

Frankenthal, 16.9.2016

## REACH compliance statement

All products available from CMC Klebetechnik in the table below contain a substance from the so-called candidate list (list of substances of very high concern or SVHCs, date of issue Jun 20, 2016 with a total of 169 entries). The amount of the substance exceeds the threshold of 0.1% (w/w). With this statement we fulfill our obligations according to article 33 of regulation (EC) No 1907/2006 (REACH) and forward the letter from our supplier DuPont along the supply chain. The following substance can be found in the below products:

**N,N-dimethyl acetamide (DMAc), CAS-No. 127-19-5  
concentration range 0.1 to 0.6% (w/w)**

This substance is a residual solvent in the Kapton<sup>®</sup> substrate (the concentration refers to the Kapton<sup>®</sup> film only). According to DuPont the release rate of DMAc at ambient temperatures is below the detection limit (see the original letter by DuPont below). Estimated exposures to downstream workers handling those products and to the general public using the final products are all well below the levels of concern.

**Please note that despite the reporting requirement all below products still comply with REACH;** our only obligation is to forward information to our customers. Furthermore the following Kapton<sup>®</sup> films are **not concerned**:

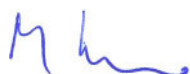
- Kapton<sup>®</sup> HN, thickness  $\leq 25 \mu\text{m}$
- Kapton<sup>®</sup> MT, thickness  $\leq 50 \mu\text{m}$
- Kapton<sup>®</sup> CR, thickness  $\leq 100 \mu\text{m}$

In these films the residual content of DMAc is below the threshold of 0.1%. Although DuPont state below that meanwhile also Kapton<sup>®</sup> 200HN (50  $\mu\text{m}$ ) is produced in a way that keeps DMAc content below the limit it will still be listed here as long as we have older product on stock.

Table of all products concerned:

| type      | remark   |
|-----------|--|
| CMC 383XX | flat copper conductors insulated with Kapton <sup>®</sup> HN<br>Please note: The residual concentration of DMAc is valid for an insulation of Kapton <sup>®</sup> 200HN (50 $\mu\text{m}$ ) and more. For the thinner Kapton <sup>®</sup> 100HN (25 $\mu\text{m}$ ) that concentration is below the threshold of 0.1%! |

|                      |   |
|----------------------|---|
| CMC 70041            | Kapton® 100MT+ without adhesive (25 µm)                               |
| CMC 70042            | Kapton® 150MT+ without adhesive (37,5 µm)                             |
| CMC 70043            | Kapton® 200MT+ without adhesive (50 µm)                               |
| CMC 70050            | Kapton® 200HN without adhesive (50 µm)                                |
| CMC 70075            | Kapton® 300HN without adhesive (75 µm)                                |
| CMC 70076            | Kapton® 300MT without adhesive (75 µm)                                |
| CMC 70125            | Kapton® 500HN without adhesive (125 µm)                               |
| CMC 70105, CMC 70905 | Kapton® 200HN coated with acrylic adhesive                            |
| CMC 70115            | Kapton® 200HN coated with polysiloxane adhesive                       |
| CMC 70175, CMC 70960 | Kapton® 500HN coated with heat seal adhesive based on polyester resin |
| CMC 70430            | Kapton® 200MT+ coated with acrylic adhesive                           |
| CMC 70849            | Kapton® 500HN coated with polysiloxane adhesive                       |
| CMC 70810, CMC 70906 | Kapton® 300MT coated with acrylic adhesive                            |
| CMC 70927            | Kapton® 200HN coated with heat seal adhesive based on polyester resin |
| CMC 70968            | Kapton® 300HN coated with polysiloxane adhesive                       |



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# REACH Compliance

## Position of DuPont Circuit and Packaging Materials for

KAPTON® 300B, 500B, 150EKJ, 200EKJ, 200EKJ-CP, 350ELJ, 300FPC, 500FPC, 300GS, 250GS-C, 275GS-C, 300GS-C, 500GS-C, 250GT, 275GT, 300GT, 350GT, 300H, 500H, 250HN, 275HN, 300HN, 500HN, 300HPP-ST, 500HPP-ST, 300MT, 100MT+, 150MT+, 200MT+, 300PST, 500PST, PV9201, PV9202, 150SAKJ, 200SAKJ, 500VN, 500VN-I, 5005X4M

DuPont is committed to making certain that all DuPont products manufactured in or imported into the European Union area are in compliance with the EU regulations 1907/2006/EC (REACH) and 1272/2008/EC (CLP). Registrations have been completed for all substances due in 2010 and 2013. Additional registrations will be completed before the required date in 2018.

KAPTON® Polyimide Films fulfil the criteria of being articles<sup>2)</sup>. There are no substances intended to be released from these films as defined by article 7(1) under normal or reasonably foreseeable conditions of use.

Under the above conditions articles are exempt from registration under REACH.

To our current knowledge the above listed DuPont CPM products contain the following substance listed on the Candidate list<sup>3)</sup> of Substances of Very High Concern (SVHC), as published on the ECHA website on 17 December 2015, in an individual concentration of > 0.1 % by weight:

N,N-dimethylacetamide (DMAc), EC 204-826-4, CAS 127-19-5

|  | DMAc concentration |
|--|--------------------|
| KAPTON® 300B, 500B, 150EKJ, 200EKJ, 200EKJ-CP, 350ELJ, 300FPC, 500FPC, 300GS, 250GS-C, 275GS-C, 300GS-C, 500GS-C, 250GT, 275GT, 300GT, 350GT, 300H, 500H, 250HN, 275HN, 300HN, 500HN, 300HPP-ST, 500HPP-ST, 300MT, 300PST, 500PST, PV9201, PV9202, 150SAKJ, 200SAKJ, 500VN, 500VN-I, 5005X4M | 0.1% - 0.3%        |
| KAPTON® 100MT+, 150MT+, 200MT+   | 0.3 – 0.6 %        |

Results from product evaluations show that DMAc is not released at detectable levels under ambient temperatures. Estimated exposures to downstream workers handling the above CPM products and the general public from use of the final products, are all well below the levels of concern.

To our current knowledge the above listed DuPont CPM products do not contain any substance listed in REACH Annex XVII above the applicable declaration limits.

To understand fully the obligations under REACH, we recommend that you consult the REACH web site at <http://echa.europa.eu>

DuPont REACH web site: <http://reach.dupont.com>

Sincerely,



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- 1) Substance: a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition (REACH, Art. 3.1).
- 2) Article: means an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition (REACH, Art. 3.3).
- 3) [http://echa.europa.eu/chem\\_data/candidate\\_list\\_table\\_en.asp](http://echa.europa.eu/chem_data/candidate_list_table_en.asp)

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