



Material Safety Data Sheet

DOC NO.: 1/5

Version: A/0 Last update: 2015-01-30

Tinci (R) NTC-CARBOMER FD21

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1 Product Name:	NTC-Carbomer FD21
1.2 INCI Name:	Acrylates/C10-30 Alkyl Acrylate Crosspolymer
1.3 Chemical family:	Hydrophobically modified acrylate crosspolymer
1.4 Company Details:	
Manufacture/Supplier:	Guangzhou Tinci Materials Technology Co., Ltd
Address:	Kangda Road No.8, Yunpu Industrial Zone, Huangpu Region, GuangZhou, China
Telephone Number:	(86 20) 82251159
Fax Number:	Fax No.(86 20)82058669
Emergency Telephone Number:	(86 20) 82251159
Contact Person:	Technical support engineer
1.5 Date issued:	January 2015

2. HAZARDS IDENTIFICATION

2.1 Appearance	Fluffy, white powder.
2.2 Odor	Slight acetic.
2.3 Classification:	Not determined.
2.4 Target Organs:	Not determined.
2.5 Signal Word:	Not determined.
2.6 Hazard statement:	Not determined.
2.7 Other Hazards:	None identified.
2.8 Precaution(s):	Not determined.
2.9 Response:	
In case of fire:	Use CO ₂ , dry chemical, foam, water spray or water fog for extinction. Carbon dioxide may be ineffective on larger fires due to a lack of cooling capacity which may result in reignition. Avoid hose stream or any method which will create dust clouds.
If on skin:	Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention.
If in eyes:	Rinse cautiously with water for several minutes. Get medical attention.
If inhaled:	If experiencing respiratory symptoms: Call a POISON CENTER or doctor. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration.
If swallowed	Call a POISON CENTER or doctor if you feel unwell. Treat symptomatically.
2.10 Storage Procedures:	Store in a cool, dry, well-ventilated location. Store in a closed container.
2.11 Disposal:	All disposal practices must be in accordance with local, national and international regulations.
<i>See Section 11 for complete health hazard information.</i>	

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients:			
Chemical Name	CAS No.	Weight %	Carcinogen
Residual acrylic acid	79-10-7	≤0.1	N/E
Residual Ethyl acetate / cyclohexane	141-78-6/110-82-7	≤0.45	N/E

4. FIRST AID MEASURES

4.1 Eye Contact:	Immediately flush eyes with plenty of one percent (1%) physiological saline solution for five (5) minutes while holding eyelids open. If no saline is available, flush with plenty of clean water for fifteen (15) minutes. See a physician. Water (moisture) swells this product into a gelatinous film which may be difficult to remove from the eye using only water.
4.2 Skin Contact:	Wash with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse.
4.3 Inhalation:	Remove exposed person to fresh air if adverse effects are observed. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. If irritation persists or if toxic symptoms are observed, get medical attention.
4.4 Ingestion:	Treat symptomatically. Get medical attention.



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4.5 Advice for the protection of first-aid providers When providing first aid always protect your self against exposure to chemicals or blood born diseases by wearing gloves, masks and eye protection. If providing CPR use mouthpieces, resuscitation bags, pocket masks or other ventilation devices. After providing first aid wash your exposed skin with soap and water.

4.6 Note to physicians: Note to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Flash Point: Not Applicable.

5.2 Fire and explosive properties Min. Ignition Energy > 50 mJ.
Deflagration Index 157 - 193 bar m/sec (7476 - 9190 psi ft/sec).
Volume Resistivity 4.7 x 10+15 ohm-cm.
Ignition Temperature of Dust Cloud ~480 °C (~896 °F).
This product has a high volume resistivity and a propensity to build up static electricity which may be discharged as a spark. A spark can be an ignition source for solvent vapor/air mixtures. If you add this product to a solvent, ensure appropriate safe handling practices such as provision for inerting flammable vapors. As with all organic dusts, fine particles suspended in air in critical proportions and in the presence of an ignition source may ignite and/or explode. Dust may be sensitive to ignition by electrostatic discharge, electrical arcs, sparks, welding torches, cigarettes, open flame, or other significant heat sources. As a precaution, implement standard safety measures for handling finely divided organic powders.

