Audit - EU DK MAL Code

AQUAPON WB Epoxy Light Gray Comp A

Denmark MAL Code

Audit - MAL Code

EU Denmark MAL Code:- 3-5

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

Product is a Liquid

AQUAPON WB Epoxy Light Gray Comp A - Components considered for the MAL Code calculation. {Denmark MAL Code}

WATER (32.154%)
- CAS: 7732-18-5
- Density: 1
- Molecular Weight: 18.02
- Boiling Point: 100
- Vapour Pressure: 17.5
- No LBL Factor entered or estimated from CAS Number or Boiling Point.
- MAL Factor entered: 0. Limit: 0
- FAD entered: 0; Lower Limit: 0

BARIUM SULFATE (18.4984120464%)
- CAS: 7727-43-7
- Density: 4.5
- Molecular Weight: 233.4
- Boiling Point: 1599.85
- No LBL Factor entered or estimated from CAS Number or Boiling Point.
- MAL Factor entered: 0. Limit: 0
- FAD entered: 1; Lower Limit: 0
- FAD 1 Quotient = 18498.412

POLYAMIDOAMINE EPOXY ADDUCT (15.4925%)
- CAS: SUB121945
- Density: 0
- No LBL Factor entered or estimated from CAS Number or Boiling Point.
- No MAL Factor calculated.
- FAD:5. (Skin Sens)
- FAD 5 Quotient = 15492.5

TITANIUM DIOXIDE (14.45412%)
- CAS: 13463-67-7
- Density: 4.1
- Relative Density: 4.26
- Molecular Weight: 79.9
- Boiling Point: 2750
- No LBL Factor entered or estimated from CAS Number or Boiling Point.
- MAL Factor entered: 0. Limit: 0
- FAD entered: 1; Lower Limit: 0
- FAD 1 Quotient = 14454.12

2-BUTOXY ETHANOL (7.74625%)
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 = 0.775

2-PROPOXYETHANOL (3.873125%)
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 = 0.387

TOLUENE (3.0985%)
Organic Solvent.
CAS: 108-88-3
Density: 0.87
Relative Density: 0.87
Molecular Weight: 92.14
Boiling Point: 110.6
Vapour Pressure: 23.17
No LBL Factor entered or estimated from CAS Number or Boiling Point.
MAL Factor entered: 74. Limit: 0
FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.
FAD 3 Quotient = 0.310

FULLER'S EARTH (1.215%)
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 = 1.215

non-hazardous resinous modifier (0.774625%)
CAS: SUB138700
Density: 0
No LBL Factor entered or estimated from CAS Number or Boiling Point.
No MAL Factor calculated.

FAD: 1. (Default)
FAD 1 Quotient = 774.625
SILICA (0.7148505%)
CAS: 7631-86-9
Density: 2
Relative Density: 2.2
Molecular Weight: 60.08
Boiling Point: 2230
No LBL Factor entered or estimated from CAS Number or Boiling Point.
MAL Factor entered: 0. Limit: 0
R Phrases: None
FAD: 1. (Default)
FAD 1 Quotient = 714.850
IRON HYDROXIDE OXIDE (0.567%)
CAS: 20344-49-4
Density: 4.1
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 = 5.67
ALUMINUM HYDROXIDE (0.47133%)
CAS: 21645-51-2
Density: 2.42
Molecular Weight: 78
Vapour Pressure: 0.0675
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 = 4.713
CARBON BLACK (0.327%)
CAS: 1333-86-4
Density: 1.8
Relative Density: 1.95
Molecular Weight: 12.01
Boiling Point: 4200
Vapour Pressure: 0
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 = 0.013
FAD 3 Quotient = 0.033
QUARTZ (>10 microns) (0.2827224%)
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 = 2.827
STRONTIUM SULFATE (0.18876%)
CAS: 7759-02-6
Density: 3.96
Molecular Weight: 183.68
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 = 1.888
TRIMETHYLOLPROPANE (0.0706995%)
CAS: 77-99-6
Density: 1.084
Molecular Weight: 134.2
Boiling Point: 304.2
Vapour Pressure: 0
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 = 0.707
MAGNESIUM OXIDE (0.027%)
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 = 0.27
Polypropylene glycol (MW>=2000) (0.0145%)
CAS: 25322-69-4
Density: 0
Molecular Weight: 2000
Vapour Pressure: 0
No LBL Factor entered or estimated from CAS Number or Boiling Point.
R Phrases: None
MAL Factor from Sub-Annex 2: 0
FAD: 1. (Default)
FAD 1 Quotient = 14.5
QUARTZ (<10 microns) (0.0140376%)
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 = 0.001
FAD 3 Quotient = 0.014

