

According to Regulation (EC) No.1907/2006

# KEXCELLED PEI K10 Ultem1010

| Product code:     | <b>Revision Number:</b> | Revision date: | MSDS No.: |
|-------------------|-------------------------|----------------|-----------|
| PEI K10 Ultem1010 | 02                      | 02/08/2021     | KS044     |

#### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

| Product name:                 | kexcelled 3D printing filament                             |  |  |
|-------------------------------|--|--|--|
| Product code:                 | PEI K10 Ultem1010  |  |  |
| Product Use:                  | A filament to be used in 3D printing applications.         |  |  |
| Supplier:                     | NorthBridge New Material Technology(Suzhou) Co.,Ltd        |  |  |
| Address:                      | Building# B2, Chaoyang Industrial square, Caohu Industrial |  |  |
|                               | Park, Xiangcheng District, Suzhou. CN.                     |  |  |
| Responsible/issuing person:   | wilson@northbridge3d.com                                   |  |  |
| Emergency telephone numbers:  | +86-(0512)-65801831  |  |  |
| 2. HAZARDS IDENTIFICATION     |  |  |  |
| Possible Hazards:             | Danger of burns while handling the hot product.            |  |  |
| Other hazards:                | No specific dangers known, if the regulations/notes for    |  |  |
|                               | storage and handling are considered.                       |  |  |
| 3. COMPOSITION/INFORMATION ON | NGREDIENTS   |  |  |
| Chemical name:                | Polyetherimide   |  |  |
| CAS Number:                   | 9002-98-6  |  |  |
| Weight:                       | >99%   |  |  |
| Remarks:                      | No hazardous ingredients                                   |  |  |
| 4. FIRST AID MEASURES         |  |  |  |
| Inhalation:                   | After inhalation of decomposition products, remove the     |  |  |
|                               | affected person to a source of fresh air and keep calm.    |  |  |
|                               |  |  |  |



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|  |   | Provide me   | dical aid.                  |                            |  |
| Skin contact:  |   | Areas affec  | ted by molten material sh   | ould be quickly placed     |  |
|  |   | under cold   | running water. Burns caus   | sed by molten material     |  |
|  |   | require hospital treatment.                                |                             |                            |  |
| Eye contact:   |   | In case of contact with the eyes, rinse immediately for at |                             |                            |  |
|  |   | least 15 mi  | nutes with plenty of wate   | r. If irritation develops, |  |
|  |   | seek imme  | diate medical attention.    |                            |  |
| Ingestion:   |   | Rinse mout   | h and then drink plenty o   | f water. If difficulties   |  |
|  |   | occur: Seek  | medical attention.          |                            |  |
| Most important sympton                                 | Most important symptoms and effects, both acute and delayed |  |                             |                            |  |
| Symptoms:  |   | No significa   | int reaction of the human   | body to the product        |  |
|  |   | known.   |                             |                            |  |
| 5. FIRE-FIGHTING MEASU                                 | IRES  |  |                             |                            |  |
| Suitable extinguishing me                              | edia :  | water spra   | ay, dry powder, carbon dio  | oxide                      |  |
| Special hazards arising from the substance or mixture: |   |  |                             |                            |  |
|  |   | Do not use   | e a solid water stream as i | t may scatter and spread   |  |
|  |   | fire.  |                             |                            |  |
| Hazards arising from the substance or mixture:         |   |  |                             |                            |  |
|  |   | Fire will pr   | oduce dense black smoke     | containing hazards         |  |
|  |   | combustic  | n products,carbon oxides    | ,hydrocarbon               |  |
|  |   | fragments  | nitrogen oxides.            |                            |  |
| Special protective equipr                              | nent:   | Do no ente   | er fire area without prope  | r protection including     |  |
|  |   | self-contai  | ned breathing apparatus     | and full protective        |  |