5.3 Extinguishing Media: CO2, dry chemical, foam, water spray, water fog. Carbon dioxide may be ineffective on larger fires due to a lack of cooling capacity which may result in reignition. Avoid hose stream or any method which will create dust clouds.

5.4 Unsuitable Extinguishing Media: Not determined.

5.5 Fire fighting Procedures: Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Do not use a water jet.

5.6 Unusual fire / explosion hazards: Solid does not readily release flammable vapors. This material has been evaluated and is considered to be a risk for dust explosion. It is categorized as Dust Explosion Class ST1. Material can form an explosive organic dust air mixture. Take care to minimize airborne dust.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precaution, protective equipment and emergency Procedures: Personal protective equipment must be worn. Caution - this material is slippery when wet.

6.2 Environmental precaution and protective procedures: Prevent entry into sewers and waterways.

6.3 Methods for clean-up and removal: Pick up free solid for recycle and/or disposal. Avoid raising a dust. Wash spill area with detergent.

7. HANDLING AND STORAGE

7.1 Handling: Keep material away from heat, sparks, pilot lights, static electricity and open flame. Avoid creating dust. Maintain good housekeeping practices. Avoid drinking, tasting, swallowing or ingesting this product. Avoid inhalation of dust, aerosol, mist, spray, fume, or vapor. Use with appropriate and adequate ventilation. Ground and bond containers when transferring material. Avoid prolonged skin contact. Launder contaminated clothing before reuse. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

7.2 Storage: Store in a cool, dry, well-ventilated area. Keep container closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Limits:

	Comp	CAS No.	Long Term (8 Hours T.W.A.)	Short Term (15 mins.)
EU	Cyclohexane	110-82-7	200 ppm	N/E
UK	Not applicable.			
Ireland	Cyclohexane	110-82-7	100 ppm	300 ppm
	Acrylic acid	79-10-7	10 ppm	20 ppm



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India	Not applicable.		
Cyprus	Cyclohexane	110-82-7	200 ppm N/E
8.2 Other Exposure Limits:	The industry-recommended permissible exposure limit for respirable polyacrylate dusts is 0.05 mg/m ³ .		
8.3 Engineering Controls:	If use generates a dust, local exhaust ventilation is recommended. Prevent inhalation by providing effective general and, when necessary, local exhaust ventilation to draw dust away from workers. Avoid high concentrations of dust in air and accumulation of dust on equipment.		
8.4 Personal Protective Equipment			
Respiratory Protection:	Use respirator with a High Efficiency Particulate Air (HEPA) filter if the recommended exposure limit is exceeded Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.		
Eye Protection:	Safety glasses or goggles.		
Hand Protection:	Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves.		
Clothing Recommendation:	Long sleeve shirt is recommended.		
Hygiene Measures:	Wash thoroughly after handling this product.		

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical State:	Fluffy, white powder
9.2 Odor:	Slight acetic
9.3 PH (@ 0.5% in H ₂ O):	2.5-3.5
9.4 Evaporation rate:	Non-volatile
9.5 Water Solubility:	Material will swell in water.
9.6 Loss by drying: :	≤ 2.0 %
9.7 Vapor pressure:	Not Applicable
9.8 Melting point	Not available
9.9 Vapor density:	Non-volatile
9.10 Flash Point:	Not Applicable
9.11 Autoignition Point	~ 480 °C (~ 896 °F)
9.12 Explosion Data:	Dust can form explosive mixtures in the air.

10. STABILITY AND REACTIVITY

10.1 Chemical Stability:	Material is normally stable at moderately elevated temperatures and pressures.
10.2 Incompatibility with other materials:	Heat may be generated if polymer comes in contact with strong basic materials like ammonia, sodium hydroxide or strong basic amines.
10.3 Polymerization:	Will not occur.
10.4 Decomposition Temperature:	Not determined.
10.5 Thermal Decomposition:	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.
10.6 Conditions to Avoid:	Not determined.

