



# THE TRIUMPH

UNIT - 1



### HONOURED RECOGNITIONS

Every ambition is accomplished with support and boost. Execution of plans is possible only through the required aiding credits. We feel glad to have been approved by FDA to climb this ladder of success. We have earned certifications and accreditations to name as **US-DMF**, **GMP**, **ISO 9001:2008**, **HACCP**, **KOSHER**, **HALAL & USP/NF**, **EP**, **BP**, **JP**, **IP**, **FCC**, **FSSC-22000**, **FSSAI**.

Thanks to all these credits we earned that we were able to see and fulfil our own dreams and serve our clients better.

#### VISION

With a focus of expansion on a global platform along with value addition to healthcare and life.

#### MISSION

Practising an innovative approach for consistent quality through appropriate groundwork, distinctive strategy and technology. The remarkable journey began in 2001 when Accent made its debut as a manufacturer and supplier of pharmaceutical excipients. Reciting the slogan of technology and quality, Accent has emerged out to be the pioneers in terms of precision and excellence in production.

With the rise and shine over a decade now, Accent has achieved milestones in the form of MCC, MS and CCS. The company values its optimism for the provision of supreme quality products.

#### **UNIT - 2**

#### **QUALITY POLICY**

Accent Microcell Private Limited shall ensure to provide high-quality products to our customers through constant improvement in manufacturing process, use of high-quality material & stringent quality control. Customer satisfaction with on-time committed delivery is our main motto. The policy is reviewed for continued suitability from time to time.















# TECHNOLOGY MAGNIFIED

Talking about the technology, we mean the quality of products along with an innovative approach to raise the standard of the products.

To identify, unleash and accept the challenges and requirements of the growing product market, technological advancements are conceptualised and established. The Dahej-SEZ Plant in Gujarat spread over 20,000 m<sup>2</sup> with an installed capacity of 12,000 MT per annum is the best example of the above.

# THE CRAFTING CREW





We owe our prominence to our dedicated staff and our overseas market experience. The efforts put up and the cognisance created by the management keep the company at par to the latest development of today's world.









# A PRECISE ENDEAVOUR

We are equipped for mass production of pharmaceutical excipients under IPEC/GMP guidelines. An in-house R&D, quality control and microbial department with chemical, physical and microbiological analytical laboratories are all structured to function as per international standards.

# PRODUCT RANGE

MCC  $(C_6H_{10}O_5)_n$  is basically the outcome of the refinement of highly purified wood pulp. MCC is used as a texturizer, anticaking agent, extender, fat substitute, binder, filler, disintegrant, flow aid, lubricant, sugar coating additive and a bulking agent in food production.

It's silent features can also be mentioned as superior compressibility, high dilution potential, optimum particle size distribution, low friction coefficient, good flowability and fast disintegration.

MCC is pure and does not contain organic or inorganic contaminants. MCC is considered to be the finest element for tableting as it abolishes all formulation-related problems. As an alternative to Carboxymethyl Cellulose and Lactose, MCC is used in plaque assays for counting viruses. Also to mention, the most common form of MCC is used in vitamin supplements and tablets.

#### Pharmacopoeia

All Accel grades comply with the latest edition of USP/NF, Ph.Eur., JP and IP.

#### Accel 101:

- Direct compression tableting
- Wet granulation
- Extrusion-Spheronisation

#### Accel 102:

- Compression properties similar to Accel 101
- With larger particle size, improves the flow

#### Accel 103 | Accel 112 | Accel 113:

• Reduces moisture content, ideal for moisture-sensitive materials

#### Accel 12:

- Outstanding flowability
- Excellent uniformity
- Short mixing time

#### Accel 105:

- Finest particle size
- Direct compression of coarser, granular & crystalline materials
- Enhanced compressibility characteristics make it suitable for application involving difficult-to-compress materials
- Admixed with Accel 101 or Accel 102 to achieve specific flow and/or compression properties

#### Accel 200:

- Large particle size increases flowability with minimum effect on compression characteristics
- Direct compression and wet granulation reduces tablet weight variation and improves content uniformity

#### Accel 301:

- Higher density than its size equivalent Accel 101
- Increases flowability, greater tablet weight, uniformity and the potential for making smaller tablets

#### Accel 302:

- Density characteristics of Accel 302 with a particle size of Accel 102
- Like Accel 301, Accel 302 increases flowability, greater tablet weight, uniformity and the potential for smaller tablets

#### Accel S (Silicified MCC):

- Excellent compaction ability
- Improves lubrication efficiency
- Improves blending properties
- Better binding properties than MCC
- Increased production capacity

