



AF 615 (AFCO 8828)

Safety Data Sheet

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

Revision Date: 09/17/2023

Version: 2.1a

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: AF 615

Product Code: AFCO 8828

Intended Use of the Product

Use of the Substance/Mixture: Wastewater processing aid for industrial applications. For professional use only.

Name, Address, and Telephone of the Responsible Party

Company

AFCO

800 Development Avenue

Chambersburg, PA 17201

T: 800-345-1329

www.afcocare.com

Emergency Telephone Number

Emergency Number : 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US) : Not classified according to paragraph (d) 29 CFR 1910.1200.

Label Elements

GHS-US Labeling : No labeling required according to paragraph (f) 29 CFR 1910.1200.

Signal Word (GHS-US) : None.

Hazard Statements (GHS-US) : None.

Precautionary Statements (GHS-US) : None.

Other Hazards

Other Hazards: Aqueous solutions or powders that become wet render surfaces extremely slippery.

Unknown Acute Toxicity (GHS-US): Not available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances: Not applicable. Product is a mixture.

Mixture

Name of Hazardous Ingredients	Product identifier	% (w/w)	Classification (GHS-US)
Adipic acid	(CAS No) 124-04-9	<=2.5	Eye Irrit. 2A, H319
Sulfamic acid	(CAS No) 5329-14-6	<=2.5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319

The exact percentage of composition are withheld as a trade secret [29 CFR § [1910.1200 App E](#)].

Full text of H-phrases: see section 16.

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Move to fresh air. Get medical attention if symptoms occur.

Skin Contact: Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids. Get medical attention.

Ingestion: Rinse mouth. If conscious, give the victim plenty of water to drink. Induce vomiting, but only if victim is fully conscious.

Most Important Symptoms and Effects Both Acute and Delayed

Powder can cause localized skin irritation in folds of the skin or under tight clothing. Contact with dust can cause mechanical irritation or drying of the skin.

Indication of Any Immediate Medical Attention and Special Treatment Needed

None.

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SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water. Water spray. Foam. Carbon dioxide (CO₂). Dry powder.

Warning! Aqueous solutions or powders that become wet render surfaces extremely slippery.

Unsuitable Extinguishing Media: None known.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Spilled product is slippery underfoot. Very slippery when wet.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment. Wear self contained breathing apparatus for firefighting if necessary.

Hazardous Combustion Products: Thermal decomposition may produce: Carbon oxides (CO, CO₂). Nitrogen Oxides (NO_x). Ammonia (NH₃). Hydrogen chloride gas. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

Other information: Aqueous solutions or powders that become wet render surfaces extremely slippery.

Other Information

Aqueous solutions or powders that become wet render surfaces extremely slippery.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust. Aqueous solutions or powders that become wet render surfaces extremely slippery.

For Non-Emergency Personnel

Protective Equipment: Wear adequate personal protective equipment (PPE). (see Section 8 Exposure Controls/Personal Protection).

Emergency Procedures: Keep people away from spill/leak. Prevent further leakage or spillage if safe to do so.

For Emergency Personnel

Protective Equipment: Wear adequate personal protective equipment (PPE). (see Section 8 Exposure Controls/Personal Protection).

Emergency Procedures: Keep people away from spill/leak. Prevent further leakage or spillage if safe to do so.

Environmental Precautions

As with all chemical products, do not flush into surface water.

Methods and Material for Containment and Cleaning Up

Small Spills: Do not flush with water. Clean up promptly by sweeping or vacuum.

Large Spills: Do not flush with water. Prevent unauthorized access. Sweep up and shovel into suitable containers for disposal.

Residues: Sweep up to prevent slip hazard. After cleaning, flush with traces of water.

Reference to Other Sections

SECTION 7: Handling and storage; SECTION 8: Exposure controls/personal protection; SECTION 13: Disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust. Wash hands before breaks and at the end of workday.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep in a dry place.

