



Rautatienkatu 2, 48100 Kotka, Finland  
 Tel:+358-(0)5-210 5200, Fax.+358-(0)5-210 5225  
 E-mail: info@granula.com, www.granula.com

## Granlux® products application table

Product	Pigment	Crystal size	Other main chemicals	Application	Dosage	Comments
CCA-45Z	45 % ZnO	60 nm	Beeswax Carnauba wax	Protective sticks, lipsticks, lipbalms, W/O emulsions	0 - 25 %	Biocosmetic application quality
CCA-50	50 % TiO <sub>2</sub>	17nm, 22 nm	Beeswax Carnauba wax	Protective sticks, lipsticks, lipbalms, W/O emulsions	0 - 25 %	Biocosmetic application quality also available
CCT-40	40 % TiO <sub>2</sub>	22 nm	Caprylic/capric mono/di glyceride	Waterproof O/W emulsions, gel in gel emulsions	0 - 30 %	Especially suited for gel in gel
EM-50	44 % TiO <sub>2</sub>	22 nm	Cetearyl glucoside	O/W emulsions	0 - 15 %	Phase inversion technology
GAC-45TZ	30 % TiO <sub>2</sub> 15 % ZnO	22 nm 60 nm	c-pentasiloxane Polyglycerol-4-isostearate Cetyl PEG/PPG-10/1 Dimethicone Hexyl laurate	W/O emulsions	0 - 20 %	
GAI-45	45 % TiO <sub>2</sub>	15 nm	Isononyl isononanoate Polyglycerol-4-isostearate Cetyl PEG/PPG-10/1 Dimethicone Hexyl laurate	W/O emulsions	0 - 30 %	Hot and cold processable
GAI-50T MBBT	25 % TiO <sub>2</sub> 25 % MBBT	15 nm	Isononyl isononanoate Polyglycerol-4-isostearate Cetyl PEG/PPG-10/1 Dimethicone, Hexyl laurate, Methylene Bis Benzotriazolyl Tetramethylbutylphenol	W/O emulsions	0 - 30 %	Hot and cold processable
GAW-45	45 % TiO <sub>2</sub>	22 nm	Polyhydroxy stearic acid Polyglycerol-4-isostearate Cetyl PEG/PPG-10/1 Dimethicone Hexyl laurate	W/O emulsions	0 - 10 %	
GAW-45TZ	30 % TiO <sub>2</sub> 15 % ZnO	22 nm 60 nm	Polyhydroxy stearic acid Polyglycerol-4-isostearate Cetyl PEG/PPG-10/1 Dimethicone	W/O emulsions	0 - 10 %	



Rautatiekatu 2, 48100 Kotka, Finland  
 Tel:+358-(0)5-210 5200, Fax.+358-(0)5-210 5225  
 E-mail: info@granula.com, www.granula.com