# Accel 581 & Accel 591 (Microcrystalline cellulose and Carboxymethyl cellulose sodium):

- Maintains suspension uniformity.
- Increases formulation stability across a wide range of pH
- As stabilizer
- Thickener
- Emulsifier
- In dry mixing, improve the flow property
- Improve creaminess
- Reduces calories

#### **Cellulose Powder:**

- Reduce calorie
- Anticaking agent
- Controlling ice crystal growth for frozen foods
- Increase fibre content
- Maintain moisture content & freshness
- Dispersing agent
- Texturizing agent
- improves stability, , increases consistency and creaminess in case of liquid consumables



# APPLICATION OF MCC





# BAKERY

- Controls flowability
- Gives baking stability
- Gives consistent creamy mouth feel •
- Exceptional for low fat products •
- Upgrades product stability •
- Improves texture •
- Acts as bulking agent •

#### **FLUIDS**

- Brings stability in hot and cold processesImproves creamy mouth feel
- Ideal for dietary health drinks
- Improves opacity in milk shakes

# DAIRY

- Serves as stabilizer in ice-cream to prevent crystallization
- Works as bulking agent
- Improves texture
- Improves texture & mouth feel in processed cheese

### **MEAT & SEA FOOD**

- Enhances texture & mouth feel
- Excellent freeze and appropriate stability •
- Holds natural characteristics and juiciness of products

## **EXTRUSITION**

- Used in low-calorie spaghetti, macaroni, noodles and brownies
- Raises texture and yield



GRADE							
	PARTICLE SIZE DISTRIBUTION			BULK	MOISTURE		
GRADE	D10 (MIC)	D50 (MIC)	D90 (MIC)	APS# (MIC)	DENSITY (GM/ML)	(%WW)	DOP#
ACCEL-101	NMT 30	40-60	NLT 80	50	0.27-0.34	3.0-5.0	200-250
ACCEL-102	NMT 45	70-100	NLT 140	90	0.26-0.34	3.0-5.0	200-250
ACCEL-103	NMT 30	40-60	NLT 80	50	0.26-0.34	1.0-3.0	200-250
ACCEL-105				20	0.20-0.30	1.0-5.0	200-250
ACCEL-112	NMT 45	70-100	NLT 140	90	0.26-0.34	0.0-1.5	200-250
ACCEL-12	NMT < 50	100-140	NLT 200	110	0.26-0.40	3.0-5.0	200-250
ACCEL-113	NMT 30	40-60	NLT 80	50	0.26-0.34	0.0-2.0	200-250
ACCEL-200	NMT 70	150-200	NLT 260	180	0.31-0.39	3.0-5.0	200-250
ACCEL-301	NMT 30	40-60	NLT 80	50	0.34-0.45	3.0-5.0	130-180
ACCEL-302	NMT 45	70-100	NLT 140	90	0.35-0.45	3.0-5.0	130-180

DETAILS		
Description	Crystalline, odourless, tasteless, free-flowing powder	
Colour	White or almost white	
Solubility	Practically insoluble in water, organic solvents and diluted acids. Slightly soluble in NaOH solution (1:20)	
Identification A	Conforms	
Identification B (Degree of Polymerization)	Conforms	
Assay	97.00% to 102%	
pН	5.0 to 7.5	
Conductivity	NMT 75 μS.cm-1	
Water Soluble Substance	0.25% max.	
Ether Soluble Substance	0.05% max.	
Loss on Drying	Max. 7.00%	
Residue on Ignition	0.1% max.	
Heavy Metals	NMT 10 PPM	
Arsenic	NMT 2 PPM	
Organic Volatile Impurities	Complies	







MICROBIAL LIMIT			
Total Aerobic Microbial Count	NMT 1000 c.f.u./g		
Total Yeast & Mould Count	NMT 100 c.f.u./g		
Escherichia Coli	Absent		
Staphylococcus Aureus	Absent		
Salmonella Species	Absent		
Pseudomonas Aeruginosa	Absent		

## COSMETICS

• Hydrocolloid compatibility aids in manufacturing creams, lotions & various cosmetic emulsions

#### WELDING ELECTRODES

- Improves electrode surface and burning of electrodes
- Provides better incineration due to very low ash contents

## RUBBER

• Aids in tyre manufacture & rubber yarn for good strength & superior texture

#### **ENZYMES**

• Helps in enzyme cellulose manufacture

### PAINTS

- Used for better texture
- Controls viscosity
- Improves holding property of paints on the surface

#### **CEMENT & CERAMICS**

- Improves binding property
- Absorbs moisture and prevents clogging

## FILTRATION

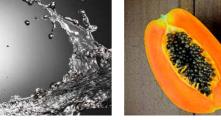
- Assists in all filtration processes
- Serves as filtering aid in petroleum industry for metal filtration













			GRADE			
	PARTICLE SIZE					
GRADE	RETAINED ON 300 μm	RETAINED ON 100 μm	RETAINED ON 32 μm	BULK DENSITY	% MOISTURE	DOP
ACCEL- POWDER CELLULOSE	NMT 0.5%	NMT 15%	NMT 85%	260 to 400 g/l	NMT 6.5%	NLT 440

DETAILS		MICROBIAL LIMIT		
Description	White or almost white,	Total Viable Aerobic Count	N.M.T. 1000 cfu/g	
	odourless, tasteless.	Total yeast & Mould Count	N.M.T 100 cfu/g	
Solubility	Practically insoluble in water, dilute acid and most	Staphylococcus aureus	Absent	
	of organic solvents, Slightly soluble in dilute NaOH	Escherichia Coli.	Absent	
		Pseudomonas aeruginosa	Absent	
		Salmonella species	Absent	
Identification A,1 (Zinc Chloride test)	Conforms			
Identification B,3 (Degree of Polymerization)	NLT 440			
Identification 2, Suspention test	Conforms	-		
pH (10% suspension in water)	5.0-7.5	-		
Conductivity	NMT 75 μS.cm-1			
Water Soluble Substance	NMT 1.0 %			
Ether Soluble Substance	NMT 0.15 %			
Heavy Metals	NMT 10 PPM			
Arsenic	NMT 3 PPM			
Lead	NMT 2 PPM			
Mercury	NMT 1 PPM			
Cadmium	NMT 1 PPM			
Sulphated Ash	NMT 0.3%			
Assay	NLT 92%			
Starch	Not detectable			
Particle size	NLT 5μm (not more than 105 of particles less than 5 μm)			

# WORLDWIDE WORLDWIDE WORLDWIDE

CANADA

USA

EXICO

FEM

DOMINICAN

BRAZIL

URUGUAY

REPUBLIC

OLUMBIA

CHILE

RGENTINA

With big dreams & dedicated efforts through innovation & consistent quality, since our establishment, we have made attempts towards extending our reach globally.

Achieving new milestones & adding one more country as our valued client every time, we feel privileged to spread internationally in more than 75 countries including USA, Canada, UK, Germany and others.

Then and today, even with all the feathers in our crown, we still believe in maintaining superior quality of our products & simultaneously respecting the trust of our clients who walk with us hand in hand to celebrate our hard-earned success.

We endeavour to deliver the best and fulfil the expectations of our invaluable patrons.



# croscarmellose SODIUM



CCS is an internally cross-linked polymer of sodium carboxymethyl cellulose and at Accent is available as Acrocell. Possessing the nature of being cross-linked, it is insoluble, hydrophilic and highly absorbent. Being uniquely fibrous, it holds remarkable water wicking capabilities. CCS improves bioavailability of formulations through its drug dissolution and disintegration attributes. E468 cross-linked sodium carboxymethyl cellulose acts as a food emulsifier.

## APPLICATION OF CCS

- Rapid disintegrator in pharmaceutical formulations for tablets, capsules and granules
- CCS effectively combines with insoluble and filler binders such as MCC and DCP
- It is preferable for non-starch base formulation products
- CCS being a rapid disintegrator, tablet dissolution can be easily achieved
- Efficient for low use of levels
- CCS works well for insensate hardness of tablets & finer dissolution stability for a long term
- Used in solid-dosage forms, vitamins and other nutrition

## TECHNICAL SPECIFICATIONS OF CROSCARMELLOSE SODIUM

	DETAILS
Description	Free-flowing powder, very hygroscopic powder
Colour	Almost white
Solubility	Practically insoluble in acetone, ethanol, ether and toluene
Identification (A,B,C), (1,2,3)	Have to correspond as USP/NF, JP, Ph.Eur., BP
Degree of Substitution	0.60 to 0.85 as USP/NF, JP, Ph.Eur., BP
Loss on Drying	NMT 10.0% as USP/NF, JP, Ph.Eur., BP
pН	5.0-7.0 as USP/NF, JP, Ph.Eur., BP
Content of Water Soluble Substance	NMT 10.0 % as USP/NF, JP, Ph.Eur., BP
Residue on Ignition / Sulphated Ash	14.0% to 28.0% as USP/NF, JP, Ph.Eur., BP
Settling Volume	10 to 30 ml as USP/NF, JP, Ph.Eur., BP
Sodium Chloride & Sodium Glycolate	NMT 0.5 % as USP/NF, Ph.Eur., BP
Heavy Metals	NMT 10 PPM as USP/NF, Ph.Eur., BP

