		Page: 1
SAFETY DATA SHEET		Revision Date: 12.12.2017
		Print Date: 14.12.2017
		SDS Number: R0524073
Tectyl® AMBER CORROSION INHIBITOR		Version: 3.0
VE20020		

Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_GB

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Tectyl® AMBER
CORROSION INHIBITOR

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

Recommended use : Corrosion inhibitor.

<p>1.3 Details of the supplier of the safety data sheet Ellis Enterprises B.V., an affiliate of Valvoline Wieldrechtseweg 39 3316 BG Dordrecht Netherlands +31 (0)78 654 3500 (in the Netherlands), or contact your local CSR contact person</p> <p>SDS@valvoline.com</p>	<p>1.4 Emergency telephone number 00-800-825-8654 / 001-859-202-3865, or contact your local emergency telephone number at 112</p> <p>Product Information +31 (0)78 654 3500 (in the Netherlands), or contact your local CSR contact person</p>
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1	H222: Extremely flammable aerosol.
	H229: Pressurised container: May burst if heated.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Chronic aquatic toxicity, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)



SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

Hazard pictograms



Signal word

: Danger

Hazard statements

: H222 Extremely flammable aerosol.
 H229 Pressurised container: May burst if heated.
 H336 May cause drowsiness or dizziness.
 H412 Harmful to aquatic life with long lasting effects.

Supplemental Hazard Statements

: EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements

: P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
Prevention:
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P211 Do not spray on an open flame or other ignition source.
 P251 Do not pierce or burn, even after use.
 P271 Use only outdoors or in a well-ventilated area.
Storage:
 P405 Store locked up.
 P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
Disposal:
 P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclenes, <2% aromatics

2.3 Other hazards**Additional advice**

No information available.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**



SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Propane	74-98-6 200-827-9 01-2119486944-21-xxxx	Flam. Gas1; H220 Press. GasLiquefied gas; H280	>= 25,00 - < 40,00
Hydrocarbons, C9-C11, n-alkanes, iso- alkanes, cyclenes, <2% aromatics	01-2119463258-33-xxxx	Flam. Liq.3; H226 STOT SE3; H336 Asp. Tox.1; H304	>= 20,00 - < 25,00
Sulfonic acids, petroleum, sodium salts	68608-26-4 271-781-5 01-2119527859-22-xxxx	Eye Irrit.2; H319	>= 2,50 - < 3,00
2-(2-Heptadec-8-enyl- 2-imidazolin-1- yl)ethanol	95-38-5 202-414-9 01-2119777867-13-xxxx	Acute Tox.4; H302 Skin Corr.1C; H314 Eye Dam.1; H318 STOT RE2; H373 Aquatic Acute1; H400 Aquatic Chronic1; H410	>= 0,25 - < 0,50

Substances with a workplace exposure limit :

Butane	106-97-8 203-448-7 01-2119474691-32-xxxx	Flam. Gas1; H220 Press. GasLiquefied gas; H280	>= 15,00 - < 25,00
(2-Methoxymethylethoxy)propanol	34590-94-8 252-104-2 01-2119450011-60-xxxx		>= 1,00 - < 2,50

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Call a POISON CENTRE or doctor/physician if exposed or you feel unwell.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Move to fresh air.
If unconscious, place in recovery position and seek medical advice.


SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

Consult a physician after significant exposure.

- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
If eye irritation persists, consult a specialist.
- If swallowed : Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
stomach or intestinal upset (nausea, vomiting, diarrhea)
irritation (nose, throat, airways)
Shortness of breath
confusion
irregular heartbeat
- Risks : Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.
Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.
May cause drowsiness or dizziness.
Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No hazards which require special first aid measures.


SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

SECTION 5: Firefighting measures
5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
 Water spray
 Foam
 Alcohol-resistant foam
 Carbon dioxide (CO₂)
 Dry chemical

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.
 Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
 Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : carbon dioxide and carbon monoxide
 Hydrocarbons
 sulfur compounds
 Aldehydes

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Specific extinguishing methods : Product is compatible with standard fire-fighting agents.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
 Use a water spray to cool fully closed containers.

SECTION 6: Accidental release measures


SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Evacuate personnel to safe areas.
Remove all sources of ignition.
Ensure adequate ventilation.
Avoid breathing dust.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up
6.4 Reference to other sections

For further information see Section 8 and Section 13 of the safety data sheet.

SECTION 7: Handling and storage
7.1 Precautions for safe handling

- Advice on safe handling : Open drum carefully as content may be under pressure.
Provide sufficient air exchange and/or exhaust in work rooms.
Do not breathe vapours/dust.
Do not smoke.
Container hazardous when empty.
Take precautionary measures against static discharges.
Avoid exposure - obtain special instructions before use.
Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.
Container may be opened only under exhaust ventilation hood.
- Advice on protection against fire and explosion : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfaces and sources of ignition. Use only explosion-proof equipment.
- Hygiene measures : Wash hands before breaks and at the end of workday.


SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. No smoking.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection
8.1 Control parameters
Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Butane	106-97-8	STEL	750 ppm 1.810 mg/m ³	GB EH40
		TWA	600 ppm 1.450 mg/m ³	GB EH40
(2-Methoxymethylethoxy)propanol	34590-94-8	TWA	50 ppm 308 mg/m ³	2000/39/EC
		TWA	50 ppm 308 mg/m ³	GB EH40

8.2 Exposure controls
Engineering measures

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Hand protection
Material : nitrile rubber


SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

Break through time : 480 min
 Glove thickness : 0,38 mm

Remarks : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Wear as appropriate:
 Impervious clothing
 Safety shoes
 Flame-resistant clothing
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
 In the case of dust or aerosol formation use respirator with an approved filter.

SECTION 9: Physical and chemical properties
9.1 Information on basic physical and chemical properties

Appearance : aerosol
 Colour : amber
 Odour : characteristic
 Odour Threshold : No data available
 pH :
 No data available
 Melting point/freezing point : No data available
 Boiling point/boiling range : < 34 °C
 Flash point : < -18 °C
 Evaporation rate : No data available
 Flammability (solid, gas) : No data available
 Upper explosion limit : No data available


SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

Lower explosion limit	: No data available
Vapour pressure	: 373 hPa
Relative vapour density	: No data available
Relative density	: No data available
Density	: 0,87 g/cm ³ (20 °C)
Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: 365 °C
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: 23 mm ² /s (20 °C)
Oxidizing properties	: No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity
10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability


Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

		Page: 10
SAFETY DATA SHEET		Revision Date: 12.12.2017
		Print Date: 14.12.2017
		SDS Number: R0524073
Tectyl® AMBER CORROSION INHIBITOR		Version: 3.0
VE20020		

excessive heat
Do not allow evaporation to dryness.
Exposure to air.

10.5 Incompatible materials

Materials to avoid : Acids
Oxidizing agents
salts of strong bases
strong bases

10.6 Hazardous decomposition products

Hazardous decomposition products : Aldehydes
carbon dioxide and carbon monoxide
Hydrocarbons
sulfur compounds
ketones

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Components:

PROPANE:

Acute inhalation toxicity : **LC50 (Rat): 1.237 mg/l**
Exposure time: **2 h**
Test atmosphere: **gas**
Assessment: **Not classified as acutely toxic by inhalation under GHS.**
Remarks: **Information given is based on data obtained from similar substances.**

Components:

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclenes, <2% aromatics:

Acute oral toxicity : **LD50 (Rat, male and female): > 15.000 mg/kg**
Method: **OECD Test Guideline 423**
Remarks: **Information given is based on data obtained from**

SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

similar substances.

