



Test report NB1417



ÉMI-TÜV

Több biztonság
Nagyobb érték

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02/ 10/ 2013
Budapest
R-421641-3
1/7 pages

Date of application:

26/06/2013

Subject of application:

BALAKRYL UNI LESK – univerzální barva na kov a dřevo
Conformity test according to EN 71-3, EN71-9 concerning
2009/48/EC Safety of toys directive

Description of Sample:

BALAKRYL UNI LESK – univerzální barva na kov a dřevo
BALAKRYL UNI LESK BÁZE /L, Z, D/

| Sample V2068 | | | | | | | |
|--------------|--------------|------|------|--------------|---------------|------|------|
| 17 | 18. | 19 | 20 | 21 | 22 | 24 | 25 |
| 1000 | 0101 0111 | 0199 | 1999 | 0215 0650 | 0225, 0245 | 0455 | 0515 |

| Sample | | | | | | | |
|--------|--------------|------|------|------|----|----|-----|
| 26 | 27 | 28 | 29 | 30 | 31 | 32 | --- |
| 0603 | 0620 0640 | 0750 | 0820 | 0840 | D | Z | --- |

The sample was submitted by the client.

Date of Testing:

26/06/2013 - 21/07/2013

Documentation:

safety data sheet

Test method:

EN 71-3:2013, EN 71-9:2005 + A1:2007,
KERMI HPLC-16, EN 1122:2001, EPA Method 8061 A



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TEST RESULTS

| | |
|---------|---|
| Sample: | BALAKRYL UNI LESK – univerzální barva na kov a dřevo |
|---------|---|

EN 71-3:2013 Safety of toys / Migration of certain elements

| TEST PARAMETER | TEST RESULT mg/kg | | | | LIMIT VALUE mg/kg in scraped-off toy material | |
|-------------------|-------------------|-------------|-------------|----------|---|-------------|
| | Samples: | 17,18,19,20 | 21,22,24,25 | 26,27,28 | | 29,30,31,32 |
| Aluminium (Al) | | 47.3 | 1.9 | 34.0 | 0.6 | 70000 |
| Antimony (Sb) | | < 0.025 | < 0.025 | < 0.025 | < 0.025 | 560 |
| Arsenic (As) | | < 0.05 | < 0.05 | < 0.05 | < 0.05 | 47 |
| Barium (Ba) | | 0.2 | 0.15 | < 0.15 | < 0.15 | 18750 |
| Boron (B) | | < 0.25 | < 0.25 | < 0.25 | < 0.25 | 15000 |
| Cadmium (Cd) | | < 0.025 | < 0.025 | < 0.025 | < 0.025 | 23 |
| Chromium (Cr III) | | 0.1 | < 0.025 | < 0.025 | < 0.025 | 460 |
| Chromium, Cr (VI) | | 0.1 | < 0.025 | < 0.025 | < 0.025 | 0.2 |
| Cobalt (Co) | | 0.1 | < 0.025 | < 0.025 | < 0.025 | 130 |
| Copper (Cu) | | 5.4 | < 0.025 | < 0.025 | 1.3 | 7700 |
| Lead (Pb) | | 0.1 | < 0.025 | 0.01 | < 0.025 | 160 |
| Manganese (Mn) | | 29.0 | 0.1 | 0.1 | 0.2 | 15000 |
| Mercury (Hg) | | < 0,025 | < 0,025 | < 0,025 | < 0,025 | 94 |
| Nickel (Ni) | | 0.3 | < 0.05 | < 0.05 | < 0.05 | 930 |
| Selenium (Se) | | < 0.05 | < 0.05 | < 0.05 | < 0.05 | 460 |
| Strontium (Sr) | | 2.0 | < 0.05 | 0.1 | < 0.05 | 56000 |
| Tin (Sn) | | 0.1 | < 0.05 | < 0.05 | < 0.05 | 180000 |
| Organic tin* | | nd | nd | nd | nd | 12 |
| Zinc (Zn) | | < 0,25 | < 0.25 | 0.9 | < 0.25 | 46000 |

