

Flexonal FPU 34-5

Version 3.2

Print Date 05.11.2021

Revision date / valid from 09.05.2020

Section 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name : Flexonal FPU 34-5
Substance name : Reaction mass of dimethyl adipate and dimethyl glutarate and dimethyl succinate
EC-No. : 906-170-0
Registration number : 01-2119475445-32-xxxx

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.
Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : Bachmann Kunststoff Technologien GmbH
Rudolf-Diesel-Str. 2
DE 63322
Rödermark
Telephone : +49 (0)6074-94394
Telefax : +49 (0)6074-98544
E-mail address : service@bktgermany.com
Responsible/issuing : Umwelt / Sicherheit person

1.4. Emergency telephone number

Emergency telephone number : +49 (0)6131-19240

Section 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

This substance is not classified as dangerous according to Directive 67/548/EEC.

Flexonal FPU 34-5

Most important adverse effects

- Human Health : See section 11 for toxicological information.
- Physical and chemical hazards : See section 9 for physicochemical information.
- Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is not labeled as dangerous according to Regulation (EC) No. 1272/2008.

Additional Labelling:

Handle in accordance with good industrial hygiene and safety practice.

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.
 The labelling is according to the declaration of the supplier.
 After the product test by the supplier there was no relevant irritant effect detected which must be declared.
 The labelling with R36 is not required.

Section 3: Composition/information on ingredients

3.1. Substances

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)		Classification (67/548/EEC)
		Hazard class / Hazard category	Hazard statements	
Reaction mass of dimethyl adipate and dimethyl glutarate and dimethyl succinate				
EC-No. : 906-170-0	<= 100	---	---	---
Registration : 01-2119475445-32-xxxx				

Remarks : The product does not contain any ingredients according to the EU Detergent Regulation (EC/648/2004), Annex VII A.

Section 4: First aid measures

4.1. Description of first aid measures

Flexonal FPU 34-5

General advice	: Take off all contaminated clothing immediately. Move out of dangerous area.
If inhaled	: Remove to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Wash off with soap and plenty of water. If skin irritation persists, call a physician.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, consult a specialist.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	: See Section 11 for more detailed information on health effects and symptoms.
Effects	: See Section 11 for more detailed information on health effects and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment	: Treat symptomatically.
-----------	--------------------------

Section 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	: Water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	: The product itself does not burn. May decompose in a fire giving off toxic fumes, Hazardous decomposition products, Carbon oxides
--------------------------------------	---

5.3. Advice for firefighters

Special protective equipment for firefighters	: Choose protective equipment according to size of fire. Wear self-contained breathing apparatus and full protective suit when necessary.
Further information	: Cool closed containers exposed to fire with water spray. Risk of closed containers bursting if strongly heated. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: Accidental release measures

Flexonal FPU 34-5

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment. Keep away unprotected persons. Ensure adequate ventilation.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

For personal protection see section 8.

Section 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Avoid formation of aerosol. Provide sufficient air exchange and/or exhaust in work rooms.

Hygiene measures : Smoking, eating and drinking should be prohibited in the application area. Keep away from food, drink and animal feedingstuffs. Take off all contaminated clothing immediately. Avoid contact with skin and eyes. Do not breathe vapours or spray mist.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in a dry, cool place. Keep only in the original container. Keep in an area equipped with solvent resistant flooring.

Advice on protection against fire and explosion : The product is flammable but not readily ignited. Possible formation of ignitable mixtures in air if heated above flash point and/or if sprayed (atomised). Keep away from sources of ignition - No smoking. Keep away from heat.

Further information on storage conditions : Keep away from heat. Keep away from direct sunlight. Keep in a well-ventilated place.

German storage class : 10 Combustible liquids.

7.3. Specific end use(s)

Specific use(s) : No information available.

Flexonal FPU 34-5

Section 8: Exposure controls/personal protection

8.1. Control parameters

Component: Reaction mass of dimethyl adipate and dimethyl glutarate and dimethyl succinate

Other Occupational Exposure Limit Values

TRGS 900, AGW:

1,2 ppm, 8 mg/m³, (2(l))

If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice : In case of insufficient ventilation, wear suitable respiratory equipment.
Required if vapours or aerosol are released.
Recommended Filter type:
Filter type A for organic gases and vapors.

Hand protection

Advice : Wear suitable gloves.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Protective gloves should be replaced at first signs of wear.
The following materials are suitable:

Material : butyl-rubber
Break through time : > 480 min
Glove thickness : 0,5 mm

Eye protection

Advice : Tightly fitting safety goggles

Skin and body protection

Flexonal FPU 34-5

Advice : Solvent resistant protective clothing

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
Local authorities should be advised if significant spillages cannot be contained.

