SAFETY DATA SHEET SDS No. PRO T.2.1

Date prepared: JUNE 2018 Date revised: FEBRUARY 2019

SDS No. PRO T.2.1

# Section 1 – Product Identification

# IDENTITY: Product Name: PRO-TEKT TRAFFICOAT, Component A

AQUAFIN, INC. 505 BLUE BALL RD. #160 ELKTON, MD 21921

Recommended use of the chemical and restriction on use:

Emergency Phone No.(800) 394-1410Information Phone No.(410) 392-2300info@aquafin.netwww.aquafin.net

Refer to the product technical data sheet. For industrial and professional users.

# Section 2 – Hazards Identification

#### **GHS Classification:**

GHS classification in accordance with 29CFR 1910.1200. Reproductive toxicity - Category 1B Specific target organ toxicity - repeated exposure - Category 2 - Oral

# **GHS Label element:**

**Hazard Pictograms** 



Signal Word: DANGER!

Hazard Statements:

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

Precautionary Statements:

#### **Prevention:**

P201 Obtain special instructions before use.

- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

#### Response:

P308+313 IF exposed or concerned: Get medical advice/ attention.

#### Storage:

P405 Store locked up.

#### Disposal:

P501: Dispose of contents/container to an approved waste disposal site.

**Other hazards:** No data available.

# Section 3 – Composition / Information on Ingredients

Chemical nature: mixture.

Hazardous Components	CAS No.	Weight %	
Ester	Trade secret	>= 60.0 - <= 100.0 %	
Polyether polyols	Trade secret	>= 10.0 - <= 30.0 %	
Diethyltoluenediamine (DETDA)	68479-98-1	>= 1.0 - <= 5.0 %	
N-Methyl-2-pyrrolidone	872-50-4	>= 0.1 - <= 1.0 %	
Carbon black	1333-86-4	>= 0.1 - <= 1.0 %	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence not require reporting in this section.

Section 4 – First Aid Measures		
General Advice:	First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.	
After Inhalation:	Move person to fresh air. If effects occur, consult a physician.	
After Skin Contact:	Wash off with plenty of water.	
After Eye Contact:	Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.	
After Ingestion:	If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.	

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

# Section 5 – Fire Fighting Measures

**Suitable Extinguishing Media:** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

**Unsuitable extinguishing media:** Do not use direct water stream. May spread fire.



#### Special hazards arising from the substance or mixture:

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

#### Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area, if this is possible, without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire-fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

# Section 6 – Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Absorb with materials such as: Dirt. Sand. Sawdust. Collect in suitable and properly labeled containers. Wash the spill site with water. See Section 13, Disposal Considerations, for additional information.

# Section 7 – Handling and Storage

**Precautions for safe handling:** Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Keep container closed. This material is hygroscopic in nature. This material is not intended to be sprayed or to be heated. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Spills of these organic materials on hot fibrous insulations may lead to lowering of the auto-ignition temperatures, possibly resulting in spontaneous combustion.

**Conditions for safe storage:** Protect from atmospheric moisture. Store in a dry place. Avoid prolonged exposure to heat and air. Store in the following material(s): Carbon steel. Stainless steel. Polypropylene. Polyethylene-lined container. Teflon. Glass-lined container. Aluminum. Plasite 3066 lined container. Plasite 3070 lined container. 316 stainless steel. See Section 10 for more specific information.

# Section 8 – Exposure Controls / Personal Protection

#### **Control parameters**

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value/Notation
Diethyltoluenediamine (DETDA)	Dow IHG	TWA	0.02 ppm
N-Methyl-2-pyrrolidone	Dow IHG	TWA	SKIN
	US WEEL	TWA	10 ppm
	US WEEL	TWA	SKIN
Carbon black	ACGIH	TWA inhalable fraction	3 mg/ m <sup>3</sup>
	OSHA Z-1	TWA	3.5 mg/ m <sup>3</sup>

#### **Biological occupational exposure limits**

Components	CAS No.	Control Parameters	Biological specimen	Sampling time	Permissible concentration	Basis
N-Methyl-2-pyrrolidone	872-50-4	5-Hydroxy-N- methyl-2- pyrrolidone	Urine	End of shift (As soon as possible after exposure ceases)	100 mg/l	ACIGH BEI

#### Exposure controls:

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

#### Individual protection measures:

Eye/face protection: Use chemical goggles.