*Organic tin compounds: MBT, DBT, TBT, TTBT, MOT, DOT, TPHT, TCyT


EN 71-9:2005 Safety of toys, Organic chemical compounds
2B- Determination of colorants

| TEST PARAMETER Colorants /CAS no. | TEST RESULT mg/kg | | | | LIMIT VALUE mg/kg |
|--------------------------------------|----------------------|-------------|-------------|----------|-------------------------|
| | Sample: | 17,18,19,20 | 21,22,24,25 | 26,27,28 | |
| Direct Blue 6 /2602-46-2 | | | | | 10 |
| | | | | | |
| Direct Black 38 /1937-37-7 | | | | | |
| Direct Red 6 /573-58-0 | | | | | |
| Disperse Blue 1 /2475-45-8 | | | | | |
| Disperse Blue 3 /2475-46-9 | | | | | |
| Disperse Blue 106/12223-01-7 | | | | | |
| Disperse Blue 124/61951-51-7 | | | | | |
| Disperse Brown 1 /23355-64-8 | | | | | |
| Disperse Orange 3 /730-40-5 | | | | | |
| Disperse Orange 11 /82-280-0 | | | | | |
| Disperse Orange 37 /13301-61-6 | | | | | |
| Disperse Red 1 /2872-52-8 | | | | | |
| Disperse Yellow 3 /2832-40-8 | | | | | |
| Disperse Yellow 9 /6373-73-5 | | | | | |
| Disperse Yellow 23/6250-23-3 | | | | | |
| Solvent Yellow 1/60-09-3 | | | | | |
| Solvent Yellow 2 /60-11-7 | | | | | |
| Solvent Yellow 3 /97-56-3 | | | | | |
| Basic Red 9 /569-61-9 | | | | | |
| Basic Violet 1 /8004-87-3 | | | | | |
| Basic Violet 14 /632-99-5 | | | | | |
| Basic Violet 3 /548-62-9 | | | | | |
| Acid Red 26 /3761-53-3 | | | | | |
| Acid Violet 49 /1694-09-3 | | | | | |

n.d.: not detected; detection limit: 5 mg/kg


2C Determination of primary aromatic amines:

| TEST PARAMETER Primary aromatic amines / CAS no. | TEST RESULT mg/kg | | | | LIMIT VALUE mg/kg |
|--|----------------------|-------------|-------------|----------|-------------------------|
| | Sample: | 17,18,19,20 | 21,22,24,25 | 26,27,28 | |
| Aniline / 62-52-3 | n.d. | | | | 10 |
| o-Toluidine / 95-53-4 | n.d. | | | | |
| 2-Methoxyaniline / 90-04-0 | n.d. | | | | |
| 4-Chloraniline / 106-47-8 | n.d. | | | | |
| 2-naphthylamine / 91-59-8 | n.d. | | | | |
| Benzidine / 92-87-5 | n.d. | | | | |
| 3,3-Dimethylbenzidine / 119-93-7 | n.d. | | | | |
| 3,3-Dichlorobenzidine / 91-94-1 | n.d. | | | | |
| 3,3-Dimethoxybenzidine / 119-90-4 | n.d. | | | | |

n.d.: not detected; detection limit : 2 mg/kg

2D Monomers (migration)

| TEST PARAMETER | TEST RESULT mg/l | LIMIT VALUE mg/l |
|-----------------------|----------------------|---------------------|
| Sample: | average of 16 paints | |
| Acrylamide/79-06-1 | n.d. | 0.02 |
| Bisphenol A/ 80-05-7 | n.d. | 0.1 |
| Formaldehyde/ 50-00-0 | n.d. | 2.5 |
| Phenol /108-95-2 | n.d. | 15 |
| Styrene/100-42-5 | n.d. | 0.75 |

Detection limit: acrylamide: 0.01 mg/l, Bisphenol A: 0.01 mg/l, phenol: 0.1 mg/l, styrene: 0.001 mg/l n.d.:not detected

