

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision date 31-Aug-2023 Revision Number 13

1. Identification

Product identifier

Product name ANSUL NFF-331 3x3

Other means of identification

Product code A16381HLDP

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Uses advised against No information available

Details of the supplier of the safety data sheet

Company Name Tyco Fire Protection Products

One Stanton Street Marinette, WI 54143-2542 Telephone: 715-735-7411

E-mail psra@jci.com

Company Phone Number Product Stewardship at +1-715-735-7411

Emergency telephone CHEMTREC 001-800-424-9300 or 001-703-527-3887

2. Hazard(s) identification

Classification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation

Category 2A

Label elements Signal word Warning

Hazard Statements

Causes serious eye irritation





Precautionary Statements - Prevention

Wear protective gloves/clothing and eye/face protection

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

Hazards not otherwise classified (HNOC)

Not applicable

Other information

No information available.

3. Composition/information on ingredients

Substance

Not applicable.

<u>Mixture</u>

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical name	CAS No	Weight-%	Trade secret
2-(2-Butoxyethoxy)ethanol	112-34-5	3 - 7	*
1-Propanaminium,	68139-30-0	1 - 5	*
N-(3-Aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-,			
N-Coco-acylderivates			
Fatty Alcohol Sulfate, TEA-salt	139-96-8	1 - 5	*
Sodium Octyl Sulfate	142-31-4	1 - 5	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.



Skin contact Wash skin with soap and water.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing mediaDo not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental Precautions

Environmental Precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into

surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.



7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
2-(2-Butoxyethoxy)ethanol	TWA: 10 ppm inhalable fraction	-	-
112-34-5	and vapor		

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protectionNo special protective equipment required.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance No information available

Color light yellow Odor Characteristic

Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 7 None known pH (as aqueous solution) None known Melting point / freezing point -9 °C / 16 °F None known Initial boiling point and boiling rangeNo data available None known



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Flash point No data available None known **Evaporation rate** No data available None known **Flammability** No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressure No data available None known Relative vapor density No data available None known Relative density No data available None known Water solubility No data available None known Solubility(ies) No data available None known **Partition coefficient** No data available None known **Autoignition temperature** No data available None known **Decomposition temperature** None known Kinematic viscosity No data available None known

Dynamic viscosity No data available None known

Other information

Explosive properties No information available **Oxidizing properties** No information available Softening point No information available Molecular weight No information available **VOC** content No information available

Liquid Density 1.12 g/ml

Bulk density No information available

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Inhalation Specific test data for the substance or mixture is not available.

Eve contact Causes serious eye irritation.

Skin contact Specific test data for the substance or mixture is not available.

Specific test data for the substance or mixture is not available. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics



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Symptoms No information available.

Acute toxicity

Product information

Method	species	Exposure Route	Effective dose	Exposure time	Results
U.S. EPA Health Effects Test	Rat	oral	5000 mg/kg		LD50 > 5000 mg/kg
Guidelines, OPPTS 870.1100,					
Acute Oral Toxicity					
U.S. EPA Health Effects Test	Rat	dermal		24 hours	LD50 > 5050 mg/kg
Guidelines, OPPTS 870.1200,					
Acute Dermal Toxicity					
U.S. EPA Health Effects Test	Rabbit	dermal		4 hours	non irritating
Guidelines, OPPTS 870.2500,					
Dermal Irritation					

Numerical measures of toxicity

No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-(2-Butoxyethoxy)ethanol	= 5660 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-
112-34-5			
Sodium Octyl Sulfate	= 3200 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
142-31-4			

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation Causes serious eye irritation.

Method	species	Exposure Route	Effective dose	Exposure time	Results
U.S. EPA Health Effects Test	Rabbit	eye			Irritant
Guidelines, OPPTS 870.2400,					
Ocular Irritation					

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Other adverse effects No information available.



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Interactive effects

No information available.

12. Ecological information

Ecotoxicity

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Oncorhynchus mykiss (rainbow trout)	NOEC	>100 mg/L	96 hours	NOEC: 50 mg/l
OECD Test No. 203: Fish, Acute Toxicity Test	Marine Species-Silverside Minnow, Menidia Beryllina	NOEC	37.5 mg/L	96 hours	NOEC: 25 mg/l
OECD Test No. 202: Daphnia sp., Acute Immobilization Test	Daphnia magna	NOEC	EC50 66.667 mg/L	48 hours	NOEC: 50 mg/l
U.S.EPA Health Effects Test Guidelines, OCSPP 850.1035: Static 96-hour Acute Toxicity Test	Mysidopsis bahia	NOEC	EC50 62.5 mg/L	96 hours	NOEC: 161.71 mg/l
OECD Test No. 201: Freshwater Alga and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	IC50	IC50: > 100 mg/L	72 hours	NOEC: 100 mg/l
OECD Test No. 209: Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)	Activated sludge microorganisms	IC50		3 hours	IC50 > 1000 mg/l

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
2-(2-Butoxyethoxy)ethan	EC50 (96h) > 100 mg/L	LC50 (96h) static = 1300	-	EC50 (48h) > 100 mg/L
ol	Desmodesmus	mg/L Lepomis		Daphnia magna
112-34-5	subspicatus	macrochirus		-

Method	Exposure time	VALUE	Results
OECD Test No. 301F: Ready	28 days		Readily biodegradable
Biodegradability: Manometric Respirome	etry		
Test (TG 301 F)			

Persistence and degradability

Biodegradability (B.O.D./C.O.D.) BOD/COD analysis

Concentrate: BOD5: 356400 mg/L BOD10: 406200 mg/L

BOD15: 426000 mg/L

BOD20: 442200 mg/L

BOD28: 470400 mg/L

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COD: 589917 mg/L

Diluted (97% water, 3% Concentrate)

BOD5: 12240 mg/L BOD10: 12940 mg/L BOD15: 14000 mg/L

BOD20: 14200 mg/L BOD28: 15620 mg/L

COD: 18033 mg/L

Bioaccumulation There is no data for this product.

Chemical name	Partition coefficient
2-(2-Butoxyethoxy)ethanol	1
112-34-5	

Mobility Keep out of waterways.

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

<u>IATA</u> Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories



TSCA Complies Complies **DSL/NDSL** Does not comply **EINECS/ELINCS** Does not comply **ENCS IECSC** Does not comply **KECL** Does not comply **PICCS** Does not comply AIIC Complies

Legend:

NZIoC

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
2-(2-Butoxyethoxy)ethanol - 112-34-5	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water	-	-	X
7732-18-5			



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2-(2-Butoxyethoxy)ethanol 112-34-5	X	-	Х
Fermentation derived cellulose 9004-34-6	X	X	Х
1,2-Propanediol 57-55-6	X	-	Х
Glycerol 56-81-5	X	Х	X
1-Decanol 112-30-1	-	-	X
Benzoic acid 65-85-0	X	Х	Х
Sodium Hydroxide 1310-73-2	X	X	X
sodium dodecylbenzene sulfonate 25155-30-0	X	X	Х

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U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPAHealth hazards2Flammability0Instability0Special hazards-HMISHealth hazards2Flammability0Physical hazards0Personal protectionX

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

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Revision Note Disclaimer No information available.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet