

SAFETY DATA SHEET



CHEMSYN STAR INFERNO-CHLORINATED

SECTION 01: IDENTIFICATION

Supplier identifier..... CHEMSYN
485 Millway Avenue
Concord, ON L4K 3V4
Canada
TOLL FREE: 1.833.888.2436

Product identifier.....
Product code..... :WW-C-1055-0-04, WW-C-1067-0-20, WW-C-1076-0-00
Emergency telephone number..... 1-833-888-2436, Mon to Fri, 9:00 a.m. to 5:00 p.m.

SECTION 02: HAZARD IDENTIFICATION



Hazard classification..... Skin Corrosion — Category 1. Serious Eye Damage — Category 1.
Signal word..... DANGER.
Hazard statement..... H314 Causes severe skin burns and eye damage.
Precautionary statements
Prevention..... P260 Do not breathe mist, vapours or spray. P264 Wash hands thoroughly after handling.
Response..... P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water or shower. P363 Wash contaminated clothing before reuse.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see First Aid Measures on this Safety Data Sheet).
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage..... P405 Store locked up.
Disposal..... P501 Dispose of contents/container to an approved waste disposal plant.
Other hazards..... None.
Supplemental Information..... < 1% of the mixture consists of an ingredient or ingredients of unknown acute toxicity.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	CAS #	WT. %
Potassium hydroxide	1310-58-3	2-5
Sodium hypochlorite	7681-52-9	2-5
Amines C10-16 alkyldimethyl n-oxides	70592-80-2	2-3
Sodium Hydroxide	1310-73-2	2-5

SECTION 04: FIRST-AID MEASURES

Routes of exposure

Inhalation..... If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention. If breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Ingestion..... Rinse mouth and then drink plenty of water. Do not induce vomiting. . Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Skin contact..... Promptly wash skin thoroughly with soap and water and rinse for 15 minutes. Remove contaminated clothing and laundry before reuse. Get medical aid.

Eye contact..... Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical aid.

Most important symptoms and effects, both acute and delayed . The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

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SECTION 05: FIRE-FIGHTING MEASURES

Extinguishing media.....	Use an extinguishing agent suitable for the surrounding fire.
Hazardous combustion products.....	Carbon oxides. Chlorine, Hydrogen chloride gas. Sodium dioxides. Harmful vapours. The substances/groups of substances mentioned can be released in case of fire.
Special protective equipment and precautions	Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.
Sensitivity to static discharge.....	Product is not sensitive to static discharge.
Sensitivity to mechanical impact.....	Product is not sensitive to mechanical impact.
Further information.....	Not applicable.

SECTION 06: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Wear protective equipment: goggles, chemically resistant clothing and gloves, and appropriate respirator if in a confined area.
Environmental precautions.....	Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.
Methods and materials for containment and cleaning up	Ensure adequate ventilation. Cover spill area with suitable absorbent material (e.g., sand, earth, sawdust, vermiculite, Oil-Dri, Kitty Litter, etc.). Sweep up material being careful not to raise dust. Place in an appropriate disposal container and seal tightly. Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

SECTION 07: HANDLING AND STORAGE

Handling precautions.....	Use good industrial hygiene practices in handling this material. Do not eat, drink or smoke when using this product. . Do not get in eyes, on skin or on clothing. Avoid inhalation of mists/vapours/fumes. Wash thoroughly after handling. Keep container tightly closed. .
Storage needs.....	Keep in a dry, cool and well-ventilated place. Protect from sunlight. Keep containers tightly closed when not in use.
Materials to avoid.....	Keep away from strong acids.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL NIOSH
Potassium hydroxide	ceiling: 2 mg/m3	no data available	no data available	no data available	no data available
Sodium hypochlorite	no data available	no data available	no data available	no data available	no data available
Amines C10-16 alkyldimethyl n-oxides	no data available	no data available	no data available	no data available	no data available
Engineering controls.....	Good general ventilation (typically 10 air changes per hour) should be used.				
Individual protection measures					
Eye/type.....	Safety glasses with side-shields.				
Gloves/ type.....	Wear chemical resistant protective gloves.				
Respiratory/type.....	Generally not required. Wear respiratory protection if ventilation is inadequate.				
Hygiene measures.....	Handle in accordance with good industrial hygiene and safety practice. Wear clean long legged, long sleeved work clothes. Hygiene measures.				

