

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Renamel Flowable Microfill

Print date: 08.09.2016

Product code: 1020XXXUSA

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If skin irritation or rash occurs: Get medical advice/attention.

Hazards not otherwise classified

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

3. Composition/information on ingredients**Mixtures****Chemical characterization**

Mixture of acrylic resins, fillers and initiators.

Hazardous components

CAS No	Components	Quantity
72869-86-4	7,7,9-Trimethyl-4,13-dioxo-3,14-dioxo-5,12-diaza-hexadecan-1,16-diol dimethacrylate	* 20 - 50 %
2082-81-7	1,4 Butanediol dimethacrylate	* < 25 %
1565-94-2	Bisphenol A Diglycidyl Methacrylate	* < 10 %

Further Information

* The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

4. First-aid measures**Description of first aid measures****General information**

Medical treatment is necessary if symptoms occur which are obviously caused by skin or eye contact with the product or by inhalation of its vapours. Take off all contaminated clothing immediately.

After inhalation

Provide fresh air. Medical treatment necessary.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary.

After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Medical treatment necessary.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**

Foam. Extinguishing powder, Carbon dioxide,

Specific hazards arising from the chemical

In case of fire may be liberated: Carbon monoxide. Carbon dioxide Hazardous decomposition products

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

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Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.
Do not allow entering drains or surface water.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

7. Handling and storage**Precautions for safe handling****Advice on safe handling**

Provide good room ventilation.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking.

Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Protect from the action of light. Keep only in the original container at a temperature between 4 -25 °C (40 -75°F). Can polymerize with intense heat release.

Advice on storage compatibility

Do not store together with:
Oxidising agent
food

8. Exposure controls/personal protection**Control parameters****Exposure controls****Protective and hygiene measures**

Avoid contact with skin, eyes and clothes. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

tightly fitting goggles

Hand protection

Gloves should be replaced regularly, especially after extended contact with the product. For each work-place a suitable glove type has to be selected.

Skin protection

Wear suitable protective clothing.

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9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: pasty
 Color: various, depending on coloration
 Odor: hardly noticeable

Test method

pH-Value: not determined

Changes in the physical state

Melting point/freezing point: not determined
 Initial boiling point and boiling range: not determined
 Flash point: not applicable
 Sustaining combustion: No data available

Flammability

Solid: not applicable
 Gas: not applicable

Lower explosion limits: not determined
 Upper explosion limits: not determined

Auto-ignition temperature

Solid: not applicable
 Gas: not applicable

Decomposition temperature: not determined
 Vapor pressure: not determined
 Density: not determined
 Water solubility: insoluble
 Partition coefficient: not determined
 Vapor density: not determined
 Evaporation rate: not determined

Other information

Solid content: not determined

10. Stability and reactivity

Reactivity

No hazardous reaction when handled and stored according to provisions.

Chemical stability

Stability: Stable
 The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

Hazardous reactions: Will not occur
 Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

Conditions to avoid

Protect from the action of light. Keep only in the original container at a temperature between 4 -25 °C

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(40-75°F).

Incompatible materials

Oxidising agent, Reducing agent, Heavy metals, acids, Alkali (lye)

Hazardous decomposition products

No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects

Acute toxicity

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

CAS No	Components			
	Exposure route	Dose	Species	Source
72869-86-4	7,7,9-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecan-1,16-diol dimethacrylate			
	oral	LD50 >2000 mg/kg	Rat	OECD 401
2082-81-7	1,4 Butanediol dimethacrylate			
	oral	LD50 > 5000 mg/kg	Rat	OECD 401
	dermal	LD50 > 3000 mg/kg	Rabbit	

Irritation and corrosivity

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

Sensitizing effects

May cause an allergic skin reaction (7,7,9- Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diaza-hexadecan-1,16-diol dimethacrylate), (1,4 Butanediol dimethacrylate)

Possible sensitization in case of persons suffering from hypersensitivity .

Carcinogenic/mutagenic/toxic effects for reproduction

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

Specific target organ toxicity (STOT) - single exposure

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

Specific target organ toxicity (STOT) - repeated exposure

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

Carcinogenicity (NTP): None of the ingredients is listed.

Carcinogenicity (IARC): None of the ingredients is listed.

Carcinogenicity (OSHA): None of the ingredients is listed.

Aspiration hazard

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

Further information

Product has not been tested. The statement is derived from the properties of the components.

12. Ecological information

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

Mobility in soil

The product has not been tested.

Other adverse effects

No information available.

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Further information

Do not allow uncontrolled discharge of product into the environment. Do not allow to enter into surface water or drains.

13. Disposal considerations

Waste treatment methods

Advice on disposal

Small quantities can be polymerized by light and the cured solid material can be disposed of with the regular garbage. Larger quantities must be disposed of following the regulations of the local authorities. Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

14. Transport information

US DOT 49 CFR 172.101

Proper shipping name:

Not a hazardous material with respect to these transport regulations.

Marine transport (IMDG)

Other applicable information

No dangerous good in sense of these transport regulations.

Air transport (ICAO)

Other applicable information

No dangerous good in sense of these transport regulations.

Special precautions for user

No information available.

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

not applicable

15. Regulatory information

U.S. Regulations

National Inventory TSCA

All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

National regulatory information

SARA Section 311/312 Hazards:

- 7,7,9-Trimethyl-4,13-dioxo-3,14-dioxo-5,12-diaza-hexadecan-1,16-diol dimethacrylate (72869-86-4): Immediate (acute) health hazard
- 1,4 Butanediol dimethacrylate (2082-81-7): Immediate (acute) health hazard
- Bisphenol A Diglycidyl Methacrylate (1565-94-2): Immediate (acute) health hazard

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Hazardous Materials Information Label (HMIS)

Health: 1

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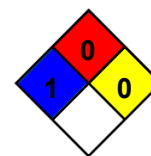
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Flammability: 0
Physical Hazard: 0

NFPA Hazard Ratings

Health: 1
Flammability: 0
Reactivity: 0
Unique Hazard:

**Changes**

Revision date: 08.09.2016
Revision No: 1,40
reason of revision: classification according CLP / GHS.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Other data

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)