Incompatible Materials: Oxidizing agents.

Specific End Use(s): Wastewater processing aid for industrial applications. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Adipic acid (124-04-9)	
USA ACGIH	ACGIH: 5 mg/m ³ (8 hours)

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Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts.

Personal Protective Equipment: Protective goggles. Protective clothing. Gloves.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear PVC or other plastic material gloves.

Eye Protection: Safety glasses with side-shields. Do not wear contact lenses where this product is used. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH.

Skin and Body Protection: Chemical resistant apron or protective suit if splashing or repeated contact with solution is likely. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: Dust safety masks recommended where working powder concentration is more than 10 mg/m³. Use respirators and components tested and approved under appropriate government standards such as NIOSH.

Additional Information: Wash hands before breaks and at the end of workday. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls: Do not allow uncontrolled discharge of product into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid.
Appearance	: White, granular.
Odor	: None.
Odor Threshold	: Not applicable.
pH	: 2.5 - 4.5 @ 5 g/L
Relative Evaporation Rate (butylacetate=1)	: Not available.
Melting Point	: >100°C (212°F)
Freezing Point	: >100°C (212°F)
Boiling Point	: Not applicable.
Flash Point	: Not applicable.
Auto-ignition Temperature	: Not applicable.
Decomposition Temperature	: >200°C (392°F)
Flammability (solid, gas)	: Not combustible.
Lower Flammable Limit	: Not expected to create explosive atmospheres.
Upper Flammable Limit	: Not expected to create explosive atmospheres.
Vapor Pressure	: Not applicable.
Relative Density	: 0.6 - 0.9
Solubility	: Soluble in water.
Partition coefficient: n-octanol/water (log value)	: <0
Viscosity	: Not available.
Kinematic Viscosity	: No data available.
Explosive Properties	: Not expected to be explosive based on the chemical structure.
Oxidizing Properties	: Not expected to be oxidizing based on the chemical structure.
Particle Characteristics	: No data available.

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SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous polymerization does not occur.

Chemical Stability: Stable.

Possibility of Hazardous Reactions: Oxidizing agents may cause exothermic reactions.

Conditions to Avoid: None known.

Incompatible Materials: Oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may produce: Carbon oxides (CO, CO₂). Nitrogen Oxides (NO_x). Ammonia (NH₃). Hydrogen chloride gas. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects – Product:

Acute Toxicity:

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LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg
LC50 Inhalation	The product is not expected to be toxic by inhalation.

Skin Corrosion/Irritation: Not irritating.

Serious Eye Damage/Irritation: Testing conducted according to the Draize technique showed the material produces no corneal or iridial effects and only slight transitory conjunctival effects similar to those which all granular materials have on conjunctiva.

Respiratory or Skin Sensitization: The results of testing on guinea pigs showed this material to be non-sensitizing.

Mutagenicity: Not mutagenic.

Teratogenicity: Not available.

Carcinogenicity: Not carcinogenic.

Specific Target Organ Toxicity (Repeated Exposure): No known effects.

Reproductive Toxicity: Not toxic for reproduction.

Specific Target Organ Toxicity (Single Exposure): No known effects.

Aspiration Hazard: No hazards resulting from the material as supplied.

Information on Acute Toxicity of Hazardous – Components:

Adipic acid (124-04-9)	
LD50 Oral Rat	= 5560 mg/kg (OECD 401)
LD50 Dermal Rabbit	>= 3176 mg/kg
LC50 Inhalation Rat	>7.7 mg/L (OECD 403) 4 hours

Skin Corrosion/Irritation: Slightly irritating.

Serious Eye Damage/Irritation: Not irritating. (OECD 405) (SNF).

Respiratory or Skin Sensitization: Not sensitizing.

Mutagenicity: Negative in the Ames Test (OECD 471). Negative in the In vitro Mammalian Cell Gene Mutation Test (OECD 476).

Teratogenicity: Not available.

