



SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083755

CLEANER CB 20 S

Date of the previous version: not applicable

Revision Date: 2015-10-20

Version 1

1. IDENTIFICATION

Product identifier

Product name CLEANER CB 20 S

Other means of identification

Product Code(s) 083755

Number 7OT
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses System cleaner.

Uses advised against Do not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheet

Supplier Address TOTAL Specialties USA Inc
1201 Louisiana Street, Suite 1800
Houston, TX 77002
Phone: +1 800 323 3198

Contact Point Technical/ HSEQ

E-mail Address USRMLIN-info@total.com

Emergency telephone number

Company Phone Number

+1 (908) 862-9300

Emergency telephone

CHEMTREC: +1 800 424 9300 (24h)

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation - Category 2
Serious eye damage/eye irritation - Category 2
Skin sensitization - Category 1

Label elements

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**WARNING****Hazard Statements**

Causes skin irritation
 Causes serious eye irritation
 May cause an allergic skin reaction

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Contaminated work clothing should not be allowed out of the workplace
 Avoid breathing dust/fume/gas/mist/vapours/ spray

Precautionary Statements - Response

Specific treatment (see Section 4 on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention

Skin

IF ON SKIN: Wash with plenty of soap and water
 Take off contaminated clothing and wash before reuse
 If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Disposal

Dispose of contents/ container to an approved waste disposal plant

Unknown Acute Toxicity

No information available

Hazards not otherwise classified (HNOC)

None known

Other information

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
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2,2',2''-(Hexahydro-1,3,5-triazin-1,3,5-triyl)triethanol	4719-04-4	5 - 10
tetrasodium ethylenediaminetetraacetate	64-02-8	1 - 5
morpholine	110-91-8	1 - 5
Triethanolamine	102-71-6	1-5
Pine oil	8002-09-3	0.1-1
Alcohols, C6-10, ethoxylated propoxylated	68987-81-5	0.1 - 1

** The exact percentage (concentration) of composition has been withheld as a trade secret*

4. FIRST AID MEASURES**First aid measures for different exposure routes**

General advice	Show this material safety data sheet to the doctor in attendance. If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Remove and wash contaminated clothing before re-use. Wash off immediately with plenty of water. If symptoms persist, call a physician.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.
Ingestion	Do NOT induce vomiting. If symptoms persist, call a physician. Clean mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting - seek medical advice.
Protection of First-aiders	Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Itching. Skin irritation.

Indication of immediate medical attention and special treatment needed, if necessary

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Notes to physician May cause sensitization of susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Cool containers / tanks with water spray. Foam. Carbon dioxide (CO₂). ABC powder.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Special Hazard Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Flash back possible over considerable distance. Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Heat, flames and sparks. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery.

Other information See Section 12 for additional information.

Environmental precautions

General Information Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses.

Methods and materials for containment and cleaning up

Methods for cleaning up Dam up. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use mechanical means such as pumps and absorbent materials.

7. HANDLING AND STORAGE

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Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wear personal protective equipment. Prevent the formation of vapors, mists and aerosols. Use only in area provided with appropriate exhaust ventilation. When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist.

Prevention of fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Design installations (machinery and equipment) to prevent burning product from spreading (tanks, retention systems, interceptors (traps) in drainage systems). **OPERATE ONLY ON COLD AND DEGASSED TANKS IN VENTILATED PREMISES (TO AVOID RISK OF EXPLOSION)**. Do not use compressed air for filling, discharging or handling. Empty containers may contain flammable or explosive vapors.

Hygiene measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. Wash hands with water as a precaution.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep away from direct sunlight. Keep in a banded area. Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep out of reach of children.

Materials to Avoid

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
morpholine 110-91-8	S* TWA 20 ppm	TWA: 20 ppm TWA: 70 mg/m ³ (vacated) TWA: 20 ppm (vacated) TWA: 70 mg/m ³ (vacated) STEL: 30 ppm (vacated) STEL: 105 mg/m ³ (vacated) S*	IDLH: 1400 ppm TWA: 20 ppm TWA: 70 mg/m ³ STEL: 30 ppm STEL: 105 mg/m ³
Triethanolamine 102-71-6	TWA 5 mg/m ³	-	

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Exposure controls

Engineering Measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

Eye/Face Protection

If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots.

Hand Protection

Protective gloves. Impervious gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. Wash hands with water as a precaution.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Color	yellow
Physical State @20°C	liquid
Odor	Mild
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
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pH	11 - 13	
Melting point/range		No information available
Boiling point/boiling range	100 °C 212 °F	
Flash point		No information available
Evaporation rate		No information available
Flammability Limits in Air		No information available
upper	-	
Lower	-	
Vapor Pressure		No information available
Vapor density		No information available
Relative density	> 1	@ 15 °C
Density	> 1000 kg/m ³	@ 15 °C
Water solubility		soluble
Solubility in other solvents		No information available
logPow		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Explosive properties	Not explosive	
Oxidizing Properties	Not applicable	
Possibility of hazardous reactions	Not applicable	
Other information		
Specific Gravity	> 1	@ 15 °C
Freezing Point		No information available
Pour point		No information available

10. STABILITY AND REACTIVITY

<u>Reactivity</u>	No information available.
<u>Chemical stability</u>	Stable under recommended storage conditions.
<u>Possibility of hazardous reactions</u>	None under normal processing.
<u>Conditions to Avoid</u>	Heat, flames and sparks. Take precautionary measures against static discharges. Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Strong oxidizing agents.
<u>Incompatible Materials</u>	Strong oxidizing agents.
<u>Hazardous Decomposition Products</u>	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

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Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Information on likely routes of exposure

Principle Routes of Exposure Inhalation, Ingestion, Eye contact, Skin contact.