11. TOXICOLOGICAL INFORMATION

11.1 ACUTE EXPOSURE

Eye Irritation	Not expected to cause eye irritation. Based on data from similar materials. Particulates may cause mechanical irritation. Solid particles (powder or dust) on the eye may cause pain and irritation.
Skin Irritation	Not expected to be a primary skin irritant. Based on data from similar materials. Contact dermatitis may occur in sensitive individuals under extreme and unusual conditions of prolonged and repeated contact, such as high exposure accompanied by elevated temperature and occlusion by clothing. This effect may be the result of the product's hygroscopic properties, abrasion, or pH.
Respiratory Irritation	Breathing of dust may cause coughing, mucous production, and shortness of breath.
Dermal Toxicity	The LD50 in rabbits is > 5000 mg/Kg. Based on data from components or similar materials.
Inhalation Toxicity	Avoid inhalation of dust. Animal studies indicate the inhalation of respirable polyacrylate dust may cause inflammatory changes in the lung.
Oral Toxicity	The LD50 in rats is > 10,000 mg/Kg. Based on data from components or similar materials.



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Dermal Sensitization	Not expected to cause skin sensitization. Based on data from components or similar materials.
Inhalation Sensitization	No data available to indicate product or components may be respiratory sensitizers.
Aspiration Hazard	Not determined.
11.2 CHRONIC EXPOSURE	
Chronic Toxicity	A two-year inhalation study in rats exposed to a respirable, water-absorbent sodium polyacrylate dust resulted in lung effects such as inflammation, hyperplasia, and tumors. There were no observed adverse effects at exposures of 0.05 mg/m ³ . In addition, long-term medical monitoring of potentially exposed workers has not revealed lung effects such as those observed in the rat. However, the inhalation of respirable dusts should be avoided by implementing respiratory protection measures and observing the recommended permissible exposure limit of 0.05 mg/m ³ .
Carcinogenicity	Not listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive Toxicity	No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
Teratogenicity	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.
11.3 ADDITIONAL INFORMATION	
Pre-existing skin conditions may be aggravated by prolonged or repeated exposure. Persons with sensitive airways (e.g., asthmatics) may react to vapors. This material readily absorbs moisture and may become thick and gelatinous upon contact with mucous membranes of the eye, or upon inhalation into the nasal passages.	
12. ECOLOGICAL INFORMATION	
12.1 ENVIRONMENTAL TOXICITY:	
Freshwater Fish Toxicity	The acute LC50 is 100 - 1000 mg/L based on component data.
Freshwater Invertebrates Toxicity	The acute EC50 is 100 - 1000 mg/L based on component data.
12.2 ENVIRONMENTAL FATE	
Biodegradation	At least 25% of the components in this product show limited biodegradation based on OECD 301-type test data. At least 25% of the components in this product show limited biodegradation based on OECD 302-type test data.
Bioaccumulation	Less than 1.0% of the components potentially bioconcentrate.
13. DISPOSAL CONSIDERATIONS	
13.1 Disposal Method:	All disposal practices must be in accordance with local, regional, national and international regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations.
14. TRANSPORT INFORMATION	
ICAO/IATA I	Not regulated
ICAO/IATA II	Not regulated
IMDG	Not regulated
IMDG EMS Fire	Not applicable.
IMDG EMS Spill	Not applicable.
IMDG MFAG	Not applicable.
MARPOL Annex II	Not determined.
USCG Compatibility	Not determined.
DOT NAERG	Not applicable.
15. REGULATORY INFORMATION	
Global Chemical Inventories	
USA:	All components of this material are on the TSCA Inventory or are exempt.
EU:	All components are in compliance with the EC Seventh amendment Directive 92/32/EEC..
Japan:	All components are in compliance with the Chemical Substances Control Law of Japan.
Australia:	All components are in compliance with chemical notification requirements in Australia.
New Zealand:	May require notification before sale under New Zealand regulations.
Canada:	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substance List.
Korea:	All components are in compliance in Korea.



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Philippines : All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R. A. 6969).

China: All components are listed on the Inventory of Existing Chemical Substances in China.

16. OTHER INFORMATION

16.1 Contact Point:	Technical Services Engineer (86-20) 82251159			
16.2 Prepared by:	Guangzhou Tinci Materials Technology Co., Ltd			
16.3 US NFPA Codes:	Health	Fire	Reactivity	Special
	1	1	0	N/E
16.4 HMIS Codes:	Health	Fire	Reactivity	
	0	1	0	

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