

SECTION 1: Identification**1.1. Identification**

Product form	: Substance
Name	: BFP 62 TF
Trade name	: BFP® 62 TF
Chemical name	: Mono- and Diglycerides
CAS-No.	: 67701-32-0

1.2. Recommended use and restrictions on use

Recommended use	: Food, Emulsifier
Restrictions on use	: Not suitable for direct human consumption

1.3. Supplier

Corbion Caravan
8250 Flint Street
Lenexa, KS 66214 - USA
T +1.800.669.4092 - F + 913.438.2198
customercare@corbion.com

1.4. Emergency telephone number

Emergency number	: +1.800.424.9300 CHEMTREC Operating hours 24 hours, 7 days a week
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SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****GHS US classification**

Not classified

2.2. GHS Label elements, including precautionary statements**GHS US labeling**

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients**3.1. Substances**

Generic name	: Mono- and Diglycerides
CAS-No.	: 67701-32-0

Name	Product identifier	Conc. (% w/w)	GHS US classification
Glycerides, C14-18 and C16-18-unsatd. mono- and di-	CAS-No.: 67701-32-0	80 – 100	Not classified
Citric acid (Antioxidant)	CAS-No.: 77-92-9	≤ 0.1	Eye Irrit. 2, H319
Tocopherols (Antioxidant)	CAS-No.: 1406-66-2	≤ 0.1	Not classified
L-Ascorbic acid (Antioxidant)	CAS-No.: 50-81-7	≤ 0.1	Not classified

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician.
First-aid measures after ingestion	: Rinse mouth.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: None known. Non-hazardous substance.
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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Under fire conditions, hazardous fumes will be present: Carbon monoxide, Carbon dioxide.
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5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Evacuate personnel to a safe area. Use water spray or fog for cooling exposed containers. Move containers from fire area if it can be done without personal risk. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not touch or walk on the spilled product. Avoid breathing dust.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Stop leak, if possible without risk. Avoid creating or spreading dust.
- Methods for cleaning up : Shovel or sweep up and put in a closed container for disposal. Flush contaminated areas with plenty of water.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Avoid contact with skin, eyes and clothing. Do not breathe dust. Always wash hands after handling the product. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store tightly closed in a dry, cool and well-ventilated place.
- Storage temperature : 55 – 85 °F
- Storage area : Store according to local legislation.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Mono- and Diglycerides (67701-32-0)
No additional information available
Glycerides, C14-18 and C16-18-unsatd. mono- and di- (67701-32-0)
No additional information available

Citric acid (77-92-9)
No additional information available
Tocopherols (1406-66-2)
No additional information available
L-Ascorbic acid (50-81-7)
No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:				
None under normal conditions. In case of repeated or prolonged contact wear gloves				
Type	Material	Permeation	Thickness (mm)	Penetration
Protective gloves	Chloroprene rubber (CR), butyl rubber, Polyvinylchloride (PVC)	6 (> 480 minutes)	0.5	
Protective gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.35	
Eye protection:				
None under normal conditions. Where excessive dust may result, wear goggles				
Type	Field of application		Characteristics	
tightly fitting safety goggles, Safety glasses with side shields	Dust			
Skin and body protection:				
None under normal use				
Type				
Long sleeved protective clothing				
Respiratory protection:				
No respiratory protection needed under normal use conditions. In case of dust formation use respirator with filter:				
Device	Filter type		Condition	
Dust mask	Type P2		Dust protection	

Thermal hazard protection:

In the event of contact with molten product : Use insulated gloves when handling this material hot. Heatproof clothing. Half-face mask (DIN EN 140). Type A/P2.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. When handling product, avoid contact with skin and eyes. Always wash hands after handling the product. Do not breathe mist.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Semi-solid. Paste.
Color	: Off-white pale yellow
Odor	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Slight
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerization: Will not occur.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Citric acid (77-92-9)	
LD50 dermal rat	> 2000 mg/kg body weight OECD 402
ATE US (oral)	5400 mg/kg body weight

Tocopherols (1406-66-2)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg body weight (OECD 402 method)

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Citric acid (77-92-9)	
LOAEL (oral, rat, 90 days)	8000 mg/kg body weight
NOAEL (oral, rat, 90 days)	4000 mg/kg body weight

Tocopherols (1406-66-2)	
NOAEL (oral, rat, 90 days)	500 mg/kg body weight (OECD 408 method)

Aspiration hazard : Not classified
Viscosity, kinematic : No data available
Symptoms/effects : None known. Non-hazardous substance.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Citric acid (77-92-9)	
LC50 - Fish [1]	440 mg/l
EC50 - Crustacea [1]	1534 mg/l
Tocopherols (1406-66-2)	
LC50 - Fish [1]	> 10 mg/l Oncorhynchus mykiss
EC50 - Crustacea [1]	> 23.53 mg/l Daphnia magna
NOEC chronic fish	> 100 mg/l Oncorhynchus mykiss

12.2. Persistence and degradability

Citric acid (77-92-9)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Citric acid (77-92-9)	
Partition coefficient n-octanol/water (Log Kow)	-0.2 – -1.8 at 20°C

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste)	: Dispose in a safe manner in accordance with local/national regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

SECTION 14: Transport information

In accordance with Department of Transport / Transportation of Dangerous Goods / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

TDG

Transport hazard class(es) (TDG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable

Packing group (TDG) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Mono- and Diglycerides (67701-32-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Tocopherols	CAS-No. 1406-66-2	≤ 0.1%
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L-Ascorbic acid	CAS-No. 50-81-7	≤ 0.1%
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This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Mono- and Diglycerides (67701-32-0)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Glycerides, C14-18 and C16-18-unsatd. mono- and di- (67701-32-0)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Citric acid (77-92-9)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Mono- and Diglycerides (67701-32-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Glycerides, C14-18 and C16-18-unsatd. mono- and di- (67701-32-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Citric acid (77-92-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Mono- and Diglycerides (67701-32-0)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemicals Inventory)

FDA - Food Additives Recognized as Safe (GRAS): 21CFR: 184.1505

Glycerides, C14-18 and C16-18-unsatd. mono- and di- (67701-32-0)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
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Citric acid (77-92-9)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
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Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemicals Inventory)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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

Revision date : 08/11/2022

Training advice : Training staff on good practice. Ensure staff are informed of and trained on the nature of exposure and basic actions to minimise exposure.

Abbreviations and acronyms

ATE	Acute Toxicity Estimate
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level

Abbreviations and acronyms	
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
TLM	Median Tolerance Limit
STP	Sewage treatment plant
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road

Indication of changes:

7.2 Storage temperature; 9 Color and water solubility.

SDS US (GHS HazCom 2012)

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.