



SAFETY DATA SHEET

in accordance with 1907/2006/EC (REACH, as amended by 453/2010/EC) 29 CFR 1910.1200 and WHMIS 2015

Revision date: 26 April 2018

Initial date of issue: 5 July 2007

SDS No. 141-24a

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

380 Machinery Coolant

1.2. Relevant identified uses of the substance or mixture and uses advised against

For use on metal working operations requiring cooling and lubrication. This is a nonflammable, water-based lubricant (pH 9.35)

1.3. Details of the supplier of the safety data sheet

Company:

A.W. CHESTERTON COMPANY
860 Salem Street
Groveland, MA 01834-1507, USA
Tel.: +1 978-469-6446 Fax: +1 978-469-6785
(Mon. - Fri. 8:30 - 5:00 PM EST)
SDS requests: www.chesterton.com
E-mail (SDS questions): ProductMSDSs@chesterton.com
E-mail: customer.service@chesterton.com

Supplier:

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive,
Unit 105, Burlington, Ontario L7L 4X8 - Tel. 905-335-5055
EU: Chesterton International GmbH, Am Lenzenfleck 23,
D85737 Ismaning, Germany - Tel. +49-89-996-5460

1.4. Emergency telephone number

24 hours per day, 7 days per week
Call Infotrac: 1-800-535-5053
Outside N. America: +1 352-323-3500 (collect)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP]

Eye Irrit. 2, H319
Skin Irrit. 2, H315
Skin Sens. 1, H317
Aquatic Chronic 3, H412

2.1.2. Classification according to Directives 1999/45/EC and 1975/324/EEC

Irritant; Xi; R36-38
R43

2.1.3. Classification according to 29 CFR 1910.1200 / WHMIS 2015

Eye Irrit. 2, H319
Skin Irrit. 2, H315
Skin Sens. 1, H317
STOT RE 2, H373
Aquatic Chronic 3, H412

2.1.4. Classification according to WHMIS 1988

D2B: Toxic materials causing other effects

2.1.5. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.6. Additional information

For full text of H-statements and R-phrases: see SECTIONS 2.2 and 16.

2.2. Label elements**2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]**

Hazard pictograms:



Signal word:

Warning

Hazard statements:

H319 Causes serious eye irritation.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P280 Wear protective gloves and eye/face protection.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337/313 If eye irritation persists: Get medical advice/attention.
 P302/352 IF ON SKIN: Wash with plenty of soap and water.
 P333/313 If skin irritation or rash occurs: Get medical advice/attention.
 P362/364 Take off contaminated clothing and wash it before reuse.

Supplemental information: None

2.2.2. Labelling according to 29 CFR 1910.1200 / WHMIS 2015

Hazard pictograms:



Signal word:

Warning

Hazard statements:

H319 Causes serious eye irritation.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H373 May cause damage to the liver, blood and kidneys through prolonged or repeated exposure if swallowed.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements: Same as section 2.2.1.

Supplemental information: None

2.3. Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

Hazardous Ingredients ¹	% Wt.	CAS No./ EC No.	REACH Reg. No.	Classification (CLP/GHS)	Classification (67/548/EEC)
Diethanolamine	5-9	111-42-2 203-868-0	NA	Acute Tox. 4, H302 STOT RE 2, H373F Skin Irrit. 2, H315 Eye Dam. 1, H318	Xn; R22-48/22 Xi; R38-41
Potassium hydroxide	1-3	1310-58-3 215-181-3	NA	Acute Tox. 4, H302 Skin Corr. 1A, H314 Met. Corr. 1, H290	C; R35 Xn; R22
7a-Ethylidihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	1-2	7747-35-5 231-810-4	NA	Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 3, H412	Xn; R20 Xi; R36-41 R43