Acute inhalation toxicity : **LC50 (Rat): > 4,95 mg/l**
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
Assessment: No adverse effect has been observed in acute inhalation toxicity tests.
Remarks: Information given is based on data obtained from similar substances.

Acute dermal toxicity : **LD50 (Rabbit, male and female): >= 3.160 mg/kg**
Method: OECD Test Guideline 402
Assessment: No adverse effect has been observed in acute dermal toxicity tests.
Remarks: Information given is based on data obtained from similar substances.

Components:**SODIUM PETROLEUM SULFONATE:**

Acute oral toxicity : **LD50 (Rat): > 5.000 mg/kg**
Method: OECD Test Guideline 401
GLP: yes
Remarks: Information given is based on data obtained from similar substances.

Acute inhalation toxicity : **LC50 (Rat): > 1,9 mg/l**
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes
Assessment: The component/mixture is classified as acute inhalation toxicity, category 5.
Remarks: No mortality observed at this dose.
Information given is based on data obtained from similar substances.

Acute dermal toxicity : **LD50 (Rabbit): > 5.000 mg/kg**
Method: OECD Test Guideline 402
GLP: yes
Remarks: No mortality observed at this dose.
Information given is based on data obtained from similar substances.

Components:**OLEYL HYDROXYETHYL IMIDAZOLINE:**

Acute oral toxicity : **LD50 (Rat): ca. 1.265 mg/kg**


SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

Components:
BUTANE NORMAL:

Acute inhalation toxicity : LC50 (Rat): > 50000 ppm
 Exposure time: 2 h
 Test atmosphere: gas

Components:
DIPROPYLENE GLYCOL MONOMETHYL ETHER:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
 Method: OECD Test Guideline 401

Acute inhalation toxicity : LC0 (Rat, female): > 553 ppm
 Exposure time: 8 h
 Test atmosphere: vapour
 Method: OECD Test Guideline 403
 Remarks: No mortality observed at this dose.

Acute dermal toxicity : LD50 (Rat): > 5.000 mg/kg

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Components:
Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclenes, <2% aromatics:

Result: Slight, transient irritation

SODIUM PETROLEUM SULFONATE:

Species: Rabbit

Result: Slight, transient irritation

Remarks: Information given is based on data obtained from similar substances.

OLEYL HYDROXYETHYL IMIDAZOLINE:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Corrosive after 1 to 4 hours of exposure

DIPROPYLENE GLYCOL MONOMETHYL ETHER:

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury.

Components:

SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclenes, <2% aromatics:Result: **No eye irritation****SODIUM PETROLEUM SULFONATE:**Species: **Rabbit**Result: **Irritating to eyes.**Remarks: **Information given is based on data obtained from similar substances.****OLEYL HYDROXYETHYL IMIDAZOLINE:**Result: **Corrosive****DIPROPYLENE GLYCOL MONOMETHYL ETHER:**Species: **Rabbit**Result: **Slight, transient irritation****Respiratory or skin sensitisation**Skin sensitisation: **Not classified based on available information.**Respiratory sensitisation: **Not classified based on available information.****Components:****SODIUM PETROLEUM SULFONATE:**Assessment: **Does not cause skin sensitisation.**Remarks: **Information given is based on data obtained from similar substances.****OLEYL HYDROXYETHYL IMIDAZOLINE:**Species: **Guinea pig**Assessment: **Does not cause skin sensitisation.**Method: **OECD Test Guideline 406****DIPROPYLENE GLYCOL MONOMETHYL ETHER:**Species: **Humans**Assessment: **Does not cause skin sensitisation.****Germ cell mutagenicity**

Not classified based on available information.

