

Manufacturer:

AFL

Product Name:

AFL FCC2 Enhanced Formula Fiber Optic Connector Cleaner - 3oz (12 pack)

Manufacturer Part Number:

FCC2-00-0903

Click here for more details on the AFL FCC2 Enhanced Formula Fiber Optic Connector Cleaner - 3oz (12 pack)

Revision date: 6/15/2022 Revision: 30 Supersedes date: 5/17/2021

SAFETY DATA SHEET AFL- FCC2 - ENHANCED FORMULA

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200.

1. Identification

Product identifier

Product name AFL- FCC2 - ENHANCED FORMULA

Product number FCC2-00-0902, FCC2-10-0902, FCC2-10-0903

Cleaning agent.

Synonyms; trade names FCC2-10-0903, Case of 12 cans

Recommended use of the chemical and restrictions on use

Application Details of the supplier of the safety data sheet

Supplier

16 Eastgate Park Belmont, NH 03220 United States of America CAGE: 0NL21

Tel: +1 603-528-7780 www.AFLglobal.com

Manufacturer MICROCARE LLC

595 John Downey Drive New Britain, CT 06051 United States of America

CAGE: OATV9

Tel: + 1 800 638 0125, +1 860-827-0626

techsupport@microcare.com

Emergency telephone number

INFOTRAC 1-800-535-5053 (U.S.A. and CANADA) Emergency telephone

1-352-323-3500 (from anywhere in the world)

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified Health hazards Not Classified Environmental hazards Not Classified

Human health Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Environmental The product contains a substance which is harmful to aquatic organisms and which may

cause long-term adverse effects in the aquatic environment.

Physicochemical Vapors are heavier than air and may travel along the floor and accumulate in the bottom of

containers. Gas or vapor displaces oxygen available for breathing (asphyxiant). Not

considered to be a significant hazard due to the small quantities used

Label elements

Hazard statements NC Not Classified

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Supplemental label EUH210 Safety data sheet available on request. RCH001a For use in industrial installations information

This substance is not classified as PBT or vPvB according to current EU criteria.

3. Composition/information on ingredients

Other hazards

30-60% Methyl Nonafluoroisobutyl Ether CAS number: 163702-08-7

Classification Not Classified

Methyl Nonafluorobutyl Ether

30-60%

CAS number: 163702-07-6

Not Classified

PROPAN-2-OL 5-10%

CAS number: 67-63-0

Classification Flam. Liq. 2 - H225 Eye Irrit. 2A - H319 STOT SE 3 - H336

The full text for all hazard statements is displayed in Section 16.

Composition comments TSCA: The ingredients of this product are on the TSCA Inventory. The exact percentage

(concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200 TSCA: The ingredients of this product are on the TSCA

Ingredient notes This product does not contain any substances classified as PBT or vPvB.

Composition

Ingestion

4. First-aid measures

Description of first aid measures

General information Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing. If breathing stops, provide artificial respiration. Never give anything by mouth to an

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing. When breathing is difficult, properly trained personnel may assist affected person

by administering oxygen. Get medical attention if any discomfort continues.

Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting

occurs, the head should be kept low so that vomit does not enter the lungs. Consult a

physician for specific advice

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Skin Contact Due to the small packaging, the risk of skin contact is minimal. Remove contaminated clothing

Eve contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort

continues

Most important symptoms and effects, both acute and delayed

General information For further information, please refer to section 11.

Inhalation Vapors in high concentrations are anesthetic. Symptoms following overexposure may include

the following: Headache. Fatigue. Dizziness. Central nervous system depression

Ingestion Due to the physical nature of this material it is unlikely that swallowing will occur. May cause

nausea, headache, dizziness and intoxication. Congestion of the lungs may occur, producing

severe shortness of breath.

Skin contact Prolonged skin contact may cause redness and irritation. Mild dermatitis, allergic skin rash.

Eye contact May cause temporary eye irritation. Indication of immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media The product is not flammable

Special hazards arising from the substance or mixture

Flammability Class The product is not flammable

Specific hazards Protection against nuisance dust must be used when the airborne concentration exceeds 10

mg/m3. Containers can burst violently when heated, due to excess pressure build-up.

Hazardous combustion

products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

Advice for firefighters

Protective actions during firefighting

Closed containers can burst violently when heated, due to excess pressure build-up. Containers close to fire should be removed or cooled with water. Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the

following substances: Toxic and corrosive gases or vapors

for firefighters

Special protective equipment Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Eyewear complying with an approved standard should be worn if a risk assessment indicates Personal precautions

eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses

Environmental precautions

Environmental precautions Not considered to be a significant hazard due to the small quantities used. Avoid discharge

into drains or watercourses or onto the ground. Contain spillage with sand, earth or other

suitable non-combustible material.

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Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with non-combustible, absorbent material. Do not discharge into drains or

watercourses or onto the ground.