#### Skin protection

**Hand protection:** Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized. **Other protection:** No precautions other than clean body-covering clothing should be needed.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

# Section 9 – Physical and Chemical Properties

# Appearance:LiquidPhysical StateLiquidColorGrayOdor:SweetOdor Threshhold:No test data available.pH:No data available.Melting point/range:No data available.

Freezing point:	No data available.	
Boiling point (760 mmHg):	No data available.	
Flash point:	Closed cup 93.3°C (199.9°F)	
	<b>Open cup</b> 93.3°C (199.9°F)	
Evaporation Rate (Butyl Acetate =1):	Not available.	
Flammability (solid, gas):	Not applicable.	
Lower explosion limit:	Liquid	
Upper explosion limit:	Liquid	
Vapor Pressure:	No data available.	
Relative Vapor Density (air = 1):	No data available.	
Relative Density (water = 1):	No data available.	
Water Solubility:	No data available.	
Partition coefficient:	This product is a mixture. See Section 12 for individual component	
n-octanol/water	data.	
Auto-ignition temperature	No data available.	
Decomposition temperature	No data available.	
Kinematic Viscosity	No information available.	
Explosive properties	No data available.	
Oxidizing properties	No data available.	
Molecular weight	Not reported.	

NOTE: The physical data presented above are typical values and should not be construed as a specification.

# Section 10 – Stability and Reactivity

Reactivity: No data available.

Chemical stability: Stable under recommended storage conditions. See Storage, Section 7.

Possibility of hazardous reactions: Will not occur by itself.

**Conditions to avoid:** Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

**Incompatible materials:** Avoid contact with oxidizing materials. Avoid contact with: Strong acids. Strong bases. Avoid contact with metal such as: Brass. Zinc. Copper. Avoid unintended contact with isocyanates. The reaction of polyols and isocyanates generates heat.

**Hazardous decomposition products:** Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon dioxide. Alcohols. Ethers. Hydrocarbons. Ketones. Polymer fragments.

# Section 11 – Toxicological Information

Toxicological information appears in this section when such data is available.

#### Acute toxicity

#### Acute oral toxicity:

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause abdominal discomfort or diarrhea. May cause nausea and vomiting. The stimulant effects of this material are reportedly strong enough to induce uterine contractions in pregnant women.

As product: Single dose oral LD50 has not been determined.



Based on information for component(s): LD50, Rat, > 5,000 mg/kg Estimated.

#### Acute dermal toxicity:

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

Based on information for component(s): LD50, Rabbit, > 2,000 mg/kg Estimated.

#### Acute inhalation toxicity:

At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous.

As product: The LC50 has not been determined.

#### Skin corrosion/irritation

Prolonged contact is not likely to cause significant skin irritation.

#### Serious eye damage/eye irritation

May cause eye irritation. May cause corneal injury.

#### Sensitization

Based on information for component(s): For skin sensitization: No relevant data found.

For respiratory sensitization: No relevant data found.

#### Specific Target Organ Systemic Toxicity (Single Exposure)

Available data is inadequate to determine single exposure specific target organ toxicity.

#### Specific Target Organ Systemic Toxicity (Repeated Exposure)

In rats, repeated dietary ingestion of diethyltoluenediamine (DETDA) has caused pancreatic, eye, liver and thyroid effects.

#### Carcinogenicity

Diethyltoluenediamine (DETDA) has caused cancer in long-term animal studies. Increased numbers of tumors in the liver, thyroid and possibly the mammary glands were observed in rats given DETDA in their diet at exaggerated doses for 2 years.

#### Teratogenicity

N-methyl pyrrolidone has caused toxic effects to the fetus in laboratory animals at high dose levels with either mild or undetectable maternal toxicity.

#### **Reproductive toxicity**

Based on information for component(s): In animal studies, did not interfere with reproduction.

#### **Mutagenicity**

Based on information for component(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

#### **Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

#### COMPONENTS INFLUENCING TOXICOLOGY:

#### <u>Ester</u>

#### Acute inhalation toxicity

At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous.

The LC50 has not been determined.

#### **Diethyltoluenediamine (DETDA)**

#### Acute inhalation toxicity

The LC50 value is greater than the Maximum Attainable Concentration.

#### N-Methyl-2-pyrrolidone

#### Acute inhalation toxicity

LC50, Rat, male and female, 4 Hour, dust/mist, > 5.1 mg/l OECD Test Guideline 403, No deaths occurred at this concentration.