2-Pyridinethiol-1-oxide, sodium salt	0.1-0.2	3811-73-2 223-296-5	NA	Acute Tox. 4, H302/H312/H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Acute 1, H400 (M-factor 100) Aquatic Chronic 1, H410 (M-factor 10)	Xn; R20/21/22 Xi; R36/38 N; R50
Other ingredients: Triethanolamine	5-10	102-71-6 203-049-8	NA	Not classified*	Not classified
<p>Indications of danger acc. to 67/548/EEC: Xn: Harmful; Xi: Irritant *Substance with a workplace exposure limit. For full text of H-statements and R-phrases: see SECTION 16.</p> <p>¹ Classified according to: * 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F), California Proposition 65 * 1272/2008/EC, 67/548/EEC, 99/45/EC, REACH * WHMIS 2015 * Safe Work Australia [NOHSC: 1008 (2004)]</p>					

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

Inhalation: Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.

Skin contact: Wash skin with soap and water. Contact physician.

Eye contact: Flush eyes for at least 15 minutes with large amounts of water. Contact physician.

Ingestion: If conscious, do not induce vomiting; drink milk or water. Contact physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Direct contact with supplied product (concentrate) causes eye irritation and may cause skin irritation. Mist or heated product can cause eye and respiratory tract irritation. May cause skin sensitization in susceptible individuals.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: FIRE-FIGHTING MEASURES**5.1. Extinguishing media**

Nonflammable.

5.2. Special hazards arising from the substance or mixture

None

5.3. Advice for firefighters

Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

Flammability Classification: –

HAZCHEM Emergency Action Code: not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Surface may be slippery. Utilize exposure controls and personal protection as specified in Section 8.

6.2. Environmental Precautions

Keep out of sewers, streams and waterways.

6.3. Methods and material for containment and cleaning up

Contain spill to a small area. Pick up with absorbent material (sand, sawdust, clay, etc.) and place in a suitable container for disposal. Clean with an industrial detergent followed by complete rinsing with water.

6.4. Reference to other sections

Refer to section 13 for disposal advice.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Do not contaminate with sodium nitrite or other nitrosating agents, which could cause the formation of cancer-causing nitrosamine. Avoid breathing mist. Utilize exposure controls and personal protection as specified in Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool, dry area. Do not store near food or feed.

7.3. Specific end use(s)

No special precautions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limit values**

Ingredients	OSHA PEL ¹		ACGIH TLV ²		UK WEL ³		AUSTRALIA ES ⁴	
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Diethanolamine	3	–	1	–	–	–	3	13
Potassium hydroxide	–	–	(Ceiling)	2	(STEL)	2	(Ceiling)	2
7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	–	–	–	–	–	–	–	–
2-Pyridinethiol-1-oxide, sodium salt	–	–	–	–	–	–	–	–
Triethanolamine	–	–	–	5	–	–	–	5

¹ United States Occupational Health & Safety Administration permissible exposure limits.

² American Conference of Governmental Industrial Hygienists threshold limit values.

³ EH40 Workplace exposure limits, Health & Safety Executive

⁴ Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003].

8.2. Exposure controls**8.2.1. Engineering measures**

No special requirements. If exposure limits are exceeded, provide adequate ventilation.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed. If exposure limits are exceeded, use approved organic vapor respirator (e.g., EN filter type A/P2).

Protective gloves: Barrier Cream or chemical resistant gloves (e.g., rubber, PVC) as appropriate.

