



Material Safety Data Sheet

Section 1. Chemical product and company identification

Common name	CASTROL CARECLEAN XHP	Code	11001-AM
Supplier	CASTROL INDUSTRIAL NORTH AMERICA INC. 1001 WEST 31ST STREET DOWNERS GROVE, IL 60515-1280 Product Information: 630 241-4000	Validation date	12/08/2003
Synonym	Not available.	Print date	12/08/2003
Trade name	CARECLEAN IS A TRADEMARK OF CASTROL INDUSTRIAL INC.	Responsible name	Product Stewardship
Material uses	Industrial applications	In case of emergency	CHEMTREC (800) 424-9300
Manufacturer	CASTROL INDUSTRIAL NORTH AMERICA INC 1001 WEST 31ST STREET DOWNERS GROVE, IL 60515-1280		

Section 2. Composition, Information on Ingredients

Name	CAS #	% by weight	Exposure limits
POLY[OXYETHYLENE(DIMETHYLIMINIO DICHLORIDE)]	31512-74-0	0.1-1	Not available.
ETHANOL, 2,2',2''-NITRILOTRIS-	102-71-6	20-25	ACGIH (United States). TWA: 5 mg/m ³
BORIC ACID (H3BO3)	10043-35-3	5-10	ACGIH TLV (United States, 2002). TWA: 5 mg/m ³ 8 hour(s). Not available.

Section 3. Hazards identification

Physical state / Appearance	Liquid.
Appearance	Slight Odor Clear. Yellow.
Emergency overview	WARNING ! CAUSES EYE IRRITATION. CAUSES SKIN IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. Avoid contact with eyes, skin and clothing. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Do not ingest. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.
Routes of Entry	Skin Contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects	<i>Eyes</i> Causes eye irritation.

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Skin Causes skin irritation.

Inhalation May cause respiratory tract irritation.

Ingestion Ingestion may cause gastrointestinal irritation and diarrhea. Acute oral toxicity (LD50) Not established.

No additional remark.

Potential chronic health effects **CARCINOGENIC EFFECTS:** No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).

MUTAGENIC EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.

TERATOGENIC EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

Medical conditions aggravated by overexposure: Not available.

Over-exposure signs/symptoms Not available.

See toxicological Information (section 11)

Section 4. First aid measures

Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, seek immediate medical attention.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Notes to Physician Not available.

Section 5. Fire fighting measures

Flammability of the product Non-flammable.

Auto-ignition temperature Not available.

Flash Point Open cup: 178.89°C (354°F).

Flammable limits Not available.

Products of combustion carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...)

Fire hazards in presence of various substances Non-flammable.

Explosion hazards in presence of various substances This material is not explosive as defined by established regulatory criteria.

Fire Fighting Media and Instructions SMALL FIRE: Use DRY chemical powder.
 LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
 Cool closed containers exposed to fire with water.

Protective clothing (fire) Be sure to use an approved/certified respirator or equivalent.

Special remarks on fire hazards No additional remark.

Special remarks on explosion hazards No additional remark.

Section 6. Accidental release measures

Small spill and leak Absorb with an inert material and put the spilled material in an appropriate waste disposal. Dispose of according to all federal, state and local applicable regulations.

Large spill and leak Absorb with an inert material and put the spilled material in an appropriate waste disposal. Do not allow any potentially contaminated water including rain water, runoff from fire fighting or spills to enter any waterway, sewer or drain. Dispose of according to all federal, state and local applicable regulations.

Section 7. Handling and storage

Avoid contact with eyes, skin and clothing. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Do not ingest. Use with adequate ventilation. Wash thoroughly after handling.

Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

Section 8. Exposure Controls and Personal Protection

Engineering controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

Personal protection

Eyes Safety glasses with side shields or chemical goggles.

Body Wear appropriate protective clothing to prevent skin contact.

Respiratory A respirator is not needed under normal and intended conditions of product use. If ventilation is inadequate, use certified respirator that will protect against organic vapor.

Hands Impervious gloves.

Feet Not applicable.

