ZHONGYAOTECH
XINGTAI ZHONGYAO CHEMICAL

PRODUCT BROCHURE
2026 / 01

HEXAGONAL PLATE MDH

HC515SA
Modified MDH.

Hexagonal plate morphology with silane treatment — higher loading, better flow, fewer surface defects than a milled grade.

MORPHOLOGY	TREATMENT	LOADING	D50
Hex plate	**Silane**	**60–65 %**	**2–3 µm**

Platelets flow differently from irregular particles. That is a **rheology** decision, not a chemistry one.

60–65%

LOADING

for V-0 in PE and EVA systems.

Hex

MORPHOLOGY

Better packing and melt flow than milled powder.

Silane

SURFACE

Coupling matched to polyolefins.

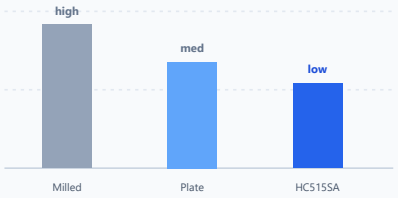
01 — MECHANISM

Shape is the second specification.

A hexagonal platelet packs differently from an irregular milled particle. At high loading that changes melt viscosity, die pressure and surface finish.

The surface treatment then determines whether the platelets bond to the polymer or act as defects.

Compare. HC515SA is the grade to trial when a milled MDH passes flame tests but fails on surface finish or line pressure.



AT 60 WT% LOADING — INDICATIVE

PROCESS

Processing → Ignition → Char

Melt pressure — At 60 wt% loading — indicative

MORPHOLOGY
Hexagonal plate
vs Irregular

MELT PRESSURE
Lower
vs Higher

SURFACE FINISH
Better
vs Adequate

02 — SPECIFICATION

Controlled batch to batch.

Parameter	Standard value	Method
Product Grade	**HC515SA**	Batch COA
Reference Standard	**HG/T3607-2007**	Batch COA
Chemical Name	**Modified magnesium hydroxide / Mg(OH)2**	Batch COA
CAS No.	**1309-42-8**	Batch COA
Appearance	**White powder**	Batch COA
Mg(OH)2 Content	**≥ 99.8%**	Batch COA
CaO	**≤ 0.01%**	Batch COA
Acid Insoluble Matter	**≤ 0.016%**	Batch COA
Moisture	**≤ 0.10%**	Batch COA
Chloride (as Cl)	**≤ 0.05%**	Batch COA
Iron (Fe)	**≤ 0.002%**	Batch COA
Particle Size D10	**≤ 0.622 μm**	Batch COA
Particle Size D50	**≤ 1.3 μm**	Batch COA
Particle Size D100	**≤ 7.742 μm**	Batch COA
Whiteness	**≥ 99**	Batch COA
Bulk Density (TDS)	**0.25 g/ml**	Batch COA
BET Surface Area (TDS)	**6 m^2/g**	Batch COA
Recommended Processing Temperature	**< 300°C**	Batch COA
Typical Packaging	**25 kg bag / jumbo bag**	Batch COA
Target Applications	**PE, PP, EVA, XLPE, PVC, TPU, LSZH cable compounds**	Batch COA

Trial note

Platelet grades need lower shear in the metering zone. A processing note accompanies every trial shipment.

SUPPLY

Packaging	**25 / 1 000 kg**
Minimum order	**1 t**
Lead time	**3–7 days**
Grade code	**HC515SA**

CAS 1309-42-8 · Batch COA with every shipment. TDS and SDS on request.

INCOMING

Ore assay

Every lot screened for Fe, Ca, Si before calcination.

IN PROCESS

Activity + LOI

Sampled during production against the batch target.

BEFORE SHIPMENT

Full COA

Complete release testing, third-party reports on request.

03 — APPLICATIONS

Where it is specified.



01

PE compounds

Surface finish



02

Cable jacket

Line pressure



03

Sheet

Flame and flow



04

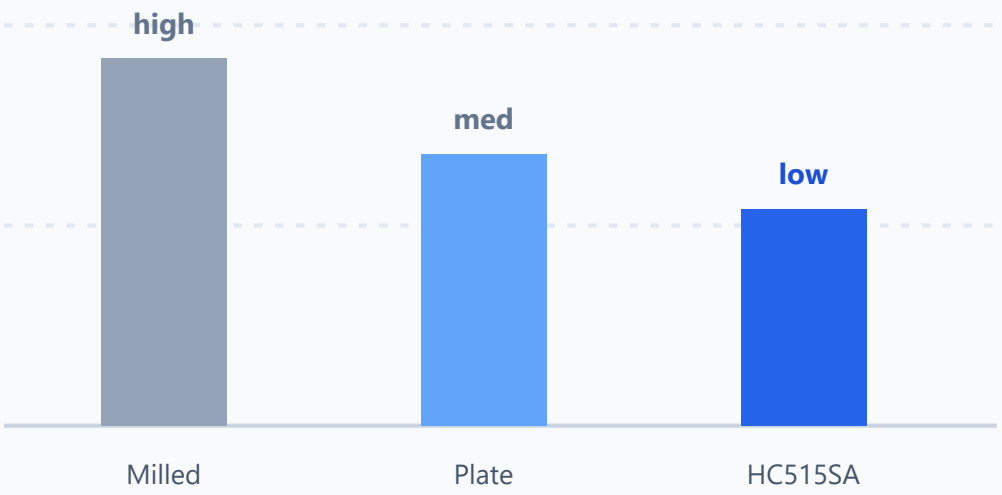
Custom grades

Morphology control

Dosage and loading figures are starting points for formulation trials. Final performance depends on the complete compound and test conditions.

04 — PERFORMANCE

Loading against performance.



AT 60 WT% LOADING — INDICATIVE

Property	HC515SA	Milled MDH
Morphology	**Hexagonal plate**	Irregular
Melt pressure	**Lower**	Higher
Surface finish	**Better**	Adequate
Cost	**Higher**	Lower

PACKAGING

25 kg PE-lined PP woven bag, palletised on request.

1 000 kg jumbo bag for bulk compounding lines.

LOGISTICS

20' FCL load	**20–24 t**
Port of loading	**Tianjin / Qingdao**
Incoterms	**FOB / CIF / CFR**
HS code	**2519.90**

05 — SUPPLY

Batch traceable. Documented every time.

Every shipment carries a batch-specific COA. TDS, SDS and REACH statements are issued on request. Production is ISO 9001:2015 certified.

50,000 t
ANNUAL CAPACITY

50+
EXPORT COUNTRIES

1 t
MINIMUM ORDER

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Specifications are typical values and do not constitute a batch release certificate. Confirm acceptance criteria against the batch COA and the TDS in force at the time of order.

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