

Audit - EU DK MAL Code

AQUAPON WB Epoxy Gloss Comp B

Denmark MAL Code

Audit - MAL Code

EU Denmark MAL Code:- 2-5

The MAL Code calculations are performed with product and component data.

Product is a Liquid

AQUAPON WB Epoxy Gloss Comp B - Components considered for the MAL Code calculation. {Denmark MAL Code}

WATER (49.68297455%)

CAS: 7732-18-5

Density: 1

Molecular Weight: 18.02

Boiling Point: 100

Vapour Pressure: 23.8

No LBL Factor entered or estimated from CAS Number or Boiling Point.

MAL Factor entered: 0. Limit: 0

FAD entered: 0; Lower Limit: 0

EPOXY RESIN (36.3176%)

CAS: 25068-38-6

Density: 1.16

Molecular Weight: 320.84

Vapour Pressure: 0

No LBL Factor entered or estimated from CAS Number or Boiling Point.

R Phrases: R43 Xi;R38 Xi;R36 N;R51/53

MAL Factor from Sub-Annex 2: 0

FAD:5. (Skin Sens)

FAD 5 Quotient = 36317.6

2-PROPOXYETHANOL (6.6032%)

Organic Solvent.

CAS: 2807-30-9

Density: 0.911

Relative Density: 0.91

Molecular Weight: 104.17

Boiling Point: 150.5

Vapour Pressure: 4.82

No LBL Factor entered or estimated from CAS Number or Boiling Point.

MAL Factor entered: 66. Limit: 0

FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.

FAD 3 Quotient = 0.660

2-BUTOXY ETHANOL (3.8025746%)

Organic Solvent.

CAS: 111-76-2

Density: 0.9

Relative Density: 0.9
Molecular Weight: 118.18
Boiling Point: 171.25
Vapour Pressure: 0.75
No LBL Factor entered or estimated from CAS Number or Boiling Point.
MAL Factor entered: 25. Limit: 0
FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.
FAD 3 Quotient = 0.380

FULLER'S EARTH (2.025%)

CAS: 8031-18-3
Density: 2.62
No LBL Factor entered or estimated from CAS Number or Boiling Point.
MAL Factor entered: 0. Limit: 0
FAD entered: 1; Lower Limit: 1
FAD 1 Quotient = 2.025

PETROLEUM DERIVATIVES (1.125%)

CAS: SUB100271
Density: 0
No LBL Factor entered or estimated from CAS Number or Boiling Point.
No MAL Factor calculated.
FAD: 1. (Default)
FAD 1 Quotient = 1125

QUARTZ (>10 microns) (0.15975%)

Carcinogen.
CAS: 14808-60-7
Density: 0
Relative Density: 2.6
Molecular Weight: 60.09
Boiling Point: 2230
No LBL Factor entered or estimated from CAS Number or Boiling Point.
MAL Factor entered: 0. Limit: 0
FAD entered: 1; Lower Limit: 0.1
FAD 1 Quotient = 1.598

LUBRICANT (0.1125%)

CAS: SUB102537
Density: 0
No LBL Factor entered or estimated from CAS Number or Boiling Point.
No MAL Factor calculated.
FAD: 1. (Default)
FAD 1 Quotient = 112.5

POLYURETHANE RESIN (0.09%)

CAS: SUB100561
Density: 0
No LBL Factor entered or estimated from CAS Number or Boiling Point.
No MAL Factor calculated.
FAD: 1. (Default)
FAD 1 Quotient = 90

MAGNESIUM OXIDE (0.045%)

CAS: 1309-48-4

Density: 2.58

Relative Density: 3.6

Molecular Weight: 40.31

Boiling Point: 3600

No LBL Factor entered or estimated from CAS Number or Boiling Point.

MAL Factor entered: 0. Limit: 0

FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.

FAD 1 Quotient = 0.45

QUARTZ (<10 microns) (0.02025%)

Carcinogen.

CAS: 14808-60-7

Density: 0

Relative Density: 2.6

Molecular Weight: 60.09

Boiling Point: 2230

No LBL Factor entered or estimated from CAS Number or Boiling Point.

MAL Factor entered: 0. Limit: 0

FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.

FAD 6 Quotient = 0.002

FAD 3 Quotient = 0.020

GLYCOL ETHER (0.0051597%)

CAS: SUB102538

Density: 0

No LBL Factor entered or estimated from CAS Number or Boiling Point.

No MAL Factor calculated.

FAD: 1. (Default)

FAD 1 Quotient = 5.160

SODIUM HYDROXIDE (0.00405%)

CAS: 1310-73-2

Density: 2.1

Relative Density: 2.13

Molecular Weight: 40

Boiling Point: 1390

Vapour Pressure: 0.097507995

No LBL Factor entered or estimated from CAS Number or Boiling Point.

MAL Factor entered: 0. Limit: 0

FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.