PETROLEUM DISTILLATES (0.00725%)
CAS: 64742-54-7
Density: 0.86
Boiling Point: 478.5
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 = 0.072

polyether fluid (0.00638%)
CAS: SUB140475
Density: 0
No LBL Factor entered or estimated from CAS Number or Boiling Point.
No MAL Factor calculated.
FAD: 1. (Default)
FAD 1 Quotient = 6.38

SILICA GEL (0.00087%)
CAS: 112926-00-8
Density: 1.5
Molecular Weight: 60.08
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 = 0.009

COPPER (0.0000434148%)
CAS: 7440-50-8
Density: 8.78
Relative Density: 8.9
Molecular Weight: 63.55
Boiling Point: 2595
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

ZINC (0.0000245388%)
CAS: 7440-66-6
Density: 7.1
Relative Density: 7.14
Molecular Weight: 65.37
Boiling Point: 908
Vapour Pressure: 0.000000075
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 = 0.000
Density = 1.375. Entered value.
Figure-before-the dash = 3
WATER(@32.15%). MAL Factor = 0. Total increased by 32.15*0=0. Running Total = 0
BARIUM SULFATE(@18.50%). MAL Factor = 0. Total increased by 18.50*0=0. Running Total = 0
TITANIUM DIOXIDE(@14.45%). MAL Factor = 0. Total increased by 14.45*0=0. Running Total = 0
2-BUTOXY ETHANOL(@7.75%). MAL Factor = 25. Total increased by 7.75*25=193.66. Running Total = 193.66
2-PROPOXYETHANOL(@3.87%). MAL Factor = 66. Total increased by 3.87*66=255.63. Running Total = 449.28
TOLUENE(@3.10%). MAL Factor = 74. Total increased by 3.10*74=229.29. Running Total = 678.57
FULLER'S EARTH(@1.22%). MAL Factor = 0. Total increased by 1.22*0=0. Running Total = 678.57
SILICA(@0.71%). MAL Factor = 0. Total increased by 0.71*0=0. Running Total = 678.57
IRON HYDROXIDE OXIDE(@0.57%). MAL Factor = 0. Total increased by 0.57*0=0. Running Total = 678.57
ALUMINUM HYDROXIDE(@0.47%). MAL Factor = 0. Total increased by 0.47*0=0. Running Total = 678.57
CARBON BLACK(@0.33%). MAL Factor = 0. Total increased by 0.33*0=0. Running Total = 678.57
QUARTZ (>10 microns)(@0.28%). MAL Factor = 0. Total increased by 0.28*0=0. Running Total = 678.57
STRONTIUM SULFATE(@0.19%). MAL Factor = 0. Total increased by 0.19*0=0. Running Total = 678.57
TRIMETHYLOLPROPANE(@0.07%). MAL Factor = 0. Total increased by 0.07*0=0. Running Total = 678.57
MAGNESIUM OXIDE(@0.03%). MAL Factor = 0. Total increased by 0.03*0=0. Running Total = 678.57
Polypropylene glycol (MW>=2000)(@0.01%). MAL Factor = 0. Total increased by 0.01*0=0.00. Running Total = 678.57
QUARTZ (<10 microns)(@0.01%). MAL Factor = 0. Total increased by 0.01*0=0. Running Total = 678.57
PETROLEUM DISTILLATES(@0.01%). MAL Factor = 0. Total increased by 0.01*0=0. Running Total = 678.57
SILICA GEL(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 678.57
COPPER(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 678.57
ZINC(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 678.57
Figure-before-the-dash calculated as 3. Via MAL Factor Total * Density (678.57 * 1.375) giving a MAL Number of 933
