



SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: NormAcid GLU Comp. B**
- **UFI: Q6FA-QQFY-X002-R5C8**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** Coating
- **Application of the substance / the mixture**
 2-comp. epoxy paint, Comp. B
 Uses in Coatings - Industrial use
 Uses in Coatings - Professional use
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Nor-Maali Oy
 Vanhatie 20, 15240 Lahti, FINLAND
- **Further information obtainable from:** MSDS (Nor-Maali Oy) tel.+358 3 874 650, sds@nor-maali.fi
- **1.4 Emergency telephone number:** Contact National Poison Center


SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 Product definition: mixture
- **Classification according to Regulation (EC) No 1272/2008**
- 




GHS05 corrosion

Skin Corr. 1	H314 Causes severe skin burns and eye damage.
Eye Dam. 1	H318 Causes serious eye damage.
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GHS09 environment

Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.
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GHS07

Acute Tox. 4	H302 Harmful if swallowed.
Skin Sens. 1	H317 May cause an allergic skin reaction.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**
- 



GHS05 GHS07 GHS09
- **Signal word** Danger
- **Hazard-determining components of labelling:**
 Benzyl alcohol
 1,3-Benzenedimethanamine

Trade name: NormAcid GLU Comp. B

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4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine

Hazard statements

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P261 Avoid breathing mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor.

2.3 Other hazards

Results of PBT and vPvB assessment

- PBT:** Not applicable.
- vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 100-51-6 EINECS: 202-859-9 Reg.nr.: 01-2119492630-38-	Benzyl alcohol Acute Tox. 4, H302; Acute Tox. 4, H332	25 - 60%
CAS: 57214-10-5 NLP: 500-137-0 Reg.nr.: 01-2119966906-20-	Formaldehyde, polymer with 1,3-benzenedimethanamine and phenol Aquatic Acute 1, H400; Aquatic Chronic 1, H410	10 - 50%
CAS: 1477-55-0 EINECS: 216-032-5 Reg.nr.: 01-2119480150-50-	1,3-Benzenedimethanamine Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	2.5 - 25%
CAS: 72480-18-3 NLP: 500-253-1 Reg.nr.: 01-2120766318-46-	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine Skin Corr. 1, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Sens. 1, H317	2.5 - 10%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Never give anything by mouth or induce vomiting to an unconscious person or a person who has convulsions.

After inhalation:

Remove person to fresh air, keep patient warm and at rest. If breathing is irregular, call national emergency number, if needed start giving artificial respiration and seek medical advice.

After skin contact:

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.

After swallowing:

If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.

Information for doctor: Treatment according to symptoms.

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- **4.2 Most important symptoms and effects, both acute and delayed**
 No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
 In a fire or if heated, a pressure increase will occur and the container may burst.
- **5.3 Advice for firefighters**
 Evacuate people from danger area and deny access to area. Remove containers from danger area and try to cool containers which cannot be removed safely. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- **Protective equipment:** Compressed air respirator and protective clothing.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
 Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- **6.2 Environmental precautions:**
 Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
- **6.3 Methods and material for containment and cleaning up:**
 Absorb liquid components with liquid-binding material (sand, peat or other absorbent material). Ensure adequate ventilation.
- **6.4 Reference to other sections**
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
 Handling must be organised so that skin contact with the product and splashes to eyes can be avoided.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 Store in accordance with local regulations. Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. Keep away from: oxidising agents, strong alkalis, strong acids. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not empty into drains.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

GB
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Safety data sheet

(EC) 1907/2006 (REACH), Annex II, as amended by Regulation (EU) 2021/848

Date of revision: 26.04.2022
Date of previous issue: 13.08.2019
Version number 3 (replaces version 2)

Trade name: NormAcid GLU Comp. B

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SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

100-51-6 Benzyl alcohol

HTP Long-term value: 45 mg/m³, 10 ppm

1477-55-0 1,3-Benzenedimethanamine

HTP Short-term value: 0.1 mg/m³
Skin

· **DNELs**

100-51-6 Benzyl alcohol

Dermal	DNEL	8 mg/kg bw/day (Workers - Long-term systemic effects)
		40 mg/kg bw/day (Workers - acute systemic effects)
Inhalative	DNEL	22 mg/m ³ (Workers - Long-term systemic effects)
		110 mg/m ³ (Workers - acute systemic effects)

1477-55-0 1,3-Benzenedimethanamine

Dermal	DNEL	330 µg/kg bw/day (Workers - Long-term systemic effects)
Inhalative	DNEL	1.2 mg/m ³ (Workers - Long-term systemic effects)
		200 mg/m ³ (Workers - Long-term local effects)

· **PNECs**

100-51-6 Benzyl alcohol

PNEC	1 - 1.02 mg/L (Freshwater)
	0.1 - 0.102 mg/L (Marine water)
	39 mg/L (Sewage treatment)
PNEC	5.27 mg/kg dwt (Fresh water sediment)
	0.527 mg/kg dwt (Marine water sediment)
PNEC	0.456 mg/kg (Soil)

1477-55-0 1,3-Benzenedimethanamine

PNEC	10 mg/L (Sewage treatment)
PNEC	12.4 mg/kg dwt (Fresh water sediment)
	1.24 mg/kg dwt (Marine water sediment)
PNEC	2.44 mg/kg (Soil)
PNEC	94 µg/L (Freshwater)
	9.4 µg/L (Marine water)

· **Additional information:**

The information is based on the valid lists at the time of manufacture (Finland 654/2020).