MICROBIAL LIMIT			
Total Aerobic Microbial Count	N.M.T. 1000cfu/g as USP/NF, Ph.Eur., BP		
Total Yeast & Mould Count	N.M.T 100cfu/g as USP/NF, Ph.Eur., BP		
Escherichia Coli	Absent as USP/NF, Ph.Eur., BP		
Staphylococcus Aureus	Absent as USP/NF, Ph.Eur., BP		
Salmonella Species	Absent as USP/NF, Ph.Eur., BP		
Pseudomonas Aeruginosa	Absent as USP/NF, Ph.Eur., BP		

# MAGNESIUM STEARATE









MS, also called Octadecanoic Acid, is a salt that contains 2 equivalents of stearate joined by an ionic bond to a magnesium atom. MS being insoluble in water and carrying a melting point of about 120°C, it is considered safe for human consumption below levels of 2500 mg/kg/day.

With its lubricating properties, MS prevents the ingredients from sticking to the machines during the compression of chemical powders into production of solid tablets thus speeding up production. MS is a sugar binder for candies and is also commonly used in baby foods.

The FDA classifies MS as a glidant or a granulating agent. MS functions in preventing molecular clumping thus ensuring accurate dosage of every pill. It is an inactive ingredient binding the active ingredients of a pill or a capsule. MS acts as a masking agent for taste & odour of active ingredients and helps prolong the shelf life of pharmaceuticals.

#### **APPLICATION OF MS**

- Used as lubricant in tableting & pharmaceuticals
- Works as flattening agent in paints and varnishes
- Functions as stabilizer & lubricant in engineering & plastics
- Acts as soothing agent in talcum powder & other cosmetics
- Serves as emulsifying agent in cosmetics & anti-caking agent in foods

## TECHNICAL SPECIFICATIONS OF MAGNESIUM STEARATE

# DETAILS

Description	Very fine, light powder, greasy to touch
Colour	White
Solubility	Practically insoluble in water & anhydrous ethanol
Identification A (Freezing Point)	Have to correspond as USP/NF, Ph.Eur., BP
Identification B (Acid Value)	195 to 210 as USP/NF, Ph.Eur., BP
Identification C, D	Have to correspond as USP, BP, Ph.Eur
Acidity or Alkalinity	Have to correspond as USP, BP, Ph.Eur
Chloride	NMT0.1% as USP/NF, Ph.Eur., BP
Sulphates	NMT 0.5% as USP/NF, Ph.Eur., BP
Cadmium	NMT 3 PPM as USP/NF, Ph.Eur., BP
Lead	NMT 10 PPM as USP/NF, Ph.Eur., BP
Nickel	NMT 5 PPM as USP/NF, Ph.Eur., BP
LOD	NMT 6% as USP/NF, Ph.Eur., BP
Assay of Magnesium	4.0% to 5.0% as USP/NF, Ph.Eur., BP
Fatty Acid Composition	NLT 40% of Stearic Acid & NLT 90% of sum of stearic acids & palmitic acid as USP/NF, Ph.Eur., BP
Bulk Density	0.22 to 0.35 gm/ml
Sieve Analysis 200 Mesh (Passing Through)	NLT 90.00%

## **MICROBIAL LIMIT**

Total Viable Aerobic Count	N.M.T. 1000cfu/g as USP/NF, Ph.Eur., BP
Total Yeast & Mould Count	N.M.T 100cfu/g as USP/NF, Ph.Eur., BP
Escherichia Coli	Absent as USP/NF
Salmonella Species	Absent as USP/NF

#### **Corporate Office**

314, Shangrilla Arcade, Shyamal Cross Roads, Anandnagar Road, Satellite, Ahmedabad - 380015, Gujarat, India

Phone.: +91 79 40042367/32459689/ 32522633/40094906 Fax No.: +91 79 4009 4907 Email: info@accentmicrocell.com bus\_intl@accentmicrocell.com

#### Unit 1 (Pirana)

Survey No. 533/P, Paldi, Kankaj, Pirana Road, Ta. Daskroi, Dist. Ahmedabad - 382425 Phone: +91 2718 288001/288002

#### Unit 2 (Dahej - SEZ)

Plot No. Z/59-60-63, Dahej-SEZ, Part-I, Ta. Vagra, Dist. Bharuch - 392130 Phone: +91 75758 05960

www.accentmicrocell.com