MAL Number = Density (1.375) * Sum (678.57) = 933
Figure-after-the-dash = 5. Calculated from component data.
BARIUM SULFATE (@18.50%) Increasing Total for FAD1 by 18498.4120464, giving 18498.4120464
POLYAMIDOAMINE EPOXY ADDUCT (@15.4925%) Increasing Total for FAD5 by 15492.5, giving 15492.5
TITANIUM DIOXIDE (@14.45%) Increasing Total for FAD1 by 14454.12, giving 32952.5320464
2-BUTOXY ETHANOL (@7.75%) Increasing Total for FAD3 by 0.774625, giving 0.774625
2-PROPOXYETHANOL (@3.87%) Increasing Total for FAD3 by 0.3873125, giving 1.1619375
TOLUENE (@3.10%) Increasing Total for FAD3 by 0.30985, giving 1.4717875
FULLER'S EARTH (@1.22%) Increasing Total for FAD1 by 1.215, giving 32953.7470464
non-hazardous resinous modifier (@0.77%) Increasing Total for FAD1 by 774.625, giving 33728.3720464
SILICA (@0.71%) Increasing Total for FAD1 by 714.8505, giving 34443.2225464
IRON HYDROXIDE OXIDE (@0.57%) Increasing Total for FAD1 by 5.67, giving 34448.8925464
ALUMINUM HYDROXIDE (@0.47%) Increasing Total for FAD1 by 4.7133, giving 34453.6058464
CARBON BLACK (@0.33%) Increasing Total for FAD6 by 0.01308, giving 0.01308
CARBON BLACK (@0.33%) Increasing Total for FAD3 by 0.0327, giving 1.5044875
QUARTZ (>10 microns) (@0.28%) Increasing Total for FAD1 by 2.827224, giving 34456.4330704
STRONTIUM SULFATE (@0.19%) Increasing Total for FAD1 by 1.8876, giving 34458.3206704
TRIMETHYLOLPROPANE (@0.07%) Increasing Total for FAD1 by 0.706995, giving 34459.0276654
MAGNESIUM OXIDE (@0.03%) Increasing Total for FAD1 by 0.27, giving 34459.2976654
Polypropylene glycol (MW>=2000) (@0.01%) Increasing Total for FAD1 by 14.5, giving 34473.7976654
QUARTZ (<10 microns) (@0.01%) Increasing Total for FAD6 by 0.00140376, giving 0.01448376
QUARTZ (<10 microns) (@0.01%) Increasing Total for FAD3 by 0.0140376, giving 1.5185251

PETROLEUM DISTILLATES (@0.01%) Increasing Total for FAD1 by 0.0725, giving 34473.8701654
polyether fluid (@0.01%) Increasing Total for FAD1 by 6.38, giving 34480.2501654
SILICA GEL (@0.00%) Increasing Total for FAD1 by 0.0087, giving 34480.2588654
COPPER (@0.00%) Increasing Total for FAD2 by 0.0000144716, giving 0.0000144716
ZINC (@0.00%) Increasing Total for FAD1 by 0.000245388, giving 34480.259110788
Figure-after-the-dash =5. Total of components with FAD=5 is >=1.
Low Boiling Liquid = Empty. Insufficient information available.
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 : 3-5

MAL Number : 933.036

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: 3-5
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.

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. 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.

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

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

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

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

- Air-supplied full mask and protective clothing 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.