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see item 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the HTP, suitable respiratory protection must be worn.

· **Respiratory protection:**

If ventilation is insufficient or if workers are exposed to concentrations above the exposure limit they must use half- or full mask with gas filter A (brown, organic substances), and when grinding P2 (Iib) -type dust filter. Mask with combined filter (gas & dust) A2-P2 must be used when spraying. In the continuous long-term work it is recommended to use motored air protector or separative protector (fresh air hood or compressed air hood or such).

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· **Hand protection**



Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Wear suitable gloves tested to EN374.

May be used, gloves(breakthrough time) 4 - 8 hours: butyl rubber, nitrile rubber

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection**



Tightly sealed goggles

The eye flushing device should be located near the the paint work area.

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· Colour:	Yellowish
· Odour:	Strong
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	> 107 °C
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	1.3 Vol %
· Upper:	13 Vol %
· Flash point:	101 °C
· Ignition temperature:	395 - 405 °C
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity at 40 °C	> 20.5 mm ² /s
· Dynamic:	Not determined.
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	0.1 hPa
· Density and/or relative density	
· Density at 20 °C:	1.09 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.

· **9.2 Other information**

· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.

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Safety data sheet

(EC) 1907/2006 (REACH), Annex II, as amended by Regulation (EU) 2021/848

Date of revision: 26.04.2022
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· Change in condition	
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No specific test data related to reactivity available for this product or its ingredients.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- **10.4 Conditions to avoid**
Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
- **10.5 Incompatible materials:** No further relevant 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 hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity**
Harmful if swallowed.

· **LD/LC50 values relevant for classification:**

100-51-6 Benzyl alcohol

Oral	LD50	1,620 mg/kg (rat)
Dermal	LD50	> 2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 4,178 mg/l (rat)

1477-55-0 1,3-Benzenedimethanamine

Oral	LD50	930 mg/kg (rat)
Dermal	LD50	3,100 mg/kg (rat)
Inhalative	LC50/4 h	1,340 mg/l (rat)

72480-18-3 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with ethylenediamine

Oral	LD50	> 300 - < 2,000 mg/kg (rat)
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- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.

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Trade name: NormAcid GLU Comp. B

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- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Other information (about experimental toxicology):**
Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Swallowing may cause nausea, diarrhea, vomiting, gastro-intestinal irritation and chemical pneumonia.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

100-51-6 Benzyl alcohol

72-h EC50	770 mg/L (Algae) (OECD TG 201)
48-h EC50	230 mg/L (Daphnia magna) (OECD TG 202)
96-h LC50	460 mg/L (Fish) (EPA OPP 72-1)

57214-10-5 Formaldehyde, polymer with 1,3-benzenedimethanamine and phenol

96-h LC50	0.5 - 1 mg/L (Oncorhynchus mykiss)
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1477-55-0 1,3-Benzenedimethanamine

72-h EC50	20.3 mg/L (Algae)
48-h EC50	15.2 mg/L (Daphnia magna)
96-h LC50	87.6 mg/L (Fish)

· **12.2 Persistence and degradability**

Biodegradation:
Benzyl alcohol: readily

· **12.3 Bioaccumulative potential** Benzyl alcohol: LogPow = 1,1 (low)

· **12.4 Mobility in soil** No further relevant information available.

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

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

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· **European waste catalogue**

08 01 11* waste paint and varnish containing organic solvents or other hazardous substances

· **Uncleaned packaging:**

· **Recommendation:**

Empty, dry paint containers (hole made to the bottom) should be taken to collection centres for metallic paint packages. If this collecting/recycling centre doesn't exist, containers can be taken to a local dump pit. For more information contact your local waste disposal authorities or paint deliverer.

SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR, IMDG, IATA** UN3066

· **14.2 UN proper shipping name**

· **ADR** PAINT, ENVIRONMENTALLY HAZARDOUS
 · **IMDG** PAINT, MARINE POLLUTANT
 Marine Pollutant Chemical: Formaldehyde, polymer with 1,3-benzenedimethanamine and phenol
 · **IATA** PAINT

· **14.3 Transport hazard class(es)**

· **ADR, IMDG**



· **Class** 8 Corrosive substances.

· **IATA**



· **Class** 8 Corrosive substances.

· **14.4 Packing group**

· **ADR, IMDG, IATA** III

· **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: Formaldehyde, polymer with 1,3-benzenedimethanamine and phenol

· **Marine pollutant:**

Yes

· **Special marking (ADR):**

The environmental hazardous mark is only applicable for packages containing more than 5 litres of liquids. Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Corrosive substances.

· **Hazard identification number (Kemler code):**

80

· **EMS Number:**

F-A,S-B

· **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)** 5L

· **Transport category** 3

· **Tunnel restriction code** E

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Trade name: NormAcid GLU Comp. B

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· IMDG	
· Limited quantities (LQ)	5L
· UN "Model Regulation":	UN 3066 PAINT, 8, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** E1 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.
- **Contact:** Nor-Maali Oy, tel. +358 3 874 650 or sds@nor-maali.fi
- **Date of previous version:** 13.08.2019
- **Version number of previous version:** 2
- **Abbreviations and acronyms:**
 - Acute Tox. 4: Acute toxicity – Category 4
 - Skin Corr. 1: Skin corrosion/irritation – Category 1
 - Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 - Skin Sens. 1: Skin sensitisation – Category 1
 - Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 - Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 - Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**