Carcinogenicity: Based on available data, the absence of mutagenicity, it is unlikely that the substance is carcinogenic.

Carcinogenicity in rat: NOAEL > 750 mg/kg/day.

Specific Target Organ Toxicity (Repeated Exposure): No known effects.

Reproductive Toxicity: Based on available data, product is not expected to be toxic for reproduction.

NOAEL/Maternal toxicity/rat >= 288 mg/kg/day.

NOAEL/Developmental toxicity/rat >= 288 mg/kg/day.

Specific Target Organ Toxicity (Single Exposure): No known effects.

Aspiration Hazard: No known effects.

Information on Acute Toxicity of Hazardous – Components:

Sulfamic acid (5329-14-6)	
LD50 Oral Rat	= 2065 - 2140 mg/kg
NOAEL/ Dermal Rat	= 2000 mg/kg (OECD 402)
Inhalation	The product is not expected to be toxic by inhalation.

Skin Corrosion/Irritation: Not irritating. (OECD 404) (SNF).

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Serious Eye Damage/Irritation: Moderately irritating to the eyes. (EPA OPPTS 870.2400).

Respiratory or Skin Sensitization: The product is not expected to be sensitizing.

Mutagenicity: Negative in the Ames Test (OECD 471). Negative in the In vitro Mammalian Cell Gene Mutation Test (OECD 476). Not mutagenic. (OECD 472, 487).

Teratogenicity: Not available.

Carcinogenicity: Based on the absence of mutagenicity, it is unlikely that the substance is carcinogenic.

Specific Target Organ Toxicity (Repeated Exposure): No known effects.

Reproductive Toxicity: Based on available data, product is not expected to be toxic for reproduction.

Prenatal Development Toxicity Study (OECD 414).

- NOAEL/Maternal toxicity/rat = 200 mg/kg/day.

- NOAEL/Developmental toxicity/rat = 200 mg/kg/day.

Specific Target Organ Toxicity (Single Exposure): No known effects.

Aspiration Hazard: No known effects.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

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LC50 Fish	5-10 mg/l (Exposure time: 96 h - Species: Danio rerio) (OECD 203)
EC50 Invertebrates	20-50 mg/l (Exposure time: 48 h - Species: Daphnia magna) (OECD 202)
Algae	Algal inhibition tests are not appropriate. The flocculation characteristics of this product interfere directly in the test medium preventing homogeneous distribution which invalidates test.
Chronic Toxicity to Fish	No data available.
Chronic Toxicity to Invertebrates	No data available.
Toxicity to Microorganisms	No data available.
Effects on Terrestrial Organisms	No data available. Readily biodegradable, exposure to soil is unlikely.
Sediment Toxicity	No data available. Readily biodegradable, exposure to sediment is unlikely.
Sulfamic acid (5329-14-6)	
LC50 Fish	70.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas) (OECD 203)
EC50 Invertebrates	71.6 mg/l (Exposure time: 48 h - Species: Daphnia magna) (OECD 202)
IC50 Algae	48 mg/l (Exposure time: 72 h - Species: Selenastrum capricornutum) (OECD 201)
Chronic Toxicity to Fish	NOECD/Danio rerio/34 days >= 60 mg/l (OECD 210)
Chronic Toxicity to Invertebrates	NOECD/Daphnia magna/21 days = 19 mg/l (OECD 211)
Toxicity to Microorganisms	EC50/activated sludge/3 hrs >200 mg/l (OECD 209)
Effects on Terrestrial Organisms	No data available.
Sediment toxicity	No data available.
Adipic acid (124-04-9)	
LC50 Fish	>=1000 mg/l (Exposure time: 96 h - Species: Danio rerio)
EC50 Invertebrates	6.3 mg/l (Exposure time: 46 h - Species: Daphnia magna) (OECD 202)
IC50 Algae	59 mg/l (Exposure time: 72 h - Species: Selenastrum capricornutum) (OECD 201)
Chronic Toxicity to Fish	No data available.
Chronic Toxicity to Invertebrates	NOEC/Daphnia magna/21 days = 6.3 mg/l (OECD 211)
Toxicity to Microorganisms	EC50/activated sludge/3 hrs = 4747 mg/l (OECD 209)
Effects on Terrestrial Organisms	No data available.
Sediment Toxicity	No data available.

