ZHONGYAOTECH
XINGTAI ZHONGYAO CHEMICAL

PRODUCT BROCHURE
2026 / 01



PVC CABLE GRADE

MDH for PVC Cables.

Smoke suppressant and thermal stabiliser for flexible PVC — cuts smoke density by more than half at 40–60 wt% loading.

$Mg(OH)_2$	LOADING	SMOKE	D50
≥ 96 %	40–60 %	120–180	1.5–3 µm

PVC already has chlorine built into the chain. MDH is how you keep it **out of the smoke**.

120–180

SMOKE DENSITY

Against 400+ for an antimony-halogen system.

40–60%

LOADING

for V-0 in flexible PVC compounds.

<5 phr

PLASTICISER IMPACT

Low interference with typical ester plasticisers.

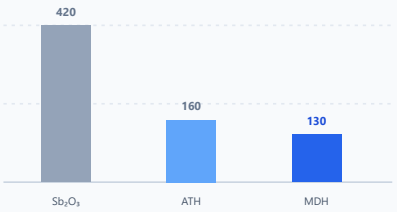
01 — MECHANISM

Smoke suppression without changing the compound.

During combustion magnesium hydroxide releases water vapour that cools the gas phase and dilutes the visible smoke precursors.

It also buffers the HCl released by the PVC itself — reducing both the acid attack on surrounding metalwork and the visible plume.

Compare. Unlike antimony trioxide, MDH adds no heavy metal and no halide to a compound that is already under scrutiny.



DSR BY FLAME RETARDANT SYSTEM — INDICATIVE

PROCESS

Processing → Ignition → Char

Smoke density — DSR by flame retardant system — indicative

SMOKE DENSITY
120–180
vs > 400

HALOGEN ADDED
None
vs Yes

HEAVY METAL
None
vs Antimony

02 — SPECIFICATION

Controlled batch to batch.

Parameter	Standard value	Method
Mg(OH)2 Content	**≥ 95.0%**	Batch COA
Specific Surface Area	**10-20 m^2/g**	Batch COA
Particle Size	**Fine**	Batch COA
Whiteness	**≥ 92%**	Batch COA

Formulation note

In plasticised PVC the filler also absorbs part of the plasticiser. Allow for 3–5 phr extra when reformulating from an antimony system.

SUPPLY

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

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.

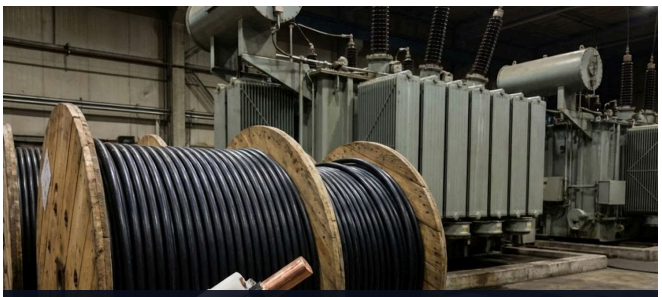
BEFORE SHIPMENT

Full COA

Complete release testing, third-party reports on request.

03 — APPLICATIONS

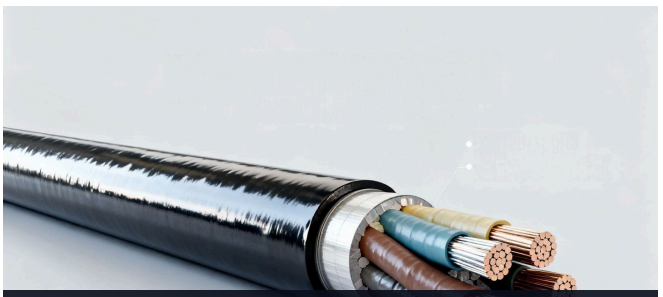
Where it is specified.



01

Flexible PVC cable

Smoke suppression



02

Building wire

Low smoke



03

PVC sheet

Flame spread



04

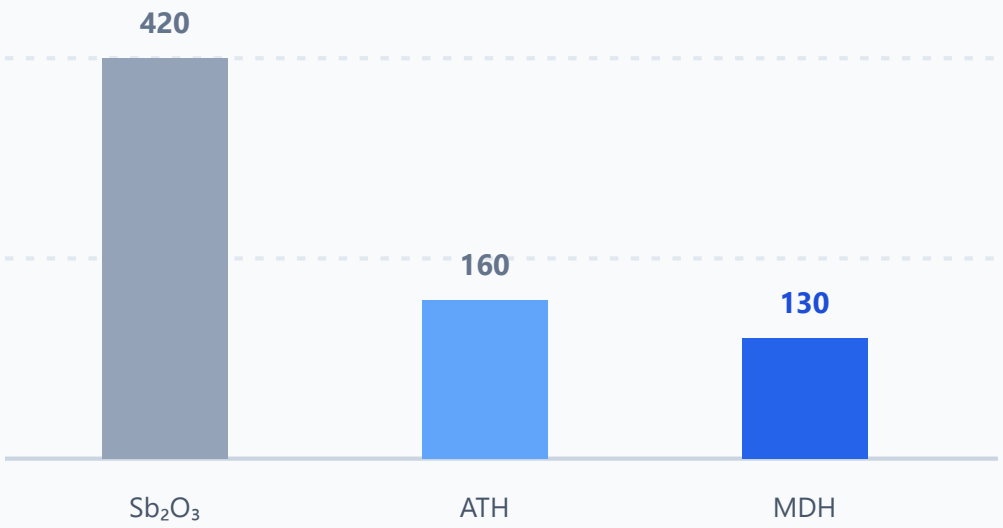
Custom compounds

Formulation support

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.



DSR BY FLAME RETARDANT SYSTEM — INDICATIVE

Property	MDH system	Antimony system
Smoke density	**120–180**	> 400
Halogen added	**None**	Yes
Heavy metal	**None**	Antimony
Cost	**Comparable**	Comparable

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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