SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200, WHMIS 2015 and Safe Work Australia

Revision date: 27 June 2023 **Date of previous issue:** 21 January 2021 **SDS No.** 141-27

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

Relevant identified uses: For use on metal working operations requiring cooling and lubrication. This is a nonflammable, water-based lubricant (pH 10.3).

Uses advised against: No information available

Reason why uses advised against: Not applicable

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): ProductSDSs@chesterton.com
E-mail: customer.service@chesterton.com

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive, Unit 105, Burlington, Ontario L7L 4X8 – Tel. 905-335-5055

Supplier:

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)
NSW Poisons Information Centre (Australia): 13 11 26

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to 29 CFR 1910.1200 / WHMIS 2015 / Safe Work Australia / GHS

Skin irritation, Category 2, H315
Skin sensitization, Category 1, H317
Eye irritation, Category 2, H319
Specific target organ toxicity – repeated exposure, Category 2, H373 (liver, blood, kidneys, nervous system, oral)
Hazardous to the aquatic environment, Chronic, Category 3, H412

2.1.2. Additional information

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

2.2. Label elements

Labeling according to 29 CFR 1910.1200 / WHMIS 2015 / Safe Work Australia / GHS

Hazard pictograms:

Signal word: Warning

Hazard statements:	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H373	May cause damage to the liver, blood, kidneys and nervous system through prolonged or repeated exposure if swallowed.
	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements:	P260	Do not breathe mist.
	P264	Wash hands and any exposed skin thoroughly after handling.
	P280	Wear protective gloves and eye/face protection.
	P272	Contaminated work clothing must not be allowed out of the workplace.
	P273	Avoid release to the environment.
	P302/352	IF ON SKIN: Wash with plenty of soap and water.
	P333/313	If skin irritation or rash occurs: Get medical advice/attention.
	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.
	P314	Get medical advice/attention if you feel unwell.
	P362/364	Take off contaminated clothing and wash it before reuse.
	P501	Dispose of contents/container to an approved waste disposal plant.
Supplemental information:	None	

2.3. Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous Ingredients[1]	% Wt.	CAS No.	GHS Classification
Polyethylene glycol phenyl ether phosphate	10 - 20	39464-70-5	Eye Irrit. 2A, H319
Diethanolamine	5 - 10	111-42-2	Acute Tox. 4, H302 STOT RE 2, H373 (liver, blood, kidneys, nervous system, oral) Skin Irrit. 2, H315 Eye Dam. 1, H318
7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	1 - 2	7747-35-5	Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
2,2'2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	0.5 - 0.9	4719-04-4	Acute Tox. 4, H302 Acute Tox. 2, H330 Skin Sens. 1, H317 (≥ 0.1%) Eye Irrit. 2, H319 STOT RE 1, H372 (respiratory system, inhalation)
2-Pyridinethiol-1-oxide, sodium salt	0.1 - 0.2	3811-73-2	Acute Tox. 3, H311/331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT RE 1, H372 (nervous system) Aquatic Acute 1, H400 (M-factor 100) Aquatic Chronic 1, H410 (M-factor 10)
Other ingredients:			
Triethanolamine	7 - 13	102-71-6	Not classified*

*Substance with a workplace exposure limit.

[1] Classified according to: 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F), WHMIS 2015, Safe Work Australia, GHS

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.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. Avoid contact with the product while providing aid to the victim. See section 8.2.2 for recommendations on personal protective equipment.

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

Direct contact with supplied product (concentrate) causes eye and 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

Suitable extinguishing media: Nonflammable. Use extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media: None

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, NOx, aldehydes and other toxic fumes.

Other hazards: None

5.3. Advice for firefighters

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

Australian HAZCHEM Emergency Action Code:

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]		AUSTRALIA ES[3]	
	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³
Polyethylene glycol phenyl ether phosphate	N/A	N/A	N/A	N/A	N/A	N/A
Diethanolamine	3	N/A	(skin)	1 *	3	13
7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	N/A	N/A	N/A	N/A	N/A	N/A
2,2'2"-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	N/A	N/A	N/A	N/A	N/A	N/A
2-Pyridinethiol-1-oxide, sodium salt	N/A	N/A	N/A	N/A	N/A	N/A
Triethanolamine	N/A	N/A	N/A	5	N/A	5

* Inhalable fraction and vapor
[1] United States Occupational Health & Safety Administration permissible exposure limits
[2] American Conference of Governmental Industrial Hygienists threshold limit values
[3] Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants

Biological limit values

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

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.

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	**pH**	10.3
Colour	dark blue	**Kinematic viscosity**	5 cps @ 25°C
Odour	mild	**Solubility in water**	complete
Odour threshold	not determined	**Partition coefficient n-octanol/water (log value)**	not applicable
Boiling point or range	100°C (212°F)	**Vapour pressure @ 20°C**	not determined
Melting point/freezing point	-4°C (25°F)	**Density and/or relative density**	1.12 kg/l
% Volatile (by volume)	50%	**Weight per volume**	9.35 lbs/gal.
Flammability	noncombustible	**Vapour density (air=1)**	> 1
Lower/upper flammability or explosion limits	not applicable	**Rate of evaporation (ether=1)**	< 1
Flash point	none	**% Aromatics by weight**	not determined
Method	PM Closed Cup	**Particle characteristics**	not applicable
Autoignition temperature	not applicable	**Explosive properties**	not determined
Decomposition temperature	no data available	**Oxidising properties**	not determined

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 toxicity -

Oral: Based on available data on components, the classification criteria are not met. ATE-mix = 11,715 mg/kg.