Persistence and Degradability

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Degradability	Based on the degradability data of the components, this product is expected to be readily (bio)degradable according to OECD criteria.
Hydrolysis	At natural pHs (>6) the polymer degrades due to hydrolysis to more than 70% in 28 days. The hydrolysis products are not harmful to aquatic organisms.
Photolysis	No data available.

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Adipic acid (124-04-9)	
Degradation	Readily biodegradable. >70% /28 days. (OECD 301D)
Hydrolysis	Does not hydrolyze.
Photolysis	Half life (indirect photolysis) =2.9 days
Sulfamic acid (5329-14-6)	
Degradation	Not relevant. (inorganic).
Hydrolysis	Does not hydrolyze.
Photolysis	No data available.

Bioaccumulative Potential

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Bioaccumulative Potential	Not expected to bioaccumulate.
Sulfamic acid (5329-14-6)	
Partition coefficient (Log Pow)	-4.34 @ 20°C
Bioconcentration factor BCF	~0
Adipic acid (124-04-9)	
Partition coefficient (Log Pow)	0.093 @ 25°C, pH 3.3
Bioconcentration factor BCF	~0

Mobility in Soil

No data available for product or components.

Other Adverse Effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose in accordance with local and national regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Waste Packaging: Rinse empty containers with water and use the rinse-water to prepare the working solution. If recycling is not practicable, dispose of in compliance with local regulations. Can be landfilled or incinerated, when in compliance with local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT	:	Not regulated for transport.
14.2 In Accordance with IMDG	:	Not regulated for transport.
14.3 In Accordance with IATA	:	Not regulated for transport.
14.4 In Accordance with TDG	:	Not regulated for transport.

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

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All components are either listed or exempt from being listed on the United States TSCA (Toxic Substances Control Act) inventory.	
SARA Section 311/312 Hazard Class	Not concerned.
SARA Title III Sections	
SARA 302 (TPQ) - Reportable Quantity	Not concerned.
SARA 304 - Reportable Quantity	Not concerned.
SARA 313 (De Minimis Concentration)	Not concerned.
RCRA Status	Not RCRA hazardous.
Clean Air Act (CAA) Section 112(r) Accidental Release (40 CFR 68) - RQ	Not concerned.
Relevant Information on the Hazardous Components	
Adipic acid (124-04-9)	
Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3) - RQ	5000 lbs
CERCLA Hazardous Substance List (40 CFR 302.4) - RQ	5000 lbs
DOT RQ	5000 lbs

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US State Regulations

Acrylamide (79-06-1)	
U.S. - California - Proposition 65	WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Canadian Regulations

Adipic acid (124-04-9)	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
Sulfamic acid (5329-14-6)	
Listed on the Canadian DSL (Domestic Substances List) inventory.	

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

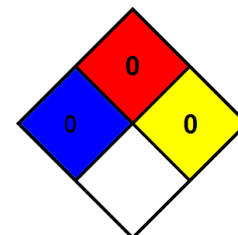
SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date	:	09/17/2023
Other Information	:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A.
Skin Irrit. 2	Skin corrosion/irritation Category 2.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

NFPA Health Hazard	:	0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
NFPA Fire Hazard	:	0 - Materials that will not burn.
NFPA Reactivity	:	0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS Rating

Health	:	0 - Minimal Hazard - No significant risk to health.
Flammability	:	0 - Minimal Hazard.
Physical	:	0 - Minimal Hazard.

Party Responsible for the Preparation of This Document

AFCO
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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.

North America GHS SDS 2015 (U.S., Can., Mex.)