

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : Tideforce™ 316

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

No additional information available

1.4. Supplier's details

Tidal Vision Products Inc.
3710 Irongate Road
Bellingham, Washington
United States
T (360)603-7676
Customerservice@Tidalvision.com

1.5. Emergency phone number

Emergency number : Chemtrec- (800) 424-9300
24 hours a day, 7 days a week

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Hazardous to the aquatic environment — Acute Hazard, Category 3 H402 Harmful to aquatic life.
Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard statements (GHS US) : H402 - Harmful to aquatic life
Precautionary statements (GHS US) : P273 - Avoid release to the environment.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

6% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
6% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
6% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

Tideforce™ 316

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Acetic acid	CAS-No.: 64-19-7	1 - 5*	Skin Irrit. 2, H315

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.
Personal protection for first-aid responders.	: First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
-----------------------------------	--------------------------

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Tideforce™ 316

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Keep cool. Protect from sunlight.

Packaging materials : Always store product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Acetic acid (64-19-7)

USA - ACGIH® - Threshold Limit Values

Local name	Acetic acid
ACGIH® TLV® TWA	25 mg/m ³
	10 ppm
ACGIH® TLV® STEL	37 mg/m ³
	15 ppm

Tideforce™ 316

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Acetic acid (64-19-7)	
Remark (ACGIH®)	TLV® Basis: Sensory irr; Burns (chemical); Pulm func
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Acetic acid
OSHA PEL TWA	25 mg/m³
	10 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	Acetic acid
Cal/OSHA PEL (OEL TWA)	25 mg/m³
	10 ppm
Cal/OSHA STEL	37 mg/m³
	15 ppm
Cal/OSHA C	40 ppm
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
USA - NIOSH - Occupational Exposure Limits	
Local name	Acetic acid
NIOSH REL 10h TWA	10 ppm
NIOSH REL STEL	15 ppm
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Tideforce™ 316

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: Yellow solid.
Color	: Mixture contains one or more component(s) which have the following color(s): Colourless
Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Irritating/pungent odour Vinegar odour
Odor threshold	: No data available
pH	: ≈ 3.5
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

Tideforce™ 316

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Tideforce™ 316	
Unknown acute toxicity (GHS US)	6% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 6% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 6% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

Acetic acid (64-19-7)	
LD50 oral rat	3310 mg/kg Source: ECHA Registered substances
LD50 oral	4960 mg/kg body weight Animal: mouse
LD50 dermal rabbit	1060 mg/kg Source: HSDB, NITE
LC50 Inhalation - Rat	11.4 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Female, Experimental value, Inhalation (vapours), 14 day(s))
LC50 Inhalation - Rat [ppm]	16000 ppm Source: ChemIDPlus

Skin corrosion/irritation : Not classified
pH: ≈ 3.5

Acetic acid (64-19-7)	
pH	2.4 (0.1 mol/l)

Serious eye damage/irritation : Not classified
pH: ≈ 3.5
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Acetic acid (64-19-7)	
NOAEL (oral,rat,90 days)	290 mg/kg body weight Animal: rat, Animal sex: male

Aspiration hazard : Not classified

Acetic acid (64-19-7)	
Viscosity, kinematic	1.02 mm²/s (25 °C, Calculated)

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : None under normal conditions.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : None under normal conditions.

Tideforce™ 316

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Harmful to aquatic life.
Hazardous to the aquatic environment, short-term (acute) : Harmful to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Tideforce™ 316	
LC50 - Fish [1]	≈ 177 mg/l O. Mykiss
EC50 - Crustacea [1]	≈ 85.1 C. Dubia
NOEC chronic fish	400 mg/l Topsmelt
NOEC chronic crustacea	100 mg/l C. dubia

Acetic acid (64-19-7)	
LC50 - Fish [1]	31.3 – 67.6 mg/l Source: ECHA
EC50 - Crustacea [1]	18.9 mg/l Source: ECHA
LC50 - Fish [2]	> 300.82 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [2]	> 300.82 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	4.51 mg/l Source: ECHA
EC50 72h - Algae [2]	> 300.82 mg/l Test organisms (species): Skeletonema costatum
ErC50 algae	> 1000 mg/l (ISO 10253, 72 h, Skeletonema costatum, Static system, Salt water, Experimental value, Nominal concentration)

12.2. Persistence and degradability

Tideforce™ 316	
Persistence and degradability	Not established.

Acetic acid (64-19-7)	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.6 – 0.74 g O ₂ /g substance
Chemical oxygen demand (COD)	1.03 g O ₂ /g substance
ThOD	1.07 g O ₂ /g substance

12.3. Bioaccumulative potential

Acetic acid (64-19-7)	
BCF - Fish [1]	3.16 (Pisces, Fresh water, QSAR)
Partition coefficient n-octanol/water (Log Pow)	-0.17 Source: ECHA
Bioaccumulative potential	Not bioaccumulative.

Tideforce™ 316

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.4. Mobility in soil

Acetic acid (64-19-7)	
Surface tension	26 mN/m (30 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.062 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Contains component(s) with potential for mobility in the soil. May be harmful to plant growth, blooming and fruit formation.

12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No

SECTION 13 Disposal considerations

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
Ecological waste information	: The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

Not regulated

Tideforce™ 316

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

TDG

Not regulated

IMDG

Not regulated

IATA

Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Acetic acid (64-19-7)

CERCLA RQ

5000 lb

15.2. International regulations

CANADA

Acetic acid (64-19-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Acetic acid (64-19-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 5/19/2026

Issue date : 5/11/2026

Full text of hazard classes and H-statements

H315 Causes skin irritation

H402 Harmful to aquatic life

Safety Data Sheet (SDS), USA

Tideforce™ 316

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.