#### Carbon black

#### Acute inhalation toxicity

LC50, Rat, 1 Hour, dust/mist, 27 mg/l No deaths occurred at this concentration.

#### Polyether polyol 1

#### Acute inhalation toxicity

Typical for this family of materials. No deaths occurred following exposure to a saturated atmosphere.

#### Polyether polyol 2

Acute inhalation toxicity The LC50 has not been determined.

#### <u>Unknowns</u>

Acute inhalation toxicity The LC50 has not been determined.

#### Titanium dioxide

#### Acute inhalation toxicity

LC50, Rat, male, 4 Hour, dust/mist, > 6.82 mg/l No deaths occurred at this concentration.

Carcinogenicity Component	List	Classification
Carbon Black	IARC ACGIH	Group 2B: Possibly carcinogenic to humans A3: Confirmed animal carcinogen with unknown relevance to humans.

# Section 12 – Ecological Information

Ecotoxicological information appears in this section when such data is available.

#### Toxicity

Ester Acute toxicity to fish Not expected to be acutely toxic to aquatic organisms.

# Diethyltoluenediamine (DETDA)

#### Acute toxicity to fish

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

LC50, Leuciscus idus (Golden orfe), static test, 48 Hour, 194 mg/l, OECD Test Guideline 203 or Equivalent

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 48 Hour, 0.5 mg/l, OECD Test Guideline 202 or Equivalent

#### Acute toxicity to algae/aquatic plants

ErC50, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate, 100 mg/l, OECD Test Guideline 201

#### N-Methyl-2-pyrrolidone

#### Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, > 5,000 mg/l

LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, 1,072 mg/l

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 24 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

#### Acute toxicity to algae/aquatic plants

ErC50, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, > 500 mg/l, OECD Test Guideline 201 or Equivalent

#### Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, 12.5 mg/l

#### Carbon black

#### Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). LC50, Leuciscus idus (Golden orfe), static test, 96 Hour, > 1,000 mg/l

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 24 Hour, > 5,600 mg/l

#### Acute toxicity to algae/aquatic plants

NOEC, Desmodesmus subspicatus (green algae), 72 Hour, 10,000 mg/l

#### Polyether polyol 1

#### Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, Danio rerio (zebra fish), static test, 96 Hour, 6,310 mg/l, OECD Test Guideline 203 or Equivalent

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 48 Hour, 9,890 mg/l, OECD Test Guideline 202 or Equivalent

#### Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, mortality, >= 10 mg/l



#### Polyether polyol 2

#### Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

For this family of materials:

LC50, Leuciscus idus (Golden orfe), semi-static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

#### Acute toxicity to aquatic invertebrates

For this family of materials: EC50, Daphnia magna (Water flea), static test, 48 Hour, > 100 mg/l, OECD Test Guideline 202 or Equivalent

#### Acute toxicity to algae/aquatic plants

For this family of materials: EC50, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, > 100 mg/l, OECD Test Guideline 201 or Equivalent

#### Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, mortality, >= 10 mg/l

#### Persistence and degradability

#### <u>Ester</u>

**Biodegradability:** For the major component(s): Biodegradation may occur under aerobic conditions (in the presence of oxygen).

#### **Diethyltoluenediamine (DETDA)**

**Biodegradability:** Material is not readily biodegradable according to OECD/EEC guidelines. 10-day Window: Fail **Biodegradation:** < 1 % **Exposure time:** 28 d **Method:** OECD Test Guideline 301D or Equivalent

Theoretical Oxygen Demand: 3.23 mg/mg

#### N-Methyl-2-pyrrolidone

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. 10-day Window: Pass Biodegradation: 91 % Exposure time: 28 d Method: OECD Test Guideline 301B or Equivalent

#### Theoretical Oxygen Demand: 2.58 mg/mg

Photodegradation Test Type: Half-life (indirect photolysis) Sensitization: OH radicals Atmospheric half-life: 0.486 d Method: Estimated.

#### Carbon black

**Biodegradability:** Biodegradation is not applicable.



#### Polyether polyol 1

**Biodegradability:** Based on information for a similar material: Material is inherently biodegradable (reaches > 20% biodegradation in OECD test(s) for inherent biodegradability).

