

Carcinogenicity (IARC): Not listed  
Carcinogenicity (OSHA): Not listed

### Special hazards for human health and environment

There is no hazard when the measures for handling and storage are followed.

In case of cell damage, there is possible release of dangerous substances and a flammable gas mixture.

## 2. Hazards Identification USA, EU

### Explication of special hazards for human health and environment

Not classified as dangerous according to directive 1999/45/EEC

There is no hazard when the measures for handling and storage are followed.

In case of cell damage, possible release of dangerous substances and a flammable gas mixture.

## 3. Composition/information on ingredients USA, EU

### Hazardous components

#### Module

	Quantity/Total	Dimensions(LxWxH)
Component Name : Battery module	100%	355 x 151 x 108.5
Cell(49.5Ah x 12ea)	< 86%	
Stack	< 13%	
BME	< 1%	

#### Stack

CAS-No.	Chemical name	Quantity/Total	Quantity/Stack	Part
7439-89-6	Fe (Iron)	< 4.6%	< 35.6%	Plate End Body, Plate Side Body
7440-50-8	Cu (Copper)	<0.2%	< 2.0%	Busbar
7440-47-3	Cr (Chromium)	< 1.1%	< 8.9%	Plate End Body, Plate Side Body
	Etc. (Al, Ni, Mn, etc.)	< 7.1%	< 53.7%	

#### Cell

EC-No.	CAS-No.	Chemical name	Quantity	EU-Classification
215-154-6	1307-96-6	Cobalt oxide	< 30 %	Xn, N R22435053
215-202-6	1313-13-9	Manganese dioxide	< 30 %	Xn R20/22
215-215-7	1313-99-1	Nickel oxide	< 30 %	Carc. Cat. 1, T R49-43-48/23-53
231-153-3	7440-44-0	Carbon	10 - 30 %	
		Electrolyte (*)	10 - 20 %	Carc. Cat. 3, C, R10-34-40-43
	24937-79-9	Polyvinylidene fluoride (PVdF)	< 10 %	
231-072-3	7429-90-5	Aluminium foil	2 - 10 %	
231-159-6	7440-50-8	Copper foil	2 - 10 %	
		Aluminium and inert materials	5 - 10 %	

Full text of each relevant R phrase can be found in heading 16.