FAD 4 Quotient = 0.004

FAD 3 Quotient = 0.101

ETHYL ALCOHOL (0.0036855%)

Organic Solvent.

CAS: 64-17-5

Density: 0.786

Relative Density: 0.8

Molecular Weight: 46.08

Boiling Point: 78.29

Vapour Pressure: 42.95

LBLFactor = 200 (CAS=64175)

MAL Factor entered: 7. Limit: 0

FAD entered: 1; Lower Limit: 0

FAD 1 Quotient = 3.686

ETHYLENE GLYCOL (0.0034254%)

Organic Solvent.

CAS: 107-21-1

Density: 1.11

Relative Density: 1.1

Molecular Weight: 62.07

Boiling Point: 197.4

Vapour Pressure: 0.05

No LBL Factor entered or estimated from CAS Number or Boiling Point.

MAL Factor entered: 0. Limit: 0

FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.

FAD 2 Quotient = 0.000

DIPROPYLENE GLYCOL (0.000288%)

CAS: 25265-71-8

Density: 0.881

Molecular Weight: 134.2

Boiling Point: 230.5

Vapour Pressure: 0.01

No LBL Factor entered or estimated from CAS Number or Boiling Point.

MAL Factor entered: 0. Limit: 0

FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.

FAD 1 Quotient = 0.003

METHYL ALCOHOL (0.0002583%)

Organic Solvent.

CAS: 67-56-1

Density: 0.792

Relative Density: 0.79

Molecular Weight: 32.05

Boiling Point: 64.7

Vapour Pressure: 126.96

LBLFactor = 100 (BP=64.7)

MAL Factor entered: 54. Limit: 0

FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.

FAD 6 Quotient = 0.000

FAD 3 Quotient = 0.000

FORMALDEHYDE (0.00024975%)

Carcinogen.

CAS: 50-00-0

Density: 1.09

Relative Density: 0.812

Molecular Weight: 30.03

Boiling Point: 98

Vapour Pressure: 1

No LBL Factor entered or estimated from CAS Number or Boiling Point.

MAL Factor entered: 2500. Limit: 0
FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.
FAD 6 Quotient = 0.000
FAD 3 Quotient = 0.002

ISOTHIAZOLONE SOLUTION (0.00002205%)

CAS: 55965-84-9
Density: 0.9
Molecular Weight: 264.76
No LBL Factor entered or estimated from CAS Number or Boiling Point.
No MAL Factor calculated.
FAD: 1. (Default)
FAD 1 Quotient = 0.022

1,4-DIOXANE (0.00001215%)

Organic Solvent.
Carcinogen.
CAS: 123-91-1
Density: 1.03
Relative Density: 1.03
Molecular Weight: 88.12
Boiling Point: 101.15
Vapour Pressure: 30.75
No LBL Factor entered or estimated from CAS Number or Boiling Point.
MAL Factor entered: 390. Limit: 0
FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.
FAD 6 Quotient = 0.000
FAD 3 Quotient = 0.000

Density = 1.065. Entered value.

Figure-before-the dash = 2

WATER(@49.68%). MAL Factor = 0. Total increased by $49.68 \times 0 = 0$. Running Total = 0
EPOXY RESIN(@36.32%). MAL Factor = 0. Total increased by $36.32 \times 0 = 0.00$. Running Total = 0.00
2-PROPOXYETHANOL(@6.60%). MAL Factor = 66. Total increased by $6.60 \times 66 = 435.81$. Running Total = 435.81
2-BUTOXY ETHANOL(@3.80%). MAL Factor = 25. Total increased by $3.80 \times 25 = 95.06$. Running Total = 530.88
FULLER'S EARTH(@2.02%). MAL Factor = 0. Total increased by $2.02 \times 0 = 0$. Running Total = 530.88
QUARTZ (>10 microns)(@0.16%). MAL Factor = 0. Total increased by $0.16 \times 0 = 0$. Running Total = 530.88
MAGNESIUM OXIDE(@0.04%). MAL Factor = 0. Total increased by $0.04 \times 0 = 0$. Running Total = 530.88
QUARTZ (<10 microns)(@0.02%). MAL Factor = 0. Total increased by $0.02 \times 0 = 0$. Running Total = 530.88
SODIUM HYDROXIDE(@0.00%). MAL Factor = 0. Total increased by $0.00 \times 0 = 0$. Running Total = 530.88
ETHYL ALCOHOL(@0.00%). MAL Factor = 7. Total increased by $0.00 \times 7 = 0.03$. Running Total = 530.90
ETHYLENE GLYCOL(@0.00%). MAL Factor = 0. Total increased by $0.00 \times 0 = 0$. Running Total = 530.90
DIPROPYLENE GLYCOL(@0.00%). MAL Factor = 0. Total increased by $0.00 \times 0 = 0$. Running Total = 530.90
METHYL ALCOHOL(@0.00%). MAL Factor = 54. Total increased by $0.00 \times 54 = 0.01$. Running Total = 530.92
FORMALDEHYDE(@0.00%). MAL Factor = 2500. Total increased by $0.00 \times 2500 = 0.62$. Running Total = 531.54
1,4-DIOXANE(@0.00%). MAL Factor = 390. Total increased by $0.00 \times 390 = 0.00$. Running Total = 531.54

Figure-before-the-dash calculated as 2. Via MAL Factor Total * Density (531.54×1.065) giving a MAL Number of 566
MAL Number = Density (1.065) * Sum (531.54) = 566

Figure-after-the-dash = 5. Calculated from component data.

