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# DHT-4A

## Mg-Al Hydrotalcite as halogen scavenger in resins.

### Applied during production and processing of polyolefins

#### Features:

DHT-4A is an antiacid that reacts with and deactivates the residual quantities of acidic substances associated with Ziegler-Natta, Friedel Craft, Metallocene or other acid catalysts used to produce polymers or elastomers. The superiority of DHT-4A compared to other products is due to its particular mechanism of adsorbing acids based on anion-exchange.

#### Specified and Typical Properties

	Typical value	General specification	units	KCBV /Kyowa method
Appearance	White Odorless Powder	WOP	-	0012A/visual
Molar ratio MgO/Al <sub>2</sub> O <sub>3</sub>	4.3	min 4.0 max 5.0	-	0102/KX-3-d
Loss on Drying (105°C 1 hr)	0.3	max 0.5	w/w%	0001B/U-9-a
Specific Surface Area	11	min 5 max 15	m <sup>2</sup> /g	0008A/U-41-a
Secondary particle size Average	0.5	min 0.30 max 0.60	µm	0007B/U-43-L
< 1 µm		min 85.0	vol %	
> 5 µm		0.0	vol %	
Heavy metals	5	max 10	ppm	0004A/U-13-a
Iron	40	max 100	ppm	0102/KX-3-i

*Typical properties are given for information only and can not be used for specification*

### Other typical values

	Value	Units	KCBV /Kyowa method
pH of suspension	8.5	-	0006A/U-61-a
Al (as Al <sub>2</sub> O <sub>3</sub> )	19	w/w%	0102/KX-3-c
Mg (as MgO)	34	w/w%	0102/KX-3-b

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### Other characteristics

	Value	Units	Method
Mn	3	ppm	ICP
Hardness (Mohs)	2.0-2.5	-	ASTM
Density	2.1	-	ASTM
Refractive Index	1.5	-	ASTM
Apparent specific gravity	0.5	1000 *Kg/m <sup>3</sup>	0005A

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### Packaging

DHT-4A is standard packed in 20kg bags or 500kg big bags (KCBV) and/or paper bags (Kyowa) on a pallet identified by nett weight and lot#.

CoC and MSDS of DHT-4A are available upon request.

### Other information

DHT-4A is produced in the Netherlands by Kisuma Chemicals BV and in Japan by Kyowa Chemical Industry Co., Ltd.

DHT-4A is shipped under CAS-number 11097-59-9 as Aluminium Magnesium Hydroxide Carbonate Hydrate, a synthetic hydrocalcite like product for which the following applies:

#### ***Product***

*TSCA : listed*

*DSL : listed*

*EINECS : listed*

*AICS : listed*

#### ***Application***

*(EU) 10/2011 (plastic materials and articles intended to come in contact with foodstuffs) : listed*

*FDA : applicable to GRAS*

The following patent applies to this product and its application:

***US 6 313 208 B1***