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health

hazards

7. Handling and storage

Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid contact with skin and eyes

Conditions for safe storage, including any incompatibilities

Storage precautions Do not store near heat sources or expose to high temperatures. Keep containers upright

Storage class The product is not flammable

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1. For use in industrial installations

Usage description Cleaning agent.

Reference to other sections. Store away from incompatible materials (see Section 10).

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

Methyl Nonafluoroisobutyl Ether

Long-term exposure limit (8-hour TWA): 750 ppm

Methyl Nonafluorobutyl Ether

Long-term exposure limit (8-hour TWA): 750 ppm

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): OSHA 400 ppm 980 mg/m³ Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m³ Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m³

OSHA = Occupational Safety and Health Administration. ACGIH = American Conference of Governmental Industrial Hygienists. A4 = Not Classifiable as a Human Carcinogen.

Ingredient comments WEL = Workplace Exposure Limits Threshold Limit Values (2005), ACGIH, by the American

Conference on Governmental Industrial Hygienists. ACGIH = US Standard. SUP = Supplier's recommendation. EU = Indicative Values according to Commission Directive 91/322/EEC.

Exposure controls

Protective equipment



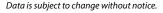
Appropriate engineering

controls

No specific ventilation requirements. This product must not be handled in a confined space

without adequate ventilation.

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Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates

eye contact is possible. Unless the assessment indicates a higher degree of protection is

required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection Hand protection not required. Chemical-resistant, impervious gloves complying with an

approved standard should be worn if a risk assessment indicates skin contact is possible. It is

recommended that gloves are made of the following material: Neoprene.

Hyglene measures When using do not eat, drink or smoke. No specific hygiene procedures recommended but

good personal hygiene practices should always be observed when working with chemical

products

Respiratory protection No specific recommendations. Respiratory protection must be used if the airborne

contamination exceeds the recommended occupational exposure limit.

Environmental exposure

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controls

Not regarded as dangerous for the environment.

9. Physical and chemical properties

Information on basic physical and chemical properties

 Appearance
 Clear liquid.

 Color
 Colorless.

 Odor
 Slight alcoholic.

 Odor threshold
 No information av

 Odor threshold
 No information available.

 pH
 No information available.

 Melting point
 No information available.

 Initial boiling point and range
 54°C/129°F @ 101.3 kPa

Flash point The product is not flammable. Does not flash, Tag closed cup (ASTM D 56)

Evaporation ractor 58 (BUOAC = 1)

Evaporation factor No information available

Flammability (solid, gas) No information available

Upper/lower flammability or explosive limits Upper flammable/explosive limit: 16.7 %(V) Lower flammable/explosive limit: 4 %(V)

Other flammability

No information available

Vapor pressure

27.6 kPa @ 25°C

Vapor density 7.0

 Relative density
 1.48 (H20 = 1) @ 25°C

 Bulk density
 No information available.

 Solubility(ies)
 Slightly soluble in water.

 Partition coefficient
 No information available.

 Auto-ignition temperature
 443°C ASTM E659

 Decomposition Temperature
 No information available.

 Viscosity
 <=0.01 Pa s @ 23°C</td>

 Explosive properties
 No information available.

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Refractive index No information available.

Particle size Not applicable.

Molecular weight No information available

Volatility 100%

 Saturation concentration
 No information available.

 Critical temperature
 No information available.

 Volatile organic compound
 No information available.

10. Stability and reactivity

Reactivity Strong alkalis. Chemically-active metals

Stability Stable at normal ambient temperatures and when used as recommended

Possibility of hazardous

reactions

Will not polymerize.

Conditions to avoid Keep away from heat, sparks and open flame. Thermal decomposition or combustion

products may include the following substances: Toxic and corrosive gases or vapors.

Materials to avoid Alkali metals. Alkaline earth metals. Powdered metal. Strong acids.

Hazardous decomposition

products

Skin Contact

Heating may generate the following products: Toxic and corrosive gases or vapors. Hydrogen fluoride (HF). Hydrogen chloride (HCl). Halogenated hydrocarbons. Carbon dioxide (CO2).

11. Toxicological information

Information on toxicological effects

Other health effects There is no evidence that the product can cause cancer.

5,000.0

Inhalation Vapors may irritate throat/respiratory system. A single exposure may cause the following

adverse effects: Coughing. Difficulty in breathing.

Ingestion May cause stomach pain or vomiting. May cause nausea, headache, dizziness and

Repeated exposure may cause skin dryness or cracking. Product has a defatting effect on

skin. May cause allergic contact eczema.

Eye contact

May cause temporary eye irritation.

Toxicological information on ingredients.

Methyl Nonafluoroisobutyl Ether

Acute toxicity - oral

Acute toxicity oral (LD∞

mg/kg) Species

Rat

Acute toxicity - inhalation

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Acute toxicity inhalation (LC₆₀ vapours mg/l)

Species ATE inhalation (vapours

mg/l)

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1,000.0

1,000.0

Methyl Nonafluorobutyl Ether

Other health effects There is no evidence that the product can cause cancer.