Numerical measures of toxicity

ATEmix (oral)	6481.9 mg/kg
ATEmix (dermal)	55555.6 mg/kg
Inhalation	
ATEmix (inhalation-vapor)	555.6 mg/l

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2,2',2''-(Hexahydro-1,3,5-triazin-1,3,5-triyl)triethanol 4719-04-4	LD50 763 mg/l (Rat)	LD50 > 4000 mg/kg (Rat - OECD 402)	LC50(4h) 0.371 mg/l (Rat - Aerosol - OECD403)
tetrasodium ethylenediaminetetraacetate 64-02-8	= 10 g/kg (Rat)		
morpholine 110-91-8	1900 mg/kg bw (rat - OECD 401)	-	35.1 mg/l air 1h (rat - vapour - OECD 403)
Triethanolamine 102-71-6	LD50 > 2000 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	
Pine oil 8002-09-3	LD50 3200 mg/kg (Rat)	LD50 5000 mg/kg (Rabbit)	

Information on toxicological effects

Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Itching. Skin irritation.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Irritating to skin.
Serious eye damage/eye irritation	Irritating to eyes.
Sensitization	May cause an allergic skin reaction.
Carcinogenicity	This product is not classified carcinogenic.

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Mutagenicity

This product is not classified as mutagenic.

Reproductive toxicity

This product does not present any known or suspected reproductive hazards.

Aspiration Hazard

Not classified.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

Acute aquatic toxicity - Product Information

No experimental data available

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
2,2',2''-(Hexahydro-1,3,5-triazin-1,3,5-triyl)triethanol 4719-04-4	EC50(72h) 6.66 mg/l (Desmodesmus subspicatus - static - OECD201)	LC50(96h) 16.07 mg/l (Danio rerio - static - OECD203)	EC50(48h) 11.9 mg/l (Daphnia magna - static - OECD202)	
tetrasodium ethylenediaminetetraacetate 64-02-8	EC50 (72h) = 1.01 mg/L Desmodesmus subspicatus	LC50 (96h) = 59.8 mg/L Pimephales promelas (static)	EC50 (24h) = 610 mg/L Daphnia magna	
morpholine 110-91-8	EC50 (96h) 28 mg/L Pseudokirchneriella subcapitata	LC50 (96h) 180 - 380 mg/l Oncorhynchus mykiss	EC50 (48h) 45 mg/l Daphnia magna (OECD 202)	
Triethanolamine 102-71-6	EC50 (72h) > 100 mg/l (Desmodesmus subspicatus)	LC50 (96h) > 100 mg/l (Lepomis macrochirus)	EC50 (24h) > 100 mg/l (Daphnia magna)	
Pine oil 8002-09-3			EC50 (48h) 17 - 28 mg/L Daphnia magna Flow through	

Chronic aquatic toxicity - Product Information

No experimental data available

Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
2,2',2''-(Hexahydro-1,3,5-triazin-1,3,5-triyl)triethanol 4719-04-4	NOEC(72h) 1.56 mg/l (Desmodesmus subspicatus - static - OECD 201)			
morpholine 110-91-8		NOEC (21d) 5 mg/l daphnia magna (OECD 211)		
Triethanolamine 102-71-6		NOEC(21d) 16 mg/l Daphnia magna semi-static		

Effects on terrestrial organisms

No experimental data available .

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Persistence and degradability**General Information** No information available.**Bioaccumulative potential****Product Information** No information available.**logPow** No information available**Component Information**

Chemical Name	log Pow
morpholine 110-91-8	<3
Triethanolamine 102-71-6	- 1.75

Mobility**Soil** No information available**Other adverse effects****General Information** No information available**13. DISPOSAL CONSIDERATIONS****Waste treatment****Waste Disposal Methods** Dispose of in accordance with local regulations.**Contaminated packaging** Empty containers may contain flammable or explosive vapors. Do not burn, or use a cutting torch on, the empty drum. Empty containers should be taken to an approved waste handling site for recycling or disposal.**14. TRANSPORT INFORMATION****DOT** Not regulated**TDG** Not regulated**MEX** Not regulated

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ICAO/IATA Not regulatedIMDG/IMO Not regulatedADR/RID Not regulatedADN Not regulated**15. REGULATORY INFORMATION**

International Inventories All the substances contained in this product are listed or exempted from listing in the following inventories:
 New Zealand (NZIoC)
 China (IECSC)
 Australia (AICS)
 U.S.A. (TSCA)

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Triethanolamine	102-71-6	1-5		Group I		

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

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U.S. State Regulations**California Proposition 65**

This product contains chemicals known to the State of California to cause cancer or reproductive toxicity

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois
morpholine 110-91-8	X	X	X	
Triethanolamine 102-71-6	X	X	X	

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 1	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2	Flammability 1	Physical Hazard 0	Personal protection X

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

Revision Date: 2015-10-20
 Revision Note: *** Indicates updated section
 Abbreviations, acronyms

Legend

Section 8
 ACGIH - American Conference of Governmental Industrial Hygienists
 OSHA - Occupational Safety and Health Administration
 NIOSH - National Institute for Occupational Safety and Health
 TLV - Threshold Limit Values
 PEL - Permissible Exposure Limits
 IDHL - Immediately Dangerous to Life or Health concentrations
 TWA - Time Weight Average
 STEL - Short Term Exposure Limits
 S* - Skin notation
 TSCA - Toxic Substance Control Act

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

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End of the safety data sheet

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