Eye and face protection: Safety glasses

Other: None

8.2.3. Environmental exposure controls

Refer to sections 6 and 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical state	liquid	Odour	mild
Colour	dark blue	Odour threshold	not determined
Initial boiling point	100°C (212°F)	Vapour pressure @ 20°C	not determined
Melting point	-4°C (25°F)	% Aromatics by weight	not determined
% Volatile (by volume)	50%	pH	9.4
Flash point	None	Relative density	1.11 kg/l
Method	PM Closed Cup	Weight per volume	9.3 lbs/gal.
Viscosity	5 cps @ 25°C	Coefficient (water/oil)	> 1
Autoignition temperature	not applicable	Vapour density (air=1)	> 1
Decomposition temperature	no data available	Rate of evaporation (ether=1)	< 1
Upper/lower flammability or explosive limits	None	Solubility in water	complete
Flammability (solid, gas)	not applicable	Oxidising properties	not applicable
Explosive properties	not applicable		

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

Refer to sections 10.3 and 10.5.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

10.4. Conditions to avoid

None

10.5. Incompatible materials

Reducers, acids and strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide, NOx, aldehydes and other toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Primary route of exposure under normal use: Inhalation, skin and eye contact. Personnel with pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

Acute effects: Direct contact with supplied product (concentrate) causes eye irritation. Mist or heated product can cause eye and respiratory tract irritation. ATE-mix oral: 5328 mg/kg. ATE-mix dermal: 41382 mg/kg. ATE-mix inhalation: 43.7 mg/l (mist).

Substance	Test	Result
2-Pyridinethiol-1-oxide, sodium salt	LD50 oral, rat	750 mg/kg
2-Pyridinethiol-1-oxide, sodium salt	LD50 dermal, rabbit	700 mg/kg
2-Pyridinethiol-1-oxide, sodium salt	LC50 inhalation, rat	1.1 mg/l/4 h
Triethanolamine	LD50 oral, rat	> 5000 mg/kg
Triethanolamine	LD50 dermal, rabbit	> 2000 mg/kg
Potassium hydroxide	LD50 oral, rat	365 mg/kg
7a-Ethylidihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	LC50 inhalation, rat	3.1 mg/l/4 h
7a-Ethylidihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	LD50 oral, rat	> 3600 mg/kg
7a-Ethylidihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	LC50 dermal, rabbit	1948 mg/kg
Diethanolamine	LD50 oral, rat	676 mg/kg
Diethanolamine	LC50 dermal, rabbit	8328 mg/kg

Chronic effects: May cause skin sensitization in susceptible individuals. The hazardous ingredients may be absorbed through the skin, although a single, prolonged exposure of this product is not expected to be toxic (LD 50 [rabbits] >2000 mg/kg).

Carcinogenicity: As per 29 CFR 1910.1200 (Hazard Communication), this product contains no carcinogens as listed by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), the Occupational Safety and Health Administration (OSHA) or Regulation (EC) No 1272/2008.

Aspiration hazard: based on available data, the classification criteria are not met.

Other information: None known

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

In soil and water, Triethanolamine and Diethanolamine are expected to biodegrade fairly rapidly following acclimation (half-life on the order of days to weeks). 7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole: OECD 301D (28 Days): 27% Biodegradability.

12.3. Bioaccumulative potential

Triethanolamine and Diethanolamine are not expected to bioaccumulate significantly in aquatic organisms. 7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole: low potential for bioaccumulation.

12.4. Mobility in soil

Liquid. Soluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Triethanolamine is expected to be extremely mobile in soil and have negligible adsorption to suspended solids and sediments in water.

12.5. Results of PBT and vPvB assessment

Not available

12.6. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

The water diluted used product can be primarily treated with an oil separator or settling tank to remove solids or tramp oil. At this point, it is possible that coolant concentration adjustments could be made and the coolant reclaimed for continued use. Check local, state and national/federal regulations and comply with the most stringent requirement. This product is classified as a hazardous waste according to 2008/98/EC.

