

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

Name of product Gummix 21Zeta LFM-48 M

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Identified uses****Sector of uses [SU]**

Soldering Material

**1.3. Details of the supplier of the safety data sheet****Distributor**Almit GmbH  
Unterer Hammer 3, DE-64720 Michelstadt  
Phone : +49 (0)6061 969250, Fax : +49 (0)6061 9692518  
E-Mail : info@almit.de  
Internet : www.almit.de**Advice**Uwe Niedermayer  
E-mail (competent person):  
uniedermayer@almit.de**1.4. Emergency telephone number****Manufacturer**Nihon Almit Co. Ltd.  
Almit Building, 2-14-2, Yayoicho, Nakano-ku,, Tokyo 164-8666, Japan  
Phone : +81 333792277  
E-Mail : tokyo2@almit.co.jp  
Internet : www.almit.com**1.4. Emergency telephone number**

No information available.

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]**

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Resp. Sens. 1	H334	
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Skin Sens. 1	H317	
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**Hazard statements for health hazards**

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**2.2. Label elements**

**Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]**

GHS07



GHS08

**Signal word**

Danger

**Hazard statements for health hazards**

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary Statements****Prevention**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P285 In case of inadequate ventilation wear respiratory protection.

**Response**

P302 + P352 IF ON SKIN: Wash with plenty of water/... .

P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

**Storage**

P403 + P235 Store in a well-ventilated place. Keep cool.

**Supplemental Hazard information (EU)****Health properties**

Repeated exposure may cause skin dryness or cracking.

**2.3. Other hazards****Adverse physicochemical effects**

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

**Adverse human health effects and symptoms**

Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

May cause sensitization in susceptible people.

Inhalation of dust may cause irritation of the respiratory system.

**Information pertaining to special dangers for human and environment**

Harmful by inhalation, in contact with skin and if swallowed.

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

not applicable

**3.2. Mixtures****Hazardous ingredients**

**Hazardous ingredients (continued)**

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
8050-09-7	232-475-7	colophony	1,3 - 5	Skin Sens. 1, H317
7440-22-4	231-131-3	silver, metallic	2,8 - 3,2	
7440-31-5	231-141-8	Tin	93 - 95	
7440-50-8	231-159-6	Copper	0,3 - 0,7	

**REACH**

CAS No	Name	REACH registration number
8050-09-7	colophony	01-2119480418-32-****
7440-22-4	silver, metallic	01-2119555669-21-****
7440-31-5	Tin	01-2119486474-28-****
7440-50-8	Copper	01-2119480154-42-****

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Remove contaminated soaked clothing immediately.

In case of allergic reactions, specially at respiratory tract, seek medical treatment immediately.

**In case of inhalation**

Remove the casualty into fresh air and keep him immobile.

If intensive inhalation of fumes seek medical treatment immediately.

**In case of skin contact**

In case of contact with skin wash off immediately with plenty of water.

Consult a doctor if skin irritation persists.

**In case of eye contact**

In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

**In case of ingestion**

Rinse out mouth and give plenty of water to drink.

Induce vomiting if patient is conscious, seek medical advice.

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

No information available.

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

No information available.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Fire-extinguishing activities according to surrounding.

Foam

Dry fire-extinguishing substance

Dry powder

Carbon dioxide

sand

**Unsuitable extinguishing media**  
water

**5.2. Special hazards arising from the substance or mixture**

In case of fire formation of dangerous gases possible.  
Carbon monoxide (CO)  
Carbon dioxide (CO<sub>2</sub>)

**5.3. Advice for firefighters**

**Special protective equipment for fire-fighters**

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus.  
Do not inhale explosion and/or combustion gases.

**Additional information**

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

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**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**

Use personal protective clothing.  
Use breathing apparatus if exposed to vapours/dust/aerosol.  
Pay attention to extension of gas especially at ground (heavier than air) and in direction of the wind.

**6.2. Environmental precautions**

Do not discharge into the drains or bodies of water..  
Do not discharge into the drains/surface waters/groundwater.  
Do not discharge into the subsoil/soil.

**6.3. Methods and material for containment and cleaning up**

Send in suitable containers for recovery or disposal.

**Additional Information**

Informations for safe handling see chapter 7.  
Informations for personal protective equipment see chapter 8.  
Informations for disposal see chapter 13.

**6.4. Reference to other sections**

No information available.