Protective clothing (pictograms)



Personal protection in case of a large spill Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name	Exposure limits
POLY[OXYETHYLENE(DIMETHYLIMINIO)ETHYDICHLORIDE]	Not available.
ETHANOL, 2,2',2''-NITRILOTRIS-	ACGIH (United States). TWA: 5 mg/m ³
BORIC ACID (H3BO3)	ACGIH TLV (United States, 2002). TWA: 5 mg/m ³ 8 hour(s). Not available.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Physical state / Appearance	Liquid.	Odor	Slight Odor
Boiling/condensation point	Not available.	Taste	Not available.
Melting/freezing point	Not available.	Color	Clear. Yellow.
pH (Concentration)	7.8 to 8.6 (Conc. (% w/w): 100) [Basic.]		
pH Dilution % and Value	7.5 to 8.5 at 3%		
Critical temperature	Not available.		
Specific Gravity	1.1 to 1.12 (Water = 1)		
Vapor pressure	Not available.		
Vapor density	Not available.		
Volatility	44.3% (v/v).		
Odor threshold	Not available.		
Evaporation rate	Not available.		
VOC	Not determined.	VOC Method	Not available.
Viscosity	Not available.		
Dispersion properties	See solubility in water, methanol.		
Solubility	Easily soluble in cold water, hot water.		
Physical chemical comments	Not available.		

Section 10. Stability and reactivity

Stability and Reactivity	The product is stable.
Conditions of instability	None known.
Incompatibility with various substances	Strong oxidizing materials
Hazardous Decomposition Products	carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...)

Hazardous polymerization Will not occur.

Section 11. Toxicological information

Toxicity to animals	Acute oral toxicity (LD50): 2200 mg/kg [Guinea pig]. (triethanolamine). Acute dermal toxicity (LD50): >2000 mg/kg [Rabbit]. (boric acid). Acute toxicity of the dust (LC50): >160 mg/m ³ 4 hour(s) [Rat]. (boric acid).
Chronic effects on humans	CARCINOGENIC EFFECTS: No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA). MUTAGENIC EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen. TERATOGENIC EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic. DEVELOPMENTAL TOXICITY: Not available.
Other Toxic Effects on Humans	Very hazardous in case of eye contact (irritant). Hazardous in case of skin contact (irritant), of ingestion, of inhalation (lung irritant).
Special remarks on toxicity to animals	Based on animal studies Contains material (CASRN 102-71-6) which may cause damage to the following organs: kidneys, liver. Alkanolamine: This product contains an alkanolamine. In all metalworking fluids containing amines, there is a potential for forming nitrosamines which are animal carcinogens. Therefore, no nitrites or related nitrosating agents should be added to such compositions.
Special remarks on chronic effects on humans	No additional remark.
Special Remarks on Other Toxic Effects on Humans	No additional remark.

Section 12. Ecological information

Ecotoxicity	Not available.
BOD and COD	Not available.
Biodegradable/OECD	Not available.
Mobility	Not available.
Products of degradation	carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...)
Toxicity of the products of biodegradation	Not available
Special remarks on the products of biodegradation	Not available.

Section 13. Disposal considerations

Waste information	Disposal.: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Keep out of waterways. Dispose of according to all federal, state and local applicable regulations.
RCRA Waste Code(s)	
Waste stream	Not available.
Consult your local or regional authorities.	

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Section 14. Transport information**DOT Classification**

Not regulated.

Marine Pollutant

Not pollutant.

Special Provisions for Transport

None identified.

ADR/RID Classification Not determined.**IMO/IMDG Classification** Not regulated.**ICAO/IATA Classification** Not regulated.**Section 15. Regulatory information****U.S. Federal regulations**

TSCA 8(a) PAIR: triethanolamine
 TSCA precursor chemical list: triethanolamine

SARA 302/304 emergency planning and notification: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: CASTROL CARECLEAN XHP: immediate health hazard.

SARA 313 toxic chemical notification and release reporting: No products were found.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

Clean air act (CAA) 112 regulated flammable substances: No products were found.

State regulations

Pennsylvania RTK: DI-ISOPROPANOLAMINE (generic environmental hazard);
 triethanolamine (generic environmental hazard)

Florida: triethanolamine

Minnesota: triethanolamine

Massachusetts RTK: DI-ISOPROPANOLAMINE; triethanolamine

California prop. 65: No products were found.

Inventory Lists

TSCA 8(b) inventory: In compliance.

CEPA DSL: In compliance.

Australia (NICNAS): In compliance.

Korea (TCCL): Not determined.

Philippines (RA6969): Not determined.

MITI: Not determined.

EINECS: In compliance.

Section 16. Other information

Label Requirements CAUSES EYE IRRITATION.
CAUSES SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

Hazardous Material Information System (U.S.A.)

Health	1
Fire hazard	1
Reactivity	0
Personal protection	B

National Fire Protection Association (U.S.A.)



References Not available.

Other special considerations HMIS rating based upon recommended in-use dilutions. NFPA rating based upon the undiluted product-concentrate.

Validated by Product Stewardship on 12/08/2003.

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CHEMTREC (800) 424-9300

Notice to reader

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