Substance	Test	Result
Polyethylene glycol phenyl ether phosphate	LD50, rat	> 2,000 mg/kg, read-across
2-Pyridinethiol-1-oxide, sodium salt	LD50, rat	750 mg/kg
7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	LD50, rat	> 3,600 mg/kg
2,2'2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	LD50, rat(OECD 401)	928 mg/kg
Diethanolamine	LD50, rat	676 mg/kg
Triethanolamine	LD50, rat	> 5,000 mg/kg

Dermal: Based on available data on components, the classification criteria are not met. ATE-mix = 564,286 mg/kg.

Substance	Test	Result
Diethanolamine	LD50, rabbit	8,328 mg/kg
7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	LD50, rabbit	1,948 mg/kg
2,2'2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	LD50, rabbit(OECD 405)	> 4,000 mg/kg
2-Pyridinethiol-1-oxide, sodium salt	LD50, rabbit	790 mg/kg
Triethanolamine	LD50, rabbit	> 2,000 mg/kg

Inhalation: Based on available data on components, the classification criteria are not met. ATE-mix = 32.81 mg/l (mist).

Substance	Test	Result
7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	LC50, rat, 4 h	3.1 mg/l (mist)
2,2'2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	LC50, rat(OECD 404)	0.371 mg/l (analytical, mist)
2-Pyridinethiol-1-oxide, sodium salt	LC50, rat, 4 h	0.5 mg/l

Skin corrosion/irritation: Direct contact with supplied product (concentrate) causes skin irritation.

Serious eye damage/ irritation: Direct contact with supplied product (concentrate) causes eye irritation.

Respiratory or skin sensitisation: May cause skin sensitization in susceptible individuals.

Substance	Test	Result
7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	Skin sensitization (OECD 405)	Sensitizing
2,2'2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	Skin sensitization, guinea pig	Sensitizing

Germ cell mutagenicity: Polyethylene glycol phenyl ether phosphate, Diethanolamine, 7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole, 2,2'2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol, 2-Pyridinethiol-1-oxide, sodium salt, Triethanolamine: based on available data, the classification criteria are not met.

Carcinogenicity: 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 the European Chemicals Agency (ECHA).

Reproductive toxicity: Diethanolamine, 7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole, Triethanolamine: based on available data, the classification criteria are not met. Polyethylene glycol phenyl ether phosphate: developmental NOAEL/maternal NOAEL, oral, rat, female, 410 mg/kg (read-across; mouse, female, 370 mg/kg (read-across 2-Pyridinethiol-1-oxide, sodium salt: not expected to be a reproductive toxicant.

STOT – single exposure: Not expected to cause toxicity.

STOT – repeated exposure: Diethanolamine: May cause damage to the liver, blood, kidneys and nervous system through prolonged or repeated exposure if swallowed.

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. 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.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number

ADG/ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE
TDG: NOT APPLICABLE
US DOT: NOT APPLICABLE

14.2. UN proper shipping name

ADG/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)

ADG/ADR/RID/ADN/IMDG/ICAO:	NOT APPLICABLE
TDG:	NOT APPLICABLE
US DOT:	NOT APPLICABLE

14.4. Packing group

ADG/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. Maritime transport in bulk according to IMO instruments

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. National regulations

US EPA SARA TITLE III

312 Hazards:

Skin irritation
Skin sensitization
Eye irritation
Specific target organ toxicity – repeated exposure

Chemicals subject to reporting requirements of Section 313 of EPCRA and of 40 CFR 372:

Diethanolamine	111-42-2	5-10%

TSCA\: All components are listed or exempted.

Other national regulations: None

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms:

ADG: Australian Dangerous Goods Code
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
cATpE: Converted Acute Toxicity point Estimate
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
NOEC: No Observed Effect Concentration
NOEL: No Observed Effect Level
OECD: Organization for Economic Co-operation and Development
(Q)SAR: Quantitative Structure-Activity Relationship
REL: Recommended Exposure Limit
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
STOT RE: Specific Target Organ Toxicity, Repeated Exposure
STOT SE: Specific Target Organ Toxicity, Single Exposure
TDG: Transportation of Dangerous Goods (Canada)
TWA: Time Weighted Average
US DOT: United States Department of Transportation
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 des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)
Chemical Classification and Information Database (CCID)
European Chemicals Agency (ECHA) - Information on Chemicals
Hazardous Chemical Information System (HCIS)
National Institute of Technology and Evaluation (NITE)
U.S. National Library of Medicine Toxicology Data Network (TOXNET)

Procedure used to derive the classification for mixtures according to GHS:

Classification	Classification procedure
Skin irritation, Category 2, H315	Calculation method
Skin sensitization, Category 1, H317	Calculation method
Eye irritation, Category 2, H319	Calculation method
Specific target organ toxicity – repeated exposure, Category 2, H373	Calculation method
Hazardous to the aquatic environment, Chronic, Category 3, H412	Calculation method

Relevant H-statements:
H302: Harmful if swallowed.
H311: Toxic in contact with skin.
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H330: Fatal if inhaled.
H331: Toxic if inhaled.
H332: Harmful if inhaled.
H372: Causes damage to organs through prolonged or repeated exposure.
H373: May cause damage to organs through prolonged or repeated exposure.
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.

Hazard pictogram names: Health hazard, exclamation mark

Further information: None

Date of last revision: 27 June 2023

Changes to the SDS in this revision: Sections 1.2, 2.1, 3.2, 5.2, 9.1, 11.1, 15.1.1, 16.

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.