplemental information None

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Hydrogen peroxide		7722-84-1	25

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation	IF INHALED: remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER/doctor. Specific treatment (see information on this label). Wash contaminated clothing before reuse.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Take off all contaminated clothing immediately. Contact with combustible material may cause fire. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wear suitable protective clothing. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. Do not inhale vapours. Avoid contact with eyes and skin. Keep out of reach of children. Contact with combustible material and heat may cause fire.

5. Fire-fighting measures

Suitable extinguishing media	Water Fog.
Unsuitable extinguishing media	Carbon dioxide.
Specific hazards arising from the chemical	Greatly increases the burning rate of combustible materials. Containers may explode when heated. During fire, gases hazardous to health may be formed.
Hazardous combustion products	Decomposition releases oxygen which may intensify fire.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	May intensify fire; oxidizer. Contact with combustible material may cause fire. These substances will accelerate burning when involved in a fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep away from clothing and other combustible materials. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.
Methods and materials for containment and cleaning up	Stop leak if you can do so without risk. Use water spray to reduce vapours or divert vapour cloud drift. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Ventilate the contaminated area. Wear appropriate protective equipment and clothing during clean-up. Should not be released into the environment. Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not discharge into lakes, streams, ponds or public waters.

7. Handling and storage

Precautions for safe handling

Keep away from heat. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe mist or vapour. Do not get in eyes, on skin, or on clothing. Provide adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, open flames or other sources of ignition. Store in original tightly closed container. Store in a well-ventilated place. Do not store near combustible materials. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Store in a cool, dry, well-ventilated place away from incompatible materials. Do not store in an unvented container. Never return spilt product to original container. Storage room must have jointless, smooth concrete floors.

8. Exposure controls/Personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1.4 mg/m3
		1 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1.4 mg/m3
		1 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

See above

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear chemical goggles and face shield.

Skin protection

Hand protection

Nitrile rubber. PVC gloves. Neoprene gloves. Do not wear cotton, wool or leather gloves.

Other

As required by employer code.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).
Do not use any form of air-purifying respirator (APR), especially those containing oxidizable sorbents such as activated carbon.

Thermal hazards

Not applicable.

General hygiene considerations	Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using do not eat or drink.

9. Physical and chemical properties

Appearance	Clear
Physical state	Liquid.
Form	Liquid
Colour	Colourless
Odour	Odourless
Odour threshold	Not available.
pH	1.7
Melting point/freezing point	-52 °C (-61.6 °F)
Initial boiling point and boiling range	114 °C (237.2 °F)
Flash point	Non combustible
Evaporation Rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Non combustible
Flammability limit - upper (%)	Non combustible
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (Water)	Complete
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Non combustible
Decomposition temperature	Not available.
Viscosity	1.85 mPa.s
Other information	
Explosive properties	Not explosive.
Oxidizing properties	May intensify fire; oxidiser.
Specific gravity	1.196 g/cm3

10. Stability and reactivity

Reactivity	Keep away from combustible material. Greatly increases the burning rate of combustible materials. This product may react with strong acids. This product may react with strong oxidizing agents. This product may react with reducing agents. Reacts vigorously with alkaline material.
Chemical stability	Stable under recommended storage conditions. May decompose if heated.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Conditions to avoid	Heat. Do not mix with other chemicals.
Incompatible materials	Acids. Reducing agents. Metals. Caustics. Combustible materials.
Hazardous decomposition products	May include and are not limited to: Oxygen.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.

Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. May cause stomach distress, nausea or vomiting.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Please note that LD50/LC50 data listed below is for 100% Hydrogen peroxide.

Components	**Species**	**Test results**
Hydrogen peroxide (CAS 7722-84-1)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours, ECHA
		700 mg/kg
	Rat	3000 - 5480 mg/kg, ECHA
		3000 - 5480 mg/kg
Inhalation		
LC50	Rat	> 170 mg/m3, 4 Hours
Oral		
LD50	Mouse	2000 mg/kg, CCOHS
	Rat	1270 mg/kg, ECHA
		1193 mg/kg, ECHA
		1026 mg/kg, ECHA
		693.7 mg/kg
		75 mg/kg, LOLI

Skin corrosion/irritation	Causes severe skin burns and eye damage.
Exposure minutes	Not available.
Erythema value	Not available.
Oedema value	Not available.
Serious eye damage/eye irritation	Causes serious eye damage.
Corneal opacity value	Not available.
Iris lesion value	Not available.
Conjunctival reddening value	Not available.
Conjunctival oedema value	Not available.
Recover days	Not available.

Respiratory or skin sensitisation

Canada - Alberta OELs: Irritant

Hydrogen peroxide (CAS 7722-84-1)	Irritant

Respiratory sensitisation	Not a respiratory sensitizer.
Skin sensitisation	This product is not expected to cause skin sensitisation.
Germ cell mutagenicity	Non-hazardous by WHMIS criteria.
Carcinogenicity	See below.

ACGIH Carcinogens

Hydrogen peroxide (CAS 7722-84-1)	A3 Confirmed animal carcinogen with unknown relevance to humans.

Canada - Manitoba OELs: carcinogenicity

Hydrogen peroxide (CAS 7722-84-1)	Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Hydrogen peroxide (CAS 7722-84-1)	Volume 36, Supplement 7, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.

Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.
Further information	Not available.

12. Ecological information

Ecotoxicity

Components of this product have been identified as having potential environmental concerns.

Please note that data listed below is for 100% Hydrogen peroxide.

Ecotoxicological data

Components		Species	Test results
Hydrogen peroxide (CAS 7722-84-1)			
Algae	IC50	Algae	2.5 mg/L, 72 Hours
Crustacea	EC50	Daphnia	7.7 mg/L, 48 Hours

Persistence and degradability	NFT 73-260 The product is biodegradable by adsorption of the stabilizer to active silt and by decomposition of the hydrogen peroxide in water and oxygen.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Mobility in general	Not available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations. Review federal, provincial, and local government requirements prior to disposal.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

General

Canada: TDG Proof of Classification: In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue. If applicable, the technical name and the classification of the product will appear below.

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN2014
Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)
Hazard class	5.1
Subsidiary hazard class	8
Packing group	II

TDG

15. Regulatory information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS status Controlled

International regulations

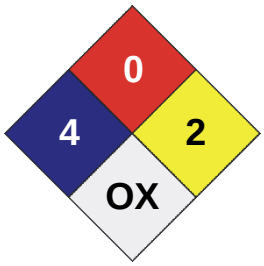
Inventory Status

Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0



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Other information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

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