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance.....	liquid.
Color.....	light yellow.
Odour.....	chlorine odour.
Odour threshold	
pH.....	14.
Melting point (°C).....	not applicable.
Freezing point (°C).....	< 0.
Initial boiling point (°C).....	100.
Flash point (°C), Method.....	>100°C, closed cup.
Evaporation rate.....	no data available.
Upper flammability limit (% vol).....	no data available.
Lower flammability limit (% vol).....	no data available.
Vapour pressure (mm Hg).....	17.5.
Vapour density (air=1).....	> 1.
Relative density/Specific Gravity.....	1.1 - 1.2
Water solubility.....	soluble.
Solubility in other solvents.....	no data available.
Partition coefficient — n-octanol/water.....	no data available.
Auto ignition temperature (°C).....	> 200 °C.
Thermal decomposition temperature.....	no data available.

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SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Viscosity..... thin liquid.

SECTION 10: STABILITY AND REACTIVITY

Reactivity..... No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability..... The product is stable if stored and handled as prescribed/indicated. React vigorously with acids. Reacts with amines and ammonia to form explosively unstable compounds. Contact with some reactive metals may produce flammable hydrogen gas. Corrosive to metals.

Possibility of hazardous reactions..... No hazardous reactions when stored and handled according to instructions. The product is chemically stable. Reacts with amines and ammonia to form explosively unstable compounds. May develop chlorine if mixed with acidic solutions. Contact with some reactive metals may produce flammable hydrogen gas.

Conditions to avoid..... Avoid heat and open flame. Exposure to sunlight. Do not mix with other chemicals.

Incompatible materials..... Generates heat when mixed with acid. Avoid contact with the following materials: Urea, ammonia, amides, amines, nitrogen containing compounds, combustible materials, metals, reducing agents.

Hazardous decomposition products..... May include and are not limited to: hydrogen chloride, chlorine gas, sodium dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
Potassium hydroxide	no data available	273 mg/kg (oral-rat); 2000 mg/kg (dermal-rabbit)
Sodium hypochlorite	> 5.25 mg/l (inal-rat, 4h)	8,910 mg/kg (oral-rat); >10,000 mg/kg (dermal-rabbit)
Amines C10-16 alkyldimethyl n-oxides	no data available	>600 mg/kg (oral-rat); >520 mg/kg (dermal-rabbit)
Routes of exposure		
Inhalation		
Ingestion		
Skin contact		
Eye contact		
Acute effects		
Acute oral toxicity.....	Acute toxicity estimate > 2,000 mg/kg. Method: calculation method. Virtually nontoxic after a single ingestion.	
Acute dermal toxicity.....	LD50 (Rabbit) : > 2,000 mg/kg. Method: calculation method. Virtually nontoxic after a single skin contact.	
Acute inhalation toxicity.....	LC50 (4h, Rat) >20 mg/l. Virtually nontoxic by inhalation. Method: calculation method.	
Skin corrosion/irritation.....	Result: Skin corrosion.	
Serious eye damage/eye irritation.....	Result: Corrosive to eyes.	
Respiratory or skin sensitisation.....	Non-sensitizing.	
Specific target organ toxicity (STOT) single exposure	Based on the available information there is no specific target organ toxicity to be expected after a single exposure.	
Aspiration hazard.....	No aspiration hazard expected.	
Chronic toxicity/effects		
Specific target organ toxicity (STOT) repeated exposure	No known significant effects or critical hazards.	
Carcinogenicity.....	No carcinogenic substances as defined by IARC, NTP, OSHA and/or ACGIH.	
Reproductive toxicity.....	No known significant effects or critical hazards.	
Germ Cell Mutagenicity.....	No known significant effects or critical hazards.	
Remarks.....	The product has not been tested. The statement has been derived from the properties of the individual components.	
Symptoms of Exposure.....	The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further important symptoms and effects are so far not known.	

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity..... May cause long-term adverse effects in the aquatic environment.

Persistence and degradability..... The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Bioaccumulative potential..... No data available.

Mobility in soil..... No data available.

Other adverse effects..... Very toxic to aquatic life with long lasting effects.

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SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods

Waste disposal of substance..... Dispose of in accordance with national, state and local regulations.
Container disposal Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

SECTION 14: TRANSPORT INFORMATION

TDG classification..... Corrosive liquid, n.o.s. (potassium hydroxide, sodium hypochlorite). Class 8, UN1760, PGIII.

SECTION 15: REGULATORY INFORMATION

WHMIS regulatory status..... This product has been classified in accordance with the hazard criteria of the Canadian Hazardous Products Regulations and the Safety Data Sheet contains all the information required by the Hazardous Products. This product is WHMIS 2015 controlled.

SECTION 16: OTHER INFORMATION

Disclaimer..... The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

Preparation date..... MAR 10/2025