			Hexyl laurate			
<b>GTI-45TZ</b>	30 % TiO <sub>2</sub> 15 % ZnO	22 nm 60 nm	Isononyl isononanoate Polyglyceryl-3 Methylglucose Distearate	O/W	0 – 30 %	
<b>GTI-45TZ</b>	35 % TiO <sub>2</sub> 10 % MBBT	22 nm, 17 nm	Isononyl isononanoate Polyglyceryl-3 Methylglucose Distearate, Methylene Bis Benzotriazolyl Tetramethylbutylphenol	O/W	0 – 30 %	
<b>MSN-50</b>	50 % TiO <sub>2</sub>	22 nm	Polydecene, Apricot kernel oil PEG- 40 ester, cetearyl glucoside	O/W low viscosity emulsions	0 - 35%	Phase inversion technology
<b>NA-50M1</b>	43 % TiO <sub>2</sub>	22 nm	Polydecene Cetyl PEG/PPG-10/1 Dimethicone	W/O emulsions	0 - 20 %	Good skinfeel, low whitening, high SPF
<b>NA-50TZ</b>	30 % TiO <sub>2</sub> 20 % ZnO	22 nm 60 nm	Polydecene Cetyl PEG/PPG-10/1 Dimethicone	W/O emulsions	0 - 20 %	Hot and cold processable
<b>NGS-40</b>	40 % TiO <sub>2</sub>	22 nm	Polydecene Glyceryl stearate	O/W	0 - 25 %	
<b>PCA-50</b>	50 % TiO <sub>2</sub>	22 nm	Paraffin wax	Protective sticks, lipsticks, lipbalms, W/O emulsions	0 - 25 %	
<b>PM-43TZ</b>	30 % TiO <sub>2</sub> 13 % ZnO	20 nm 60 nm	Cocoglycerides, Potassium palmitoyl hydrolyzed wheat protein glyceryl stearate, cetearyl alcohol	O/W creams	0 – 30 %	
<b>TEM-45</b>	45 % TiO <sub>2</sub>	15 nm	Caprylic/capric triglyceride, cetearyl glucoside	O/W emulsions	0 - 25 %	Phase inversion technology, bio-cosmetic applications also available
<b>TEM-45T MBBT</b>	34 % TiO <sub>2</sub> 12 % ZnO	15 nm 60 nm	Caprylic/capric triglyceride, cetearyl glucoside, Methylene Bis Benzotriazolyl Tetramethylbutylphenol	O/W emulsions	0 - 20 %	Phase inversion technology, bio-cosmetic applications also available
<b>TEM-45TZ</b>	34 % TiO <sub>2</sub> 12 % ZnO	15 nm 60 nm	Caprylic/capric triglyceride, cetearyl glucoside	O/W emulsions	0 - 20 %	Phase inversion technology, bio-cosmetic applications also available
<b>TEM-45Z</b>	45 % ZnO	60 nm	Caprylic/capric triglyceride, cetearyl glucoside	O/W emulsions	0 - 20 %	Phase inversion technology, bio-cosmetic applications
<b>CGS-40TZ</b>	27 % TiO <sub>2</sub> 13 % ZnO	20 nm 60 nm	Cetearyl glucoside Sesam oil, refined, KBA	O/W also sprayable	0 – 30 %	Natural cosmetics according to BDIH



Rautatiekatu 2, 48100 Kotka, Finland  
 Tel:+358-(0)5-210 5200, Fax.+358-(0)5-210 5225  
 E-mail: info@granula.com, www.granula.com

<b>PS-40TZ</b>	27 % TiO <sub>2</sub> 13 % ZnO	20 nm 60 nm	Potassium palmitoyl hydrolyzed wheat protein glyceryl stearate, cetearyl alcohol Sesam oil, refined, KBA	O/W cream	0 – 30 %	Natural cosmetics according to BDIH
<b>GAI2-45TZ</b>	22,5 % TiO <sub>2</sub> 22,5 % ZnO	22 nm 60 nm	Isononyl isononanoate Polyglycerol-4-isostearate Cetyl PEG/PPG-10/1 Dimethicone Hexyl laurate	W/O emulsions	0 -30 %	Hot and cold processable
<b>CCA2-50TZ</b>	35 % TiO <sub>2</sub> 15 % ZnO	15nm, 60 nm	Beeswax Carnauba wax	Protective sticks, lipsticks, lipbalms, W/O emulsions	0 - 25 %	Biocosmetic application quality also available
<b>TG2-50M1</b>	44 % TiO <sub>2</sub>	22 nm	Caprylic/capric triglyceride	Multi-purpose	0 - 30 %	Good skinfeel, low whitening, high SPF
<b>TG2-55TMBBT</b>	30 % TiO <sub>2</sub> 25 % MBBT	22 nm	Caprylic/capric triglyceride Methylene Bis Benzotriazolyl Tetramethylbutylphenol	Multi-purpose	0 - 30 %	Good skinfeel, low whitening, high SPF