



SAFETY DATA SHEET

in accordance with 2015/830/EU (REACH, Annex II) 29 CFR 1910.1200, WHMIS 2015 and Safe Work Australia

Revision date: 26 September 2019

Initial date of issue: 25 June 2008

SDS No. 223B-16

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

1.1. Product identifier

388 Synthetic Tapping Fluid (Bulk)

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

A high-performance, synthetic metal working fluid. Synthetic Tapping fluid provides the industrial performance of conventional petroleum and solvent based fluids while eliminating the hazards normally associated with these traditional products. Effective for all hand and automatic tapping operations and is used for a variety of demanding metal cutting operations over a broad range of metals, including aluminum. Nonflammable.

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

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)
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 Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, 29 CFR 1910.1200, WHMIS 2015 and GHS.

2.1.2. Australian statement of hazardous nature

Not classified as hazardous according to criteria of Safe Work Australia.

2.1.3. Additional information

None

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

Hazard pictograms: None

Signal word: None

Hazard statements: None

Precautionary statements: None

Supplemental information: EUH208 Contains 7a-Ethylidihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole. May produce an allergic reaction.

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.	CLP/GHS Classification
Oxirane, methyl-, polymer with oxirane, monobutyl ether, phosphate	1-5	71662-44-7 Polymer	NA	Aquatic Chronic 3, H412
Oleic acid, ethoxylated	1-5	9004-96-0 500-015-7	NA	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 (non-CLP)
Ethylene oxide-Propylene oxide copolymer monobutyl ether	0.1-<1	9038-95-3 Polymer	NA	Acute Tox. 2, H330 STOT RE 1, H372
7a-Ethylidihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	0.01-0.05	7747-35-5 231-810-4	NA	Flam. Liq. 4, H227 (non-CLP) Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 3, H412

For full text of H-statements: see SECTION 16.

¹ Classified according to: • 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F)
• 1272/2008/EC, GHS, REACH
• WHMIS 2015
• Safe Work Australia

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Remove person to fresh air and keep comfortable for breathing. Contact physician immediately.

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

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

Ingestion: Do not induce vomiting. If conscious, drink milk, egg whites, gelatin. Contact physician immediately.

Protection of first-aiders: No special precautions.

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

Direct eye contact will cause minimal eye irritation. This product has the potential for slight skin irritation, rarely irritating to people.

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

Treat symptoms.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Nonflammable. Use extinguisher appropriate to the surrounding fire.

Unsuitable extinguishing media: Not applicable

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: Section

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

Surfaces can be slippery. Evacuate area. Provide adequate ventilation. Utilize exposure controls and personal protection as specified in Section 8.

6.2. Environmental Precautions

No special requirements.

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**

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

7.2. Conditions for safe storage, including any incompatibilities

Store in a 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
Oxirane, methyl-, polymer with oxirane, monobutyl ether, phosphate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oleic acid, ethoxylated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethylene oxide-Propylene oxide copolymer monobutyl ether	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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 Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants

Biological limit values

Not available

Derived No Effect Level (DNEL) according to Regulation (EC) No 1907/2006:**Workers**

Substance	Route of exposure	Potential health effects	DNEL
7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	Inhalation	Chronic effects, systemic	14.79 mg/m ³

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:

Not available

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

Use only in well-ventilated areas.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed. In case of insufficient ventilation, use an approved amine cartridge respirator (e.g., EN filter type A-P).

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	low viscosity liquid	Odour	mild odor
Colour	amber	Odour threshold	not determined
Initial boiling point	100°C (212°F)	Vapour pressure @ 20°C	not determined
Melting point	0°C (32°F)	% Aromatics by weight	not applicable
% Volatile (by volume)	85%	pH	8.2
Flash point	none	Relative density	1.02 kg/l
Method	PM Closed Cup	Weight per volume	8.5 lbs/gal.
Viscosity	5 cps @ 25°C	Coefficient (water/oil)	> 1
Autoignition temperature	not applicable	Vapour density (air=1)	> 1
Decomposition temperature	not determined	Rate of evaporation (ether=1)	< 1
Upper/lower flammability or explosive limits	not applicable	Solubility in water	complete
Flammability (solid, gas)	not applicable	Oxidising properties	not determined
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

Strong reducers, alkali and strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products

Oxides of Carbon and Nitrogen and other toxic fumes.