#### Polyether polyol 2

**Biodegradability:** For this family of materials: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).

10-day Window: Fail Biodegradation: 40 % Exposure time: 28 d Method: OECD Test Guideline 301B or Equivalent 10-day Window: Not applicable Biodegradation: 99 % Exposure time: 28 d Method: OECD Test Guideline 302B or Equivalent

#### **Bioaccumulative potential**

#### <u>Ester</u>

**Bioaccumulation:** No data available for this product. For the major component(s): Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

#### Diethyltoluenediamine (DETDA)

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). **Partition coefficient: n-octanol/water(log Pow):** 1.17 Measured **Bioconcentration factor (BCF):** 3 Estimated.

#### N-Methyl-2-pyrrolidone

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). **Partition coefficient: n-octanol/water(log Pow):** -0.38 Measured

#### Carbon black

Bioaccumulation: No relevant data found.

#### Polyether polyol 1

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). **Partition coefficient:** n-octanol/water(log Pow): -3.38 - -3.25 Estimated.

#### Polyether polyol 2

Bioaccumulation: No bioconcentration is expected because of the relatively high water solubility.

#### Mobility in soil

#### <u>Ester</u>

For the major component(s):

Potential for mobility in soil is low (Koc between 500 and 2000). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

#### **Diethyltoluenediamine (DETDA)**

Potential for mobility in soil is low (Koc between 500 and 2000). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.



Partition coefficient (Koc): 551.2 Estimated.

#### N-Methyl-2-pyrrolidone

Potential for mobility in soil is very high (Koc between 0 and 50). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process. **Partition coefficient (Koc):** 21 Estimated.

#### Carbon black

No relevant data found.

#### Polyether polyol 1

No relevant data found.

#### Polyether polyol 2

No relevant data found.

# Section 13 – Disposal Considerations

**Disposal methods:** NOTICE: Research sample for use by qualified personnel only. Upon completion of tests, dispose of material and container safely and in accord with federal, state/provincial and local laws and regulations. If further information is needed on disposal or use, consult your supplier.

### Section 14 – Transport Information

USDOT (Domestic Surface)	Not regulated for transport.
Classification for SEA transport (IMO-IMDG): Proper shipping name UN number Class Packing group Marine pollutant Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Diethyltoluenediamine, UN 3082 9 III Diethyltoluenediamine, Consult IMO regulations before transporting ocean bulk
Classification for AIR transport (IATA/ICAO): Proper shipping name UN number Class Packing group	Environmentally hazardous substance, liquid, n.o.s. (Diethyltoluenediamine, N,N'- Dialkylaminodiphenylmethane) UN 3082 9 III

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

# Section 15 – Regulatory Information

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Reproductive toxicity Specific target organ toxicity (single or repeated exposure)

# Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

This material does not contain any components with a CERCLA RQ.

#### Pennsylvania Worker and Community Right-To-Know Act:

Pennsylvania (Worker and Community Right-To-KnowAct): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

Components	CASRN
Castor Oil	8001-79-4

#### California Prop. 65

WARNING: This product can expose you to chemicals including Titanium dioxide, Carbon black, Bischloroisopropyl Ether, Propylene oxide, which is/are known to the State of California to cause cancer, and N-Methyl-2-pyrrolidone, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to <u>www.P65Warnings.ca.gov</u>.

#### United States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

# Section 16 – Other Information

#### Other information

For research use only.

#### Revision

Identification Number: 99112190 / A001 / Issue Date: 06/04/2018 / Version: 0.0 Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

#### Abbreviations and acronyms:

USDOT:	United States Department of Transportation.
ACGIH:	USA ACGIH Threshold Limit Vales (TLV)
ACGIH BEI	ACGIH - Biological Exposure Indices (BEI)
DOW IHG:	Dow Industrial Hygiene Guideline
IMDG:	International Maritime Code for Dangerous Goods.
OSHA Z-1:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
SKIN:	Absorbed via skin
TWA:	Time weighted average
US WEEL:	USA. Workplace Environmental Exposure Levels (WEEL)

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation;



DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC -International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 -Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. -Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative.

#### SDS prepared by:

Aquafin product safety department.

#### DISCLAIMER:

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use. Aquafin shall not be responsible for the use of this product in a manner to infringe on any patent or any other intellectual property rights held by others. User is responsible for determining appropriate safety measures and for applying the legislation covering his own activities. We recommend that user makes tests to determine the suitability of a product for its particular purpose prior to use.

END OF SDS

(February 21, 2019)