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|                            |                  | equipmen   | t.  |                           |  |  |
| Specific hazards:          |                  | Take prec  | autionary measures again                                | st static                 |  |  |
|                            |                  | discharges                                       | discharges.Thermal decomposition can lead to release of |                           |  |  |
|                            |                  | irritating g                                     | ases and vapors.Duse formed bu operation such           |                           |  |  |
|                            |                  | as cutting                                       | or grinding may form an e                               | explosive mixture in air. |  |  |
| 6. ACCIDENTAL RELEASE      | MFASURFS         |  |   |                           |  |  |
|                            | MEASORES         |  |   |                           |  |  |
| Personal precautions:      |                  | Ensure ad  | equate ventilation.                                     |                           |  |  |
|                            |                  | Use perso  | nal protective equipment.                               |                           |  |  |
|                            |                  | Sources of                                       | f ignition should be kept w                             | vell clear.               |  |  |
| Environmental precautio    | ns:              | Discharge into the environment must be avoided.  |   |                           |  |  |
| Reference to other section | ns:              | Information regarding exposure controls/personal |   |                           |  |  |
|                            |                  | protectior                                       | and disposal consideration                              | ons can be found in       |  |  |
|                            |                  | section 8 a                                      | and 13.   |                           |  |  |
| 7. HANDLING AND STOR       | AGE              |  |   |                           |  |  |
| Precautions for safe hand  | lling :          | Provide fo                                       | r appropriate exhaust ver                               | tilation and dust         |  |  |
|                            |                  | collection                                       | at machinery .  |                           |  |  |
|                            |                  | The mater  | ial can accumulate static                               | charge and can therefore  |  |  |
|                            |                  | cause elec                                       | trical ignition.  |                           |  |  |
|                            |                  | Wear pers  | onal protective equipmer                                | it.                       |  |  |
| Protection against fire ar | d explosion:     | Avoid dus  | t formation. Dust can forn                              | n an explosive mixture    |  |  |
|                            |                  | with air. P                                      | rovide exhaust ventilatior                              | . When the product is     |  |  |
|                            |                  | ground (cl                                       | hopped), dust explosion re                              | egulations should be      |  |  |
|                            |                  |  |   |                           |  |  |



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# KEXCELLED PEI K10 Ultem1010 Product code: Revision Number: Revision date: MSDS No.: PEI K10 Ultem1010 02 02/08/2021 KS044 noted. Conditions for safe storage, including any incompatibilities Further information on storage Avoid extreme heat. Avoid all sources of ignition: heat,

Specific end use(s):Specific end use(s) listed in Section 1 the<br/>advice mentioned in this section 7 is to be observed.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

|                                      | Handle in accordance with good industrial hygiene and        |  |
|--------------------------------------|--|--|
|                                      | safety practices. Processing fume condensate may be a fire   |  |
|                                      | hazard and toxic; remove periodically from exhaust hoods,    |  |
|                                      | ductwork, and other surfaces using appropriate personal      |  |
|                                      | protection.  |  |
| Respiratory protection:              | Effective dust mask  |  |
|                                      | In the case of vapor formation use respirator with an        |  |
|                                      | approved filter.   |  |
| Hand protection:                     | Use additional heat protection gloves.                       |  |
| Eye protection:                      | Safety glasses with side-shields (frame goggles).            |  |
| Body protection:                     | Body protection must be chosen depending on activity and     |  |
|                                      | possible exposure, e.g. apron, protecting boots,             |  |
|                                      | chemical-protection suit.                                    |  |
| General safety and hygiene measures: | Avoid contact of molten material with skin. Avoid inhalation |  |
|                                      | of dusts/mists/vapors. Eye wash fountains and safety         |  |



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|                                     |              | showers m                                      | nust be easily accessible. I | Handle in accordance    |  |
|                                     |              | with good                                      | industrial hygiene and sa    | fety practice.          |  |
| 9. PHYSICAL AND CHEMICAL PROPERTIES |              |  |                              |                         |  |
| Appearance:                         |              | filament                                       |                              |                         |  |
| Color:                              |              | natural  |                              |                         |  |
| Odour:                              |              | none or sli                                    | ght                          |                         |  |
| Odor threshold:                     |              | not detern                                     | nined                        |                         |  |
| pH Value:                           |              | not soluble                                    | 2.                           |                         |  |
| Boiling point/Boiling rang          | ge:          | not determined.                                |                              |                         |  |
| Flash point:                        |              | not detern                                     | nined.                       |                         |  |
| Flammability:                       |              | not data available                             |                              |                         |  |
| Lower explosion limit:              |              | No data av                                     | vailable.                    |                         |  |
| Upper explosion limit:              |              | not data available.                            |                              |                         |  |
| 10. STABILITY AND REACT             | ΓΙVΙΤΥ       |  |                              |                         |  |
| Reactivity:                         |              | No hazard                                      | ous reactions if stored an   | d handled as            |  |
|                                     |              | prescribed                                     | l/indicated.                 |                         |  |
| Chemical stability:                 |              | The product is stable if stored and handled as |                              |                         |  |
|                                     |              | prescribed                                     | l/indicated.                 |                         |  |
| Conditions to avoid:                |              | Do not exc                                     | ceed maximum temperatu       | ures recommended in     |  |
|                                     |              | the produ                                      | ct literature.               |                         |  |
| Hazardous decompositio              | n products:  | Process va                                     | pors under recommende        | d processing conditions |  |
|                                     |              | may includ                                     | de trace levels of hydroca   | rbons, phenols,         |  |
|                                     |              | alkylphend                                     | ols, diarylcarbonates, othe  | er substituted          |  |