Components:**PROPANE:**

Genotoxicity in vitro

: Test Type: **Ames test**Test species: **Salmonella typhimurium**Metabolic activation: **with and without metabolic activation**Result: **negative**Remarks: **Information given is based on data obtained from similar substances.****SODIUM PETROLEUM SULFONATE:**

Genotoxicity in vitro

: Test Type: **Ames test**Test species: **Salmonella typhimurium**


SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

Metabolic activation: **with and without metabolic activation**
 Result: **negative**
 Remarks: **Information given is based on data obtained from similar substances.**

BUTANE NORMAL:

Genotoxicity in vitro : Test Type: Ames test
 Test species: Salmonella typhimurium
 Metabolic activation: with and without metabolic activation
 Result: negative

DIPROPYLENE GLYCOL MONOMETHYL ETHER:

Genotoxicity in vitro : Test Type: Ames test
 Test species: Salmonella typhimurium
 Metabolic activation: with and without metabolic activation
 Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause drowsiness or dizziness.

Components:

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclenes, <2% aromatics:

Assessment: **May cause drowsiness or dizziness.**

STOT - repeated exposure

Not classified based on available information.

Components:

OLEYL HYDROXYETHYL IMIDAZOLINE:

Exposure routes: **Ingestion**

Target Organs: **Gastrointestinal tract, thymus gland**

Assessment: **May cause damage to organs through prolonged or repeated exposure.**


Aspiration toxicity

Not classified based on available information.

Components:

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclenes, <2% aromatics:

May be fatal if swallowed and enters airways.

		Page: 15
SAFETY DATA SHEET		Revision Date: 12.12.2017
		Print Date: 14.12.2017
		SDS Number: R0524073
Tectyl® AMBER CORROSION INHIBITOR		Version: 3.0
VE20020		

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

Components:

DIPROPYLENE GLYCOL MONOMETHYL ETHER:

Remarks: Central nervous system

SECTION 12: Ecological information

12.1 Toxicity

Components:

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclenes, <2% aromatics

Toxicity to fish	: LL50 (Oncorhynchus mykiss (rainbow trout)) : > 1.000 mg/l Exposure time: 96 h Test Type: semi-static test Test substance: WAF Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EL50 (Water flea (Daphnia magna)) : 1.000 mg/l Exposure time: 48 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 202
Toxicity to algae	: EL50 (Pseudokirchneriella subcapitata (green algae)) : > 1.000 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201

Sulfonic acids, petroleum, sodium salts

Toxicity to fish	: LL50 (Pimephales promelas (fathead minnow)) : > 1.000 mg/l Exposure time: 96 h Test Type: Renewal Test substance: WAF Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)) : > 1.000 mg/l Exposure time: 48 h

SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

Test Type: **static test**
 Test substance: **WAF**
 Remarks: **Information given is based on data obtained from similar substances.**

Toxicity to algae : **NOEC (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l**
 End point: **Growth inhibition**
 Exposure time: **72 h**
 Test Type: **static test**
 Test substance: **WAF**
 Remarks: **Information given is based on data obtained from similar substances.**

2-(2-Heptadec-8-enyl-2-imidazolyl-1-yl)ethanol

Toxicity to fish : **LC50 (Danio rerio (zebra fish)): 0,3 mg/l**
 Exposure time: **96 h**
 Test Type: **static test**
 Method: **OECD Test Guideline 203**

Toxicity to daphnia and other aquatic invertebrates : **EC50 (Water flea (Daphnia magna)): 0,163 mg/l**
 Exposure time: **48 h**
 Test Type: **semi-static test**
 Method: **OECD Test Guideline 202**

Toxicity to algae : **EC50 (Desmodesmus subspicatus (green algae)): 0,03 mg/l**
 End point: **Growth inhibition**
 Exposure time: **72 h**
 Test Type: **static test**
 Method: **OECD Test Guideline 201**

M-Factor (Acute aquatic toxicity) : **10**


M-Factor (Chronic aquatic toxicity) : **1**

Butane

Toxicity to fish : **Remarks: No toxicity at the limit of solubility QSAR**

Toxicity to daphnia and other aquatic invertebrates : **EC50 (Daphnia magna (Water flea)): Expected > 10 - < 100 mg/l**
 Exposure time: **48 h**
 Remarks: **QSAR**

