

```
UProducts[{}, 0] = {1}; UProducts[{}, d_Integer] /; d > 0 = {};  
  
UProducts[{i_, is_}, d_Integer] :=  
  Sort@Flatten@Table[(Ui @@@ Subsets[$Basis, {j}] u, {j, 0, d}, {u, UProducts[{is}, d - j]}];
```