Section 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Form	: liquid
Colour	: colourless
Odour	: sweet
Odour Threshold	: no data available
pH	: no data available
Melting point/range	: -20 °C
Boiling point/boiling range	: ca. 196 - 225 °C
Flash point	: 103 °C
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	: 8 %(V)
Lower explosion limit	: 0,9 %(V)
Vapour pressure	: 0,08 hPa (20 °C)
Relative vapour density	: no data available
Density	: ca. 1,09 g/cm ³ (20 °C)
Water solubility	: ca. 53 g/l (20 °C)
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: 370 °C
Thermal decomposition	: no data available
Viscosity, dynamic	: ca. 2,6 mPa.s (25 °C)

Flexonal FPU 34-5

- Explosivity : Product is not explosive.
Formation of explosive air/vapour mixtures is possible.
- Oxidizing properties : no data available

9.2. Other information

No further information available.

Section 10: Stability and reactivity

10.1. Reactivity

Advice : No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Conditions to avoid : Heat, flames and sparks. Keep away from direct sunlight.

10.5. Incompatible materials

Materials to avoid : Acids, Bases, Oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products : Fire may cause evolution of: Carbon oxides

Section 11: Toxicological information

11.1. Information on toxicological effects

Irritation

Skin

Result : Based on available data, the classification criteria are not met.

Eyes

Result : Based on available data, the classification criteria are not met.

Flexonal FPU 34-5

Sensitisation

Result : No sensitizing effect known.

CMR effects

CMR Properties

Carcinogenicity : It is not considered carcinogenic.

Mutagenicity : It is not considered mutagenic.

Reproductive toxicity : It is not considered toxic for reproduction.

Specific Target Organ Toxicity

Single exposure

remark : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

remark : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Aspiration hazard

No aspiration toxicity classification

Further information

Other relevant toxicity information : Handle in accordance with good industrial hygiene and safety practice.

Component: Reaction mass of dimethyl adipate and dimethyl glutarate and dimethyl succinate

Acute toxicity

Oral

LD50 Oral : > 5000 mg/kg (rat, female)
Information given is based on data obtained from similar substances.

Inhalation

Flexonal FPU 34-5

LC50 : > 11 mg/l (rat, male and female; 4 h)
Information given is based on data obtained from similar substances.

Dermal

LD50 Dermal : > 2000 mg/kg (rat)

Section 12: Ecological information

12.1. Toxicity

Component: Reaction mass of dimethyl adipate and dimethyl glutarate and dimethyl succinate

Acute toxicity

Fish

LC50 : 18 - 24 mg/l (Pimephales promelas (fathead minnow); 96 h)

Toxicity to daphnia and other aquatic invertebrates

EC50 : 112 - 150 mg/l (Daphnia magna (Water flea); 48 h)

algae

ErC50 : > 85 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h)

12.2. Persistence and degradability

Component: Reaction mass of dimethyl adipate and dimethyl glutarate and dimethyl succinate

Persistence and degradability

Biodegradability

Result : 97 % (aerobic; Exposure Time: 28 d)(OECD Test Guideline 301)
Readily biodegradable.

12.3. Bioaccumulative potential

Flexonal FPU 34-5

Component: Reaction mass of dimethyl adipate and dimethyl glutarate and dimethyl succinate

Bioaccumulation

Result : Does not bioaccumulate.

12.4. Mobility in soil

Component: Reaction mass of dimethyl adipate and dimethyl glutarate and dimethyl succinate

Mobility

Soil : Predicted distribution to environmental compartments

Water : Predicted distribution to environmental compartments

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Additional ecological information

Result : Do not flush into surface water or sanitary sewer system.

Section 13: Disposal considerations

13.1. Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains.

Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

European Waste : No waste code according to the European Waste Catalogue

Flexonal FPU 34-5

Catalogue Number can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

Section 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

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

IMDG : Not applicable.

Section 15: Regulatory information

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

WGK (DE)	:	WGK:1; slightly water endangering; WGK (DE); Self-classification according VwVwS of 17 May 1999, Annex 4
Major Accident Hazard Legislation	:	Does not fall under the German StörfallV. -
Other regulations	:	Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

Flexonal FPU 34-5

15.2. Chemical Safety Assessment

no data available

Section 16: Other information

Full text of R-phrases referred to under sections 2 and 3. Further information

Other information : The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

|| Indicates updated section.