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|  | hydro                | ocarbons, hydrogen cyanid                        | e (hydrocyanic acid).       |  |  |
| 11. TOXICOLOGICAL INFO   | RMATION              |  |                             |  |  |
| Acute Toxicity:  | No da                | ita available.                                   |                             |  |  |
| Irritation:  | No iri               | No irritation is expected under intended use and |                             |  |  |
|  | appro                | opriate handling.                                |                             |  |  |
| Respiratory/Skin sensitization:  |                      | May cause irritation of respiratory tract.       |                             |  |  |
| Germ cell mutagenicity:  | No da                | No data available.                               |                             |  |  |
| Carcinogenicity:   | No da                | ita available.                                   |                             |  |  |
| Reproductive toxicity:   | No da                | ita available.                                   |                             |  |  |
| Repeated dose toxicity and Specific target organ toxicity (repeated exposure): |                      |  |                             |  |  |
|  | No da                | ita available.                                   |                             |  |  |
| Other relevant toxicity in   | formation: Based     | l on our experience and th                       | e information available, no |  |  |
|  | adver                | se health effects are expec                      | cted if handled as          |  |  |
|  | recor                | nmended with suitable pre                        | cautions for designated     |  |  |
|  | uses.                |  |                             |  |  |
| 12. ECOLOGICAL INFORM  | ATION                |  |                             |  |  |
| Ecotoxicity effects:   | Do no                | ot flush into surface water                      | or sanitary sewer system    |  |  |
| Toxicity:  | No da                | ita available.                                   |                             |  |  |
| Persistence and degradal   | <b>bility:</b> No da | ita available.                                   |                             |  |  |
| Bio accumulative potenti   | al: No da            | ita available.                                   |                             |  |  |
| Mobility in soil (and othe   | r compartments if av | ailable):  |                             |  |  |
|  | No da                | ita available.                                   |                             |  |  |
| Other information:   | This r               | naterial is not expected to                      | be environmentally          |  |  |



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|   |                     | hazardous     | s under normal use.   |                          |  |  |
| Additional information:   |                     | Should no     | t be released into the envi                                   | ironment.                |  |  |
| 13. DISPOSAL CONSIDERATIONS   |                     |               |   |                          |  |  |
| Waste treatment method  | ds:                 | Recycling     | Recycling is encouraged. Landfill or incinerate in accordance |                          |  |  |
|   |                     | with fede     | ral, state and local require                                  | ments. Collected         |  |  |
|   |                     | processing    | g fume condensates and ir                                     | ncinerator ash should be |  |  |
|   |                     | tested to     | determine waste classifica                                    | tion.                    |  |  |
| 14. TRANSPORT INFORM  | ATION               |               |   |                          |  |  |
| Not regulated as hazardo  | us for shipmen      | nt,unless not | ted ,under current transpc                                    | ortation guidelines.     |  |  |
| 15. REGULATORY INFORMATION  |                     |               |   |                          |  |  |
| Safety, health and environmental regulations/legislation specific for the substance or mixture: |                     |               |   |                          |  |  |
|   |                     | If other re   | gulatory information appl                                     | ies that is not already  |  |  |
|   |                     | provided      | elsewhere in this safety da                                   | ta sheet, then it is     |  |  |
|   |                     | described     | in this subsection.   |                          |  |  |
| Chemical Safety Assessm   | ent:                | Chemical      | Safety Assessment not req                                     | uired Product is not     |  |  |
|   |                     | classified    | as hazardous.   |                          |  |  |

#### **16. OTHER INFORMATION**

The information in this Material Safety Data Sheet (MSDS) is based on current knowledge and experience. No liability can be assumed for the accuracy and completeness of this information.