Acute toxicity - oral

Acute toxicity oral (LDso

mg/kg)

5.000.0

Species Rat 5.000.0 ATE oral (mg/kg)

Acute toxicity - inhalation

Acute toxicity inhalation 1,000.0

(LC₆₀ vapours mg/l)

Species Rat ATE inhalation (vapours 1,000.0

mg/l)

PROPAN-2-OL

Acute toxicity - inhalation

Acute toxicity inhalation 16,000.0

(LC₈₀ vapours mg/l)

16,000.0

ATE inhalation (vapours mg/l)

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

NTP carcinogenicity Not listed. **OSHA Carcinogenicity** Not listed

12. Ecological information

Ecotoxicity There are no data on the ecotoxicity of this product.

Ecological information on ingredients.

Methyl Nonafluoroisobutyl Ether

Ecotoxicity The product is not expected to be toxic to aquatic organisms.

Methyl Nonafluorobutyl Ether

Ecotoxicity There are no data on the ecotoxicity of this product.

Toxicity Not considered toxic to fish.

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Revision: 30

Ecological information on ingredients.

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Methyl Nonafluoroisobutyl Ether

Toxicity Not considered toxic to fish.

Methyl Nonafluorobutyl Ether

Toxicity Not considered toxic to fish.

PROPAN-2-OL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 9,640 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 5102 mg/l, Daphnia magna

Acute toxicity - aquatic

IC₅₀, 72 hours: >2,000 mg/l, Algae

plants

Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.

Methyl Nonafluoroisobutyl Ether

Persistence and degradability

The product is not expected to be biodegradable.

Methyl Nonafluorobutyl Ether

Persistence and

degradability

No data available.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

Methyl Nonafluoroisobutyl Ether

Bio-Accumulative Potential No data available on bioaccumulation.

Methyl Nonafluorobutyl Ether

Bio-Accumulative Potential No data available on bioaccumulation.

PROPAN-2-OL

Partition coefficient : 0.05

Mobility in soil

Mobility The product contains volatile substances which may spread in the atmosphere. Not

considered to be a significant hazard due to the small quantities used.

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Ecological information on ingredients.

Methyl Nonafluoroisobutyl Ether

Mobility Not applicable.

Methyl Nonafluorobutyl Ether

Mobility Not applicable.

Other adverse effects

Other adverse effects The product contains volatile organic compounds (VOCs) which have a photochemical ozone

creation potential.

13. Disposal considerations

Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be

considered.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

14. Transport information

General FCC2-10-0902 and FCC2-10-0903 can be shipped as Consumer ORM-D.

UN proper shipping name

Proper shipping name (International) Not applicable., Non-hazardous substance.

Transport hazard class(es)

Transport Labels (International)

Not applicable., Non-hazardous substance.

Transport labels

No transport warning sign required. Not regulated.

Packing group

Packing group (International) Not applicable., Non-hazardous substance.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

No information required.

Transport in bulk according to No information required. Not relevant.

Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

Not listed.

Data is subject to change without notice.

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CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

Not listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

Not listed.

SARA 313 Emission Reporting

Not listed.

CAA Accidental Release Prevention

Not listed.

SARA (311/312) Hazard Categories

None

OSHA Highly Hazardous Chemicals

Not listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

Not listed.

California Air Toxics "Hot Spots" (A-I)

PROPAN-2-OL

Present.

California Air Toxics "Hot Spots" (A-II)

Not listed

California Directors List of Hazardous Substances

PROPAN-2-OL

Present.

Massachusetts "Right To Know" List

PROPAN-2-OL

Present.

Rhode Island "Right To Know" List

PROPAN-2-OL

Present.

Minnesota "Right To Know" List

PROPAN-2-OL

Present.

New Jersey "Right To Know" List

PROPAN-2-OL

Present.

Pennsylvania "Right To Know" List

PROPAN-2-OL

Present.

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Inventories

Canada - DSL/NDSL

DSL

US - TSCA

Yes

US - TSCA 12(b) Export Notification

The following ingredients are listed:

Methyl Nonafluoroisobutyl Ether

resent

Methyl Nonafluorobutyl Ether

Present.

16. Other information

Abbreviations and acronyms used in the safety data sheet

TDG: The transport of dangerous goods act

IATA: International air transport association.

ICAO: Technical instructions for the safe transport of dangerous goods by air.

IMDG: International maritime dangerous goods.

CAS: Chemical abstracts service ATE: Acute toxicity estimate.

 LC_{50} : Lethal concentration to 50 % of a test population.

 $LD_{50}\!:$ Lethal dose to 50% of a test population (median lethal dose).

EC₅₀: 50% of maximal effective concentration.

PBT: Persistent, bioaccumulative and toxic substance.

vPvB: Very persistent and very bioaccumulative.

Revision commentsNOTE: Lines within the margin indicate significant changes from the previous revision.

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SDS No. BULK - FCC2-00-0902

SDS status Approved.

Hazard statements in full H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

Data is subject to change without notice.

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