



SAFETY DATA SHEET

Revision date 16-Oct-2023

Revision Number 3

Section 1: Identification

Product identifier

Product name ANSUL NFF-331 3x3

Product code A16381HLDP

Other means of identification

Pure substance/mixture Mixture

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

Manufacturer

Johnson Controls
8 Henderson Place,
Onehunga Auckland 1061,
New Zealand
Tel: +64 800 496 7625 or local (09) 625 0600

E-mail address psra@jci.com

Emergency telephone number

Emergency telephone No information available

Section 2: Hazard identification

GHS Classification

Serious eye damage/eye irritation

Category 2

Label elements



Signal word

Warning

Hazard statements

Causes serious eye irritation

Precautionary Statements - Prevention



Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

Other hazards which do not result in classification

Causes mild skin irritation.

Section 3: Composition/information on ingredients**Substance**

Not applicable.

Mixture

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

Chemical name	CAS No.	Weight-%
2-(2-Butoxyethoxy)ethanol	112-34-5	0 - 10%
1-Propanaminium, N-(3-Aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-Coco-acylderivates	68139-30-0	0 - 10%
Fatty Alcohol Sulfate, TEA-salt	139-96-8	0 - 10%
Sodium Octyl Sulfate	142-31-4	0 - 10%
Sodium Decyl Sulfate	142-87-0	0 - 10%

Section 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 doctor.
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

Note to doctors Treat symptomatically.

Section 5: Fire-fighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

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

Specific hazards arising from the chemical

Specific hazards arising from the chemical No information available.

Special protective actions for fire-fighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions 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 labelled containers.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 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 containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

Section 8: Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	New Zealand	Australia	ACGIH TLV	United Kingdom
2-(2-Butoxyethoxy)ethanol 112-34-5	-	-	TWA: 10 ppm inhalable fraction and vapor	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
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Individual protection measures, such as personal protective equipment

Eye/face protection	No special protective equipment required.
Hand protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Environmental exposure controls	No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Colour	light yellow
Odour	Characteristic.
Odour threshold	No information available

Property	Values	Remarks • Method
pH	7	None known
Melting point / freezing point	-9 °C	None known
Initial boiling point and boiling range	No data available	None known
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 limits	No data available	
Lower flammability or explosive limits	No data available	
Vapour pressure	No data available	None known

Relative vapour 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
Explosive properties	No information available.	
Oxidising properties	No information available.	

Other information

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
Particle characteristics	No information available

Section 10: Stability and reactivity

Reactivity

Reactivity	No information available.
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Chemical stability

Stability	Stable under normal conditions.
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Explosion data

Sensitivity to mechanical impact	None.
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Sensitivity to static discharge	None.
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Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal processing.
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Conditions to avoid

Conditions to avoid	None known based on information supplied.
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Incompatible materials

Incompatible materials	Strong acids. Strong bases. Strong oxidising agents.
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Hazardous decomposition products

Hazardous decomposition products	None known based on information supplied.
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Section 11: Toxicological information

Acute toxicity

Information on likely routes of exposure

Product Information

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

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

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

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

Symptoms No information available.

Acute toxicity

Product information

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

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 26,130.70 mg/kg

ATEmix (dermal) 21,809.70 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-(2-Butoxyethoxy)ethanol	= 5660 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-
Sodium Octyl Sulfate	= 3200 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Sodium Decyl Sulfate	= 1950 mg/kg (Rat)	-	-

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 Guidelines, OPPTS 870.2400, Ocular Irritation	Rabbit	eye			Irritant

Respiratory or skin sensitisation 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.
Data used to identify the health effects	Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity The environmental impact of this product has not been fully investigated.

Unknown aquatic toxicity 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Crustacea
2-(2-Butoxyethoxy)ethanol	EC50 (96h) > 100 mg/L Desmodesmus subspicatus	LC50: =1300mg/L (96h, Lepomis macrochirus)	EC50: >100mg/L (48h, Daphnia magna)

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 Immobilisation 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 Algae 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

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability



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

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 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
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Bioaccumulative potential

Bioaccumulation	There is no data for this product.
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Chemical name	Partition coefficient
2-(2-Butoxyethoxy)ethanol	1
Sodium Decyl Sulfate	1.72

Mobility in soil

Mobility	Keep out of waterways.
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Other adverse effects

No information available.

Section 13: Disposal considerations**Disposal methods**

Waste from residues/unused products	Dispose of product in packaging in a way that is consistent with the EPA Consolidation 30 April 2021 of the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste.
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Contaminated packaging	For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the
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substance that it contained, taking into account the material the package is manufactured from.

Packages may only be reused or recycled if:

- the substance has a physical hazard other than corrosive to metal, and has been treated to remove any residual contents of the hazardous substance;
- or for substances that have a health or environmental hazard, or corrosive to metal, the contents of the residue in the package are below the threshold for the substance to be classified as hazardous in the Hazardous Substances (Hazard Classification) Notice 2020.

Section 14: Transport information

IATA Not regulated

IMDG Not regulated

ADR Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

Section 15: Regulatory information

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

EPA New Zealand HSNO approval code or group standard HSR002573 - Fire Fighting Chemicals

National regulations There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

Certified handlers, tracking and controlled substance license requirements Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information
Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information
Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

NZIoC Complies
TSCA Complies
DSL/NDSL Complies



EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AIIC	Complies

Legend:

NZIoC - New Zealand Inventory of Chemicals

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

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

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

Section 16: Other information

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Revision Note

***Indicates updated data since last publication.

Key or legend to abbreviations and acronyms used in the safety data sheetLegend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

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) (AELG(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)

Australian 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)

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

World Health Organization

Disclaimer

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End of Safety Data Sheet