European List of Wastes code: 12 01 09

SECTION 14: TRANSPORT INFORMATION**14.1. UN number**

ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE

TDG: NOT APPLICABLE

US DOT: NOT APPLICABLE

14.2. UN proper shipping name

ADR/RID/ADN/IMDG/ICAO: NON-HAZARDOUS, NON REGULATED

TDG: NON-HAZARDOUS, NON REGULATED

US DOT: NON-HAZARDOUS, NON REGULATED

14.3. Transport hazard class(es)

ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE

TDG: NOT APPLICABLE

US DOT: NOT APPLICABLE

14.4. Packing group

ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE

TDG: NOT APPLICABLE

US DOT: NOT APPLICABLE

14.5. Environmental hazards

NOT APPLICABLE

14.6. Special precautions for user

NOT APPLICABLE

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

NOT APPLICABLE

14.8. Other information

NOT APPLICABLE

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU regulations**

Authorisations under Title VII: Not applicable

Restrictions under Title VIII: None

Other EU regulations: Directive 94/33/EC on the protection of young people at work.

15.1.2. National regulations

US EPA SARA TITLE III		Hazardous Materials Identification System (HMIS)	
312 Hazards:	313 Chemicals:	4 = Severe Hazard	HEALTH
Immediate	Diethanolamine 111-42-2	3 = Serious Hazard	FLAMMABILITY
Delayed	5-9%	2 = Moderate Hazard	PHYSICAL HAZARD
		1 = Slight Hazard	Personal Protection
		0 = Minimal Hazard	
		* = See Section 8	

Other national regulations: National implementation of the EC Directive referred to in section 15.1.1.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms:

- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE: Acute Toxicity Estimate
- BCF: Bioconcentration Factor
- CLP: Classification Labelling Packaging Regulation (1272/2008/EC)
- ES: Exposure Standard
- GHS: Globally Harmonized System
- ICAO: International Civil Aviation Organization
- IMDG: International Maritime Dangerous Goods
- LC50: Lethal Concentration to 50 % of a test population
- LD50: Lethal Dose to 50% of a test population
- LOEL: Lowest Observed Effect Level
- N/A: Not Applicable
- NA: Not Available
- NOAEL: No Observed Adverse Effect Level
- NOEL: No Observed Effect Level
- OECD: Organization for Economic Co-operation and Development
- PBT: Persistent, Bioaccumulative and Toxic substance
- (Q)SAR: Quantitative Structure-Activity Relationship
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)
- RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
- SDS: Safety Data Sheet
- STEL: Short Term Exposure Limit
- STOT: Specific Target Organ Toxicity
- TDG: Transportation of Dangerous Goods (Canada)
- US DOT: United States Department of Transportation
- vPvB: very Persistent and very Bioaccumulative substance
- WEL: Workplace Exposure Limit
- WHMIS: Workplace Hazardous Materials Information System

Other abbreviations and acronyms can be looked up at www.wikipedia.org.

Key literature references and sources for data:

- Commission de la santé et de la sécurité du travail (CSST)
- Chemical Classification and Information Database (CCID)
- European Chemicals Agency (ECHA) - Information on Chemicals
- Hazardous Substances Information System (HSIS)
- National Institute of Technology and Evaluation (NITE)
- Swedish Chemicals Agency (KEMI)
- U.S. National Library of Medicine Toxicology Data Network (TOXNET)

Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008:

Classification	Classification procedure
Eye Irrit. 2, H319	Calculation method
Skin Irrit. 2, H315	Calculation method
Skin Sens. 1, H317	Bridging principle "Dilution"
Aquatic Chronic 3, H412	Calculation method

Relevant H-statements: H290: May be corrosive to metals.
H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H373F: May cause damage to the liver, blood and kidneys through prolonged or repeated exposure if swallowed.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
H412: Harmful to aquatic life with long lasting effects.

Relevant R-phrases: R20: Harmful by inhalation.
R22: Harmful if swallowed.
R35: Causes severe burns.
R36: Irritating to eyes.
R38: Irritating to skin.
R41: Risk of serious damage to eyes.
R43: May cause sensitisation by skin contact.
R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50: Very toxic to aquatic organisms.

Hazard pictogram names: Exclamation mark

Changes to the SDS in this revision: Section 1.3, 16.

Date of last revision: 26 April 2018

Further information: None

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.