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**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.  
Use only in well-ventilated areas.

**General protective measures**

Avoid contact with eyes and skin  
Do not inhale gases/vapours/aerosols.

**Hygiene measures**

At work do not eat, drink, smoke or take drugs.  
Keep separated from food and feed.  
Wash hands and skin before breaks and after work.

**Advice on protection against fire and explosion**

The product is not combustible.

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

Ventilate store-rooms thoroughly.

Keep only in original container.

**Advice on storage compatibility**

Do not store together with food.

Store at cool and aired place and at distance to acids and alkalies.

**Further information on storage conditions**

Store at cool and aired place.

**Information on storage stability**

Storage time: 24 months.

**7.3. Specific end use(s)**

No information available.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2004/37/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m <sup>3</sup> ]	[ppm]	Remark
7440-22-4	silver, metallic	8 hours	0,1		

**8.2. Exposure controls****Respiratory protection**

In case of insufficient ventilation or long-term effect use breathing apparatus.

Breathing apparatus

**Hand protection**

PVC gloves

Neoprene gloves

**Eye protection**

tightly fitting goggles

**Other protection measures**

protective clothing

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

solid

**Colour**

silver-grey

**Odour**

odourless

**Odour threshold**

not determined

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
<b>pH value</b>	not determined				
<b>Boiling temperature / boiling range</b>	not determined				
<b>melting range</b>	217 - 221 °C				
<b>Flash point</b>	no				
<b>Vapourisation rate</b>	not determined				
<b>Flammable (solid)</b>	not determined				
<b>Flammability (gas)</b>	not determined				
<b>Ignition temperature</b>	no				
<b>Self ignition temperature</b>	not determined				
<b>Lower explosion limit</b>	not determined				
<b>Upper explosion limit</b>	not determined				
<b>Vapour pressure</b>	< 0,1 mbar	20 °C			
<b>Relative density</b>	7,4 g/cm <sup>3</sup>	20 °C			
<b>Vapour density</b>	6	20 °C			
<b>Solubility in water</b>					insoluble
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	not determined				
<b>Decomposition temperature</b>	not determined				
<b>Viscosity</b>	not determined				
<b>Oxidising properties</b>	No information available.				
<b>Explosive properties</b>	no				

**9.2. Other information**

No information available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No information available.

**10.2. Chemical stability**

No information available.

**10.3. Possibility of hazardous reactions**

No information available.

**10.4. Conditions to avoid**

not determined

**10.5. Incompatible materials****Substances to avoid**

Reactions with acids and strong oxidising agents.

**10.6. Hazardous decomposition products**

Carbon monoxide and carbon dioxide.

Toxic metal compounds

Irritant gases/vapours

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
<b>Skin irritation</b>	irritant			
<b>Eye irritation</b>	irritant			
<b>Skin sensitization</b>	sensitizing			

**SECTION 12: Ecological information****12.1. Toxicity**

No information available.

**12.2. Persistence and degradability**

	Elimination rate	Method of analysis	Method	Validation
<b>Biological degradability</b>				not readily degradable

**12.3. Bioaccumulative potential**

Because of its consistency the product cannot be dispersed in the environment. Adverse ecological effects are therefore unlikely on the basis of current knowledge.

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Other adverse effects****General regulation**

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

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**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Recommendations for the product**

Collect waste separated in suitable, labeled and lockable containers.

Remove in accordance with local official regulations.

**Recommendations for packaging**

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

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**SECTION 14: Transport information**

	<b>ADR/RID</b>	<b>IMDG</b>	<b>IATA-DGR</b>
<b>14.1. UN number</b>	-	-	-
<b>14.2. UN proper shipping name</b>	-	-	-
<b>14.3. Transport hazard class(es)</b>	-	-	-
<b>14.4. Packing group</b>	-	-	-
<b>14.5. Environmental hazards</b>	-	-	-

**14.6. Special precautions for user**

No information available.

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

No information available.

**Transport/further information**

No dangerous goods as defined by the transport regulations - ADR/RID, IMDG, ICAO/IATA-DGR.

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**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

No information available.



**15.2. Chemical Safety Assessment**

No information available.

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**SECTION 16: Other information**

**Recommended uses and restrictions**

National and local regulations concerning chemicals shall be observed.

**Further information**

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

H317 May cause an allergic skin reaction.