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

Primary route of exposure under normal use: Skin and eye contact.

Acute toxicity -

Oral: Based on available data on components, the classification criteria are not met.

Substance	Test	Result
Oxirane, methyl-, polymer with oxirane, monobutyl ether, phosphate	LD50, rat	> 5,000 mg/kg (read-across)
Oleic acid, ethoxylated	LD50, mouse	> 25,000 mg/kg (1949)
Ethylene oxide-Propylene oxide copolymer monobutyl ether	LD50, rat	> 45,000 mg/kg

Dermal: Based on available data on components, the classification criteria are not met.

Substance	Test	Result
Oxirane, methyl-, polymer with oxirane, monobutyl ether, phosphate	LD50, rabbit	> 2,000 mg/kg (read-across)
Ethylene oxide-Propylene oxide copolymer monobutyl ether	LD50, rabbit	> 21,140 mg/kg

Inhalation: Based on available data on components, the classification criteria are not met.

ATE-mix = 10.82 mg/l (mist).

Substance	Test	Result
Ethylene oxide-Propylene oxide copolymer monobutyl ether	LC50 inhalation, rat, 4 h	0.106 - 0.26 mg/l (mist)

Skin corrosion/irritation: This product has the potential for slight skin irritation, rarely irritating to people.

Serious eye damage/irritation: Direct eye contact will cause minimal eye irritation.

Respiratory or skin sensitisation: Ethylene oxide-Propylene oxide copolymer monobutyl ether: a similar material did not cause allergic skin reactions when tested in humans.

Germ cell mutagenicity: 7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole: based on available data, the classification criteria are not met.

Substance	Test	Result
7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole	Skin sensitization (OECD 405)	Sensitizing

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: 7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole: based on available data, the classification criteria are not met.

STOT – single exposure: 7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole: based on available data, the classification criteria are not met.

STOT – repeated exposure: Not expected to cause toxicity.

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

Other information: None

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

Not expected to be harmful to aquatic organisms. Long term adverse effects to aquatic organisms are not expected.

12.2. Persistence and degradability

Oxirane, methyl-, polymer with oxirane, monobutyl ether, phosphate: Dissolved organic carbon (DOC) 22.5% (28 days). Ethylene oxide-Propylene oxide copolymer monobutyl ether, biodegradation: 7% (OECD 301B, 28 days). 7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole: inherently biodegradable.

12.3. Bioaccumulative potential

Ethylene oxide-Propylene oxide copolymer monobutyl ether: not expected to bioaccumulate. 7a-Ethyldihydro-1H, 3H, 5H-oxazolo [3,4-c] oxazole: low potential for bioaccumulation (BCF: 2-3, fish, measured).

12.4. Mobility in soil

Liquid. Soluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

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**

Incinerate absorbed material with a properly licensed facility. Free product may be amenable to wastewater treatment with organic extraction. Removal of organics with activated carbon or biological treatment may be necessary. Check local, state and national/federal regulations and comply with the most stringent requirement. Unused product is not classified as a hazardous waste according to 2008/98/EC.

SECTION 14: TRANSPORT INFORMATION**14.1. UN 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. 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: None

15.1.2. National regulations

US EPA SARA TITLE III

312 Hazards:

None

313 Chemicals:

None

Other national regulations: None

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: 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
 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
 NOEC: No Observed Effect Concentration
 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)
 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
 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 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)
 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 [CLP] / GHS:

Classification	Classification procedure
Not applicable	Not applicable

Relevant H-statements: H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H227: Combustible liquid.
H320: Causes eye irritation.
H330: Fatal if inhaled.
H332: Harmful if inhaled.
H372: Causes damage to organs through prolonged or repeated exposure.
H412: Harmful to aquatic life with long lasting effects.

Hazard pictogram names: Not applicable

Further information: None

Date of last revision: 26 September 2019

Changes to the SDS in this revision: Sections 2.2, 3, 4.1, 8.1, 11, 12.2, 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.