EPOXY RESIN (@36.3176%) Increasing Total for FAD5 by 36317.6, giving 36317.6
2-PROPOXYETHANOL (@6.60%) Increasing Total for FAD3 by 0.66032, giving 0.66032

2-BUTOXY ETHANOL (@3.80%) Increasing Total for FAD3 by 0.38025746, giving 1.04057746
FULLER'S EARTH (@2.02%) Increasing Total for FAD1 by 2.025, giving 2.025
PETROLEUM DERIVATIVES (@1.12%) Increasing Total for FAD1 by 1125, giving 1127.025
QUARTZ (>10 microns) (@0.16%) Increasing Total for FAD1 by 1.5975, giving 1128.6225
LUBRICANT (@0.11%) Increasing Total for FAD1 by 112.5, giving 1241.1225
POLYURETHANE RESIN (@0.09%) Increasing Total for FAD1 by 90, giving 1331.1225
MAGNESIUM OXIDE (@0.04%) Increasing Total for FAD1 by 0.45, giving 1331.5725
QUARTZ (<10 microns) (@0.02%) Increasing Total for FAD6 by 0.002025, giving 0.002025
QUARTZ (<10 microns) (@0.02%) Increasing Total for FAD3 by 0.02025, giving 1.06082746
GLYCOL ETHER (@0.01%) Increasing Total for FAD1 by 5.1597, giving 1336.7322
SODIUM HYDROXIDE (@0.00%) Increasing Total for FAD4 by 0.00405, giving 0.00405
SODIUM HYDROXIDE (@0.00%) Increasing Total for FAD3 by 0.10125, giving 1.16207746
ETHYL ALCOHOL (@0.00%) Increasing Total for FAD1 by 3.6855, giving 1340.4177
ETHYLENE GLYCOL (@0.00%) Increasing Total for FAD2 by 0.00034254, giving 0.00034254
DIPROPYLENE GLYCOL (@0.00%) Increasing Total for FAD1 by 0.00288, giving 1340.42058
METHYL ALCOHOL (@0.00%) Increasing Total for FAD6 by 0.000012915, giving 0.002037915
METHYL ALCOHOL (@0.00%) Increasing Total for FAD3 by 0.0002583, giving 1.16233576
FORMALDEHYDE (@0.00%) Increasing Total for FAD6 by 0.00024975, giving 0.002287665
FORMALDEHYDE (@0.00%) Increasing Total for FAD3 by 0.0024975, giving 1.16483326
ISOTHIAZOLONE SOLUTION (@0.00%) Increasing Total for FAD1 by 0.02205, giving 1340.44263
1,4-DIOXANE (@0.00%) Increasing Total for FAD6 by 0.000001215, giving 0.002288880
1,4-DIOXANE (@0.00%) Increasing Total for FAD3 by 0.0001215, giving 1.16495476
Figure-after-the-dash =5. Total of components with FAD=5 is >=1.

Low Boiling Liquid = False.

ETHYL ALCOHOL (@0.00%) Total increased by $0.00 \cdot 7 / 200 = 0.00$. Running Total = 0.00

METHYL ALCOHOL (@0.00%) Total increased by $0.00 \cdot 54 / 100 = 0.00$. Running Total = 0.00

Density * (Sum of components Concentration * MALFactor/LBLFactor) = 0

Recommended Usage Temperature is < 40C, hence no MAL Code in use is assigned.

Audit - RFU MAL Code

EU Denmark RFU MAL Code:-

Nothing was found

New Fields for IA3.3

MAL-code : 2-5

MAL Number : 566.095

MAL Number (RFU) : Not applicable.

Protection based on MAL : **According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:**

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

MAL-code: 2-5

Application: When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new* booths and cabins with non-atomizing guns.

- Protective clothing must be worn.

When using scraper or knife, brush, roller, etc. for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Gas filter mask and protective clothing must be worn.

When spraying in existing* spray booths, if the operator is outside the spray zone.

- Air-supplied full mask and protective clothing must be worn.

During non-atomizing spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. During downtimes, cleaning and repair of closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied half mask, protective clothing and eye protection must be worn.

During all spraying where atomization occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, protective clothing and hood must be worn.

Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc. must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

*See Regulations.

**Protection based on R-F-U
MAL** : Not available.

Not available.

Not available.