



SAFETY DATA SHEET

Revision date 25-Oct-2023

Revision Number 3

Section 1: Identification

Product identifier

Product name ANSUL NFF 3X3 UL201

Product code 452615

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Fire extinguishing agent.

Uses advised against Consumer use

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



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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. Harmful to aquatic life with long lasting effects.

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-%
Caprylcaprylyl glucoside	68515-73-1	0 - 10%
2-(2-Butoxyethoxy)ethanol	112-34-5	0 - 10%
Sodium Octyl Sulfate	142-31-4	0 - 10%
1-Propanaminium, N-(3-Aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-Coco-acylderivates	68139-30-0	0 - 10%
3-(polyoxyethylene)-propylheptamethyltrisiloxane	67674-67-3	0 - 10%

Section 4: First-aid measures

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact

Wash skin with soap and water.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.

Self-protection of the first aider

Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms

May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation.



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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 Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

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. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

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.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

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 No information available
Odour No information available.
Odour threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known

Initial boiling point and boiling range	No data available	
Flash point	No data available	
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	9.715	
Liquid Density	No information available	
Bulk density	No information available	
Particle characteristics	No information available	

Section 10: Stability and reactivity

Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials

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

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

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. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation. Causes mild skin irritation.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation.

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	2000 mg/kg		LD50 > 2000 mg/Kg
U.S. EPA Health Effects Test Guidelines, OPPTS 870.2500, Dermal Irritation	Rabbit	dermal		4 hours	Causes mild skin irritation

Numerical measures of toxicity

No information available

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

ATEmix (oral)	32,350.70 mg/kg
ATEmix (dermal)	15,620.00 mg/kg

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

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

Skin corrosion/irritation May cause skin irritation. Classification based on data available for ingredients. Causes mild skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Method	species	Exposure Route	Effective dose	Exposure time	Results
U.S. EPA Health Effects Test	Rabbit	eye			Causes moderate eye

Guidelines, OPPTS 870.2400 , Ocular Irritation					irritation
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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 Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Caprylcaprylyl glucoside	-	LC50: =170mg/L (96h, Danio rerio)	-
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	Pimephales promelas	NOEC	LC50 32 mg/L	96 hours	NOEC mg/l
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	EC50 > 100 mg/L	48 hours	EC50 > 100 mg/l
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Skeletonema costatum	NOEC	EC50 19.8 mg/L	72 hours	NOEC < 6.3 mg/l
OECD Test No. 209: Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)	Activated sludge microorganisms	EC15 and EC50			No inhibition of activated sludge respiration at 10, 100 and 1000 mg/L. The EC15 and EC50 could not be calculated.

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability

Method	Exposure time	VALUE	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F)	28 days	>20% - <60% (during the 10 days of achieving 10% ThOD)	Inherently biodegradable

Biodegradability (B.O.D./C.O.D.)

BOD/COD analysis

Concentrate:

BOD5: > 214110 mg/L

BOD20: 447667 mg/L

COD: 447100 mg/L

Diluted (97% water, 3% Concentrate)

BOD5: 8591 mg/L

BOD20: 15000 mg/L

COD: 21490 mg/L

Bioaccumulative potential

Bioaccumulation

There is no data for this product.

Chemical name	Partition coefficient
2-(2-Butoxyethoxy)ethanol	1

Mobility in soil

Mobility

No information available.

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.

Substances which are hazardous to human health or corrosive to metals – may be discharged into the environment if a tolerable exposure limit has been set for the substance (or a component of that substance); and the discharge does not, after reasonable mixing, result in the concentration of the substance in an environmental medium exceeding the tolerable exposure limit. If there is no tolerable exposure limit for the substance, then it may only be discharged into the environment if the substance is very rapidly converted to substances that are not hazardous substances.

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

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

National regulations

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



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DSL/NDL	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 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
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) (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)
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