Toxicity to algae : **EC50 (green algae): Expected 7,7 mg/l**
 Exposure time: **96 h**
 Remarks: **QSAR**

		Page: 17
SAFETY DATA SHEET		Revision Date: 12.12.2017
		Print Date: 14.12.2017
		SDS Number: R0524073
Tectyl® AMBER CORROSION INHIBITOR		Version: 3.0
VE20020		

(2-Methoxymethylethoxy)propanol

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 10.000 mg/l
 Exposure time: 96 h
 Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 1.919 mg/l
 Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 969 mg/l
 End point: Growth inhibition
 Exposure time: 72 h

12.2 Persistence and degradability

Components:

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclenes, <2% aromatics

Biodegradability : Result: **Readily biodegradable.**
 Biodegradation: **80 %**
 Exposure time: **28 d**
 Method: **OECD Test Guideline 301F**

Sulfonic acids, petroleum, sodium salts

Biodegradability : Result: **Not readily biodegradable.**
 Biodegradation: **8 %**
 Exposure time: **28 d**
 Method: **OECD Test Guideline 301D**
 Remarks: **Information given is based on data obtained from similar substances.**

2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol

Biodegradability : Result: **Not readily biodegradable.**
 Biodegradation: **1 %**
 Exposure time: **28 d**
 Method: **OECD Test Guideline 301B**

Butane

Biodegradability : Result: **Readily biodegradable.**
 Remarks: **Information given is based on data obtained from similar substances.**

(2-Methoxymethylethoxy)propanol

Biodegradability : Result: **Readily biodegradable.**
 Biodegradation: **75 %**
 Exposure time: **28 d**
 Method: **OECD Test Guideline 301F**

Chemical Oxygen Demand : 2,02 mg/g



SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

(COD)

ThOD : 2,06 mg/g

12.3 Bioaccumulative potential

Components:

Propane

Partition coefficient: n-octanol/water : log Pow: 2,36

Sulfonic acids, petroleum, sodium salts

Partition coefficient: n-octanol/water : log Pow: Calculated > 10

2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol

Partition coefficient: n-octanol/water : log Pow: 8

Butane

Partition coefficient: n-octanol/water : log Pow: 2,89

(2-Methoxymethylethoxy)propanol

Partition coefficient: n-octanol/water : log Pow: 0,004

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects


Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life., Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

		Page: 19
SAFETY DATA SHEET		Revision Date: 12.12.2017
		Print Date: 14.12.2017
		SDS Number: R0524073
Tectyl® AMBER CORROSION INHIBITOR		Version: 3.0
VE20020		

Contaminated packaging : Empty remaining contents.
 Empty containers should be taken to an approved waste handling site for recycling or disposal.
 Do not re-use empty containers.
 Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number

ADR: Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: UN1950
INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: UN1950
INTERNATIONAL MARITIME DANGEROUS GOODS: UN1950
RID: Not dangerous goods

14.2 UN proper shipping name

ADR: Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Aerosols, flammable
INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Aerosols, flammable
INTERNATIONAL MARITIME DANGEROUS GOODS: AEROSOLS
RID: Not dangerous goods

14.3 Transport hazard class(es)


ADR: Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: 2.1
INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: 2.1
INTERNATIONAL MARITIME DANGEROUS GOODS: 2.1
RID: Not dangerous goods

14.4 Packing group

ADR: Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO:
INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER:
INTERNATIONAL MARITIME DANGEROUS GOODS:
RID: Not dangerous goods

14.5 Environmental hazards

ADR: Environmentally hazardous
INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Environmentally hazardous
INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Environmentally hazardous