2E Migration of solvents

| TEST PARAMETER | TEST RESULT mg/l | | | | LIMIT VALUE mg/l |
|--|---------------------|-------------|-------------|----------|------------------------|
| | Samples: | 17,18,19,20 | 21,22,24,25 | 26,27,28 | |
| Trichloroethylene (79-01-6) | nd. | nd. | nd. | nd. | 0,02 |
| Dichloromethane (75-09-2) | nd. | nd. | nd. | nd. | 0,06 |
| 2-Methoxyethyl ace- tate (110-49-6) | nd. | nd. | nd. | nd. | 0,5 |
| 2-Ethoxyethanol (110-80-5) | nd. | nd. | nd. | nd. | 0,5 |
| 2-Ethoxyethyl ace- tate (111-15-9) | nd. | nd. | nd. | nd. | 0,5 |
| Bis(2-methoxyethyl) ether (111-96-6) | nd. | nd. | nd. | nd. | 0,5 |
| 2-Methoxypropyl acetate (70657-70-4) | nd. | nd. | nd. | nd. | 0,5 |
| Methanol (67-56-1) | nd. | nd. | nd. | nd. | 5 |
| Nitrobenzene (98- 95-3) | nd. | nd. | nd. | nd. | 0,02 |
| Cyclohexanone (108-88-3) | nd. | nd. | nd. | nd. | 46 |
| 3,5,5-Trimethyl-2- cyclohexene-1-one (78-59-1) | nd. | nd. | nd. | nd. | 3 |
| Toluene (108-88-3) | nd. | nd. | nd. | nd. | 2 |
| Ethylbenzene (100- 41-4) | nd. | nd. | nd. | nd. | 1 |
| Xylene (all iso- mers)(various No.) | nd. | nd. | nd. | nd. | 2 (total) |

Detection limit: Trichlorethylene, Dichlormethane: 0,005 mg/l, Toluene, Ethylbenzene, Xylenes: 0,001 mg/l
 Methanol: 1,0 mg/l, Nitrobenzene, Cyclohexanone, 3,5,5-trimethyl-2-cyclohexene-1-on 0.1 mg/l
 2-metoxietil acetate, 2-etoxiethanol, 2-etoxietil acetate, Bis(2-metoxietil) eter 1-methoxyethyl-2-
 propilacetate 0,10 mg/l

n.d.: not detected


2H Preservatives (migration):

| TEST PARAMETER | TEST RESULT | LIMIT VALUE |
|------------------------|----------------------|-------------|
| Sample: | average of 16 paints | |
| Phenol /108-95-2 | n.d. | 15 mg/l |
| Formaldehyde / 50-00-0 | n.d. | 0.05 % |
| MIT/ 2682-20-4 | n.d. | 10 mg/kg |
| CIT/ 26172-55-4 | n.d. | 10 mg/kg |
| BIT / 2634-33-5 | n.d. | 15 mg/kg |

Detection limit: phenol: 0.1 mg/l , MIT: 1 mg/kg, CIT: 1 mg/kg, BIT: 5 mg/kg
 n.d.: not detected

Lead, cadmium content: EN 1122:2001 ICP-MS

| TEST PARAMETER | TEST RESULT mg/kg \pm 10% | LIMIT VALUE mg/kg |
|----------------|--------------------------------|----------------------|
| Sample : | average of 16 paints | |
| Cadmium (Cd) | < 0,1 | 100 |
| Lead (Pb) | 1,6 | 1000 |

detection limit: Cd 0,1, Pb 0,25 mg/kg


Plasticizers:

| TEST PARAMETER | TEST RESULT % m/m | LIMIT VALUE % m/m |
|--|----------------------|----------------------|
| Sample: | average of 16 paints | |
| Di-methyl phthalate / 131-11-3 | n.d. | --- |
| Di-ethyl phthalate / 84-66-2 | n.d. | --- |
| Di-propyl phthalate / 131-16-8 | n.d. | --- |
| Di-buthyl phthalate / 84-74-2 | n.d. | 0.1 |
| Di-iso-buthyl phthalate / 84-69-5 | n.d. | 0.1 |
| Benzyl buthyl phthalate BBP /85-68-7 | n.d. | 0.1 |
| Di-n-octyl phthalate / 117-84-0 | n.d. | 0.1 |
| Di-iso-octyl phthalate / 27554-26-3 | n.d. | --- |
| Di-nonyl phthalate / 84-76-4 | n.d. | --- |
| Di-iso-nonyl phthalate / 68515-48-0 | n.d. | 0.1 |
| Di-decyl phthalate / 84-77-5 | n.d. | --- |
| Di-iso-decyl phthalate / 26761-40-0 | n.d. | --- |
| Di-un-decyl phthalate / 3648-20-2 | n.d. | --- |
| Bis(2-ethylhexyl) phthalate / 117-81-7 | n.d. | 0.1 |
| Di-cyclohexyl phthalate / 84-61-7 | n.d. | --- |
| Bis(2-methoxyethyl) phthalate / 117-82-8 | n.d. | --- |
| Di-allyl phthalate / 131-17-9 | n.d. | --- |

n.d.:not detected, detection limit: 0.001 % m/m



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