		Page: 20
SAFETY DATA SHEET		Revision Date: 12.12.2017
		Print Date: 14.12.2017
		SDS Number: R0524073
Tectyl® AMBER CORROSION INHIBITOR		Version: 3.0
VE20020		

INTERNATIONAL MARITIME DANGEROUS GOODS: Environmentally hazardous, MARINE POLLUTANT
RID: Environmentally hazardous

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Ship Type: Not applicable
Hazard code(s): Not applicable
Pollutant Category: Not applicable

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable


REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Butane

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
P3a	FLAMMABLE AEROSOLS	150 t	500 t
18	Liquefied extremely flammable gases (including	50 t	200 t

		Page: 21
SAFETY DATA SHEET		Revision Date: 12.12.2017
		Print Date: 14.12.2017
		SDS Number: R0524073
Tectyl® AMBER CORROSION INHIBITOR		Version: 3.0
VE20020		

LPG) and natural gas

Other regulations : Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work.

The components of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

AICS On the inventory, or in compliance with the inventory

ENCS Not in compliance with the inventory

KECI On the inventory, or in compliance with the inventory

PICCS On the inventory, or in compliance with the inventory

IECSC On the inventory, or in compliance with the inventory

TSCA On TSCA Inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Further information

Revision Date: 12.12.2017

Full text of H-Statements

H220 Extremely flammable gas.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.


SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Version: 3.0

Tectyl® AMBER CORROSION INHIBITOR

VE20020

H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Valvoline's Environmental Health and Safety Department (+31 (0)78 654 3500).

Sources of key data used to compile the Safety Data Sheet
 Valvoline internal data including own and sponsored test reports
 The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists
 BEI : Biological Exposure Index
 CAS : Chemical Abstracts Service (Division of the American Chemical Society).
 CMR : Carcinogenic, Mutagenic or Toxic for Reproduction
 FG : Food grade
 GHS : Globally Harmonized System of Classification and Labeling of Chemicals.
 H-statement : Hazard Statement
 IATA : International Air Transport Association.
 IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 ICAO : International Civil Aviation Organization
 ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"
 IMDG : International Maritime Code for Dangerous Goods
 ISO : International Organization for Standardization
 logPow : octanol-water partition coefficient
 LCxx : Lethal Concentration, for xx percent of test population
 LDxx : Lethal Dose, for xx percent of test population.
 ICxx : Inhibitory Concentration for xx of a substance
 Ecxx : Effective Concentration of xx
 N.O.S.: Not Otherwise Specified
 OECD : Organization for Economic Co-operation and Development
 OEL : Occupational Exposure Limit
 P-Statement : Precautionary Statement


SAFETY DATA SHEET

Revision Date: 12.12.2017

Print Date: 14.12.2017

SDS Number: R0524073

Tectyl® AMBER CORROSION INHIBITOR

Version: 3.0

VE20020

PBT : Persistent , Bioaccumulative and Toxic
 PPE : Personal Protective Equipment
 STEL : Short-term exposure limit
 STOT : Specific Target Organ Toxicity
 TLV : Threshold Limit Value
 TWA : Time-weighted average
 vPvB : Very Persistent and Very Bioaccumulative
 WEL : Workplace Exposure Level

ABM : Water Hazard Class for the Netherlands
 ADR : Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADNR: Regulation for the Carriage of Dangerous Substances on the Rhine
 CLP : Classification, Labelling and Packaging
 CSA : Chemical Safety Assessment
 CSR : Chemical Safety Report
 DNEL : Derived No Effect Level.
 EINECS : European Inventory of Existing Commercial Chemical Substances.
 ELINCS : European List of Notified Chemical Substances
 PEC : Predicted Effect Concentration
 PEL : Permissible Exposure Limits
 PNEC : Predicted No Effect Concentration
 R-phrase : Risk phrase
 REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
 RID : Regulation Concerning the International Transport of Dangerous Goods by Rail
 S-phrase: Safety phrase
 WGK : German Water Hazard Class