

DAZZLING®

Mesotrione 98% TC · 硝磺草酮原药 98% TC

Issued by: Hubei Daheng Agricultural Science and Technology Development Co., Ltd.

出具单位: 湖北达亨农业科技发展有限公司

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Date of issue: September 13, 2026 · English edition revised September 18, 2026

HS code: 2930909044 (CN national code as stated in the factory TDS — confirm with your broker)

TDS 技术数据表

Technical Data Sheet — Mesotrione 98% TC

企业名称: 湖北达亨农业科技发展有限公司

修订日期: 2026-09-13

HS编码: 2930909044

产品名称: 硝磺草酮原药 98% TC

英文通用名: Mesotrione

CAS号: 104206-82-8

分子式: $C_{14}H_{13}NO_7S$

分子量: 339.32

外观: 淡黄色至浅棕黄色粉末

硝磺草酮质量分数 (干基): $\geq 98.0\%$ (HPLC 高效液相色谱)

pH值 (1%水溶液): 3.0 ~ 6.0

丙酮不溶物: $\leq 0.2\%$

干燥减量: $\leq 1.0\%$

熔点: 148.7-152.5 °C (伴随分解)

蒸气压 (20°C): $< 5.7 \times 10^{-6}$ Pa

水中溶解度 (20°C): 0.16 g/L

溶解性: 易溶于丙酮、二氯甲烷、乙腈; 微溶于甲醇、甲苯; 几乎不溶于水

用途: 除草剂原药, 用于加工制剂, 防治玉米田一年生阔叶杂草及部分禾本科杂草; 仅作为农药加工原料, 不可直接大田施用

包装规格: 25kg纸板桶

Technical Data Sheet

English · Mesotrione 98% TC

Company: Hubei Daheng Agricultural Technology Development Co., Ltd.

Version: V1.0

Date: 2026-09-13

HS code: 2930909044

Product Name: Mesotrione 98% TC

CAS No.: 104206-82-8

Molecular Formula: C₁₄H₁₃NO₇S

Molecular Weight: 339.32

Appearance: Pale yellow to light brown powder

Assay (dry basis): ≥98.0% — HPLC

pH value (1% aqueous suspension): 3.0 ~ 6.0 — pH Meter

Insoluble matter in Acetone: ≤0.2% — Gravimetry

Loss on Drying: ≤1.0% — 105°C constant weight

Melting Point: 148.7~152.5°C (with decomposition) — Melting Point Apparatus

Vapor Pressure (20°C): <5.7×10⁻⁶ Pa

Solubility in water (20°C): 0.16 g/L

Solubility: Soluble in acetone, dichloromethane, acetonitrile; slightly soluble in methanol, toluene; practically insoluble in water

Application: Herbicide technical material, used for formulation manufacturing, control annual broadleaf weeds and partial grass weeds in corn. Only for pesticide processing, not for direct field application.

Packing: 25kg fibre drum

Shelf life: 24 months, store sealed in cool & dry condition

Note: This TDS is for quality reference and foreign trade only. Official registration requires third-party lab certificate.

SDS 化学品安全技术说明书

Safety Data Sheet — Mesotrione 98% TC (Chinese)

第1部分 化学品及企业标识

1.1 **化学品名称:** 硝磺草酮 98%原药 (Mesotrione 98% TC)

1.2 **CAS号:** 104206-82-8

1.3 **供应商:** 湖北达亨农业科技发展有限公司

1.4 **地址:** 湖北省枣阳市环城鲍庄村九组

1.5 **推荐用途:** 农药除草剂原药, 用于农药制剂加工

1.6 **限制用途:** 禁止直接田间喷施, 禁止食品、饲料使用

第2部分 危险性概述

2.1 **GHS危险性分类:** 皮肤刺激 类别2; 眼刺激 类别2; 危害水生环境-急性 类别1; 危害水生环境-慢性 类别1; 疑似损害胎儿

2.2 **警示词:** 警告

2.3 **危险象形图:** 腐蚀、环境

2.4 **危险说明:** H315 造成皮肤刺激 / H319 造成严重眼刺激 / H361d 怀疑对胎儿造成伤害 / H410 对水生生物毒性极大并具有长期持续影响

2.5 **防范说明:** P202 在阅读并理解所有安全预防措施前, 不要操作; P280 佩戴防护手套、护目镜、防护服; P264 作业后彻底清洗皮肤; P273 避免释放到环境; P302+P352 如皮肤沾染: 用大量清水冲洗; P305+P351+P338 如入眼: 清水冲洗数分钟, 摘除隐形眼镜继续冲洗; P391 收集泄漏物; P501 按照当地法规处置包装物/残余物

第3部分 成分/组成信息

硝磺草酮: ≥98.0%

CAS号: 104206-82-8

杂质 (相关杂质、水分等): ≤2.0%

第4部分 急救措施

4.1 **吸入:** 转移至新鲜空气处, 保持呼吸道通畅, 如不适就医

4.2 **皮肤接触:** 立即脱去污染衣物, 大量流动清水冲洗至少15分钟; 如皮肤刺激持续, 就医

4.3 **眼睛接触:** 大量清水持续冲洗至少15分钟, 翻开眼睑冲洗; 刺激不退立即就医

4.4 **食入:** 不要催吐, 携带本SDS送医; 无特效解毒剂, 对症治疗

第5部分 消防措施

5.1 **灭火剂:** 干粉、二氧化碳、泡沫; 禁止高压直流水冲击燃烧物料, 防止粉尘扩散

5.2 **特殊危害:** 高温分解会释放氮氧化物、硫氧化物有毒烟气; 粉尘遇明火有粉尘爆炸风险

5.3 **消防人员防护:** 佩戴全套呼吸器、防护服, 在上风向灭火

第6部分 泄漏应急处理

6.1 **个人防护:** 佩戴防尘口罩、护目镜、耐化学品手套, 隔离无关人员

6.2 **环境防范:** 严禁流入下水道、河湖、水体

6.3 **泄漏处置:** 小量泄漏, 用惰性沙土吸附收集; 大量泄漏围堤收容, 收集至密闭容器, 按危废处理; 清扫避免扬尘

6.4 **清理后:** 对污染区域清水冲洗, 收集冲洗废液, 不可直接排放

第7部分 操作处置与储存

7.1 **操作:** 密闭操作, 局部排风, 避免粉尘产生; 严禁吸入粉尘; 操作区域禁止饮食、吸烟; 穿戴全套PPE

7.2 **储存:** 密封存放于阴凉、干燥、通风库房; 远离热源、火源、食品、饲料; 与氧化剂、强酸分开存放; 加锁保管, 远离儿童

7.3 **不兼容物质:** 强氧化剂、强碱

第8部分 接触控制/个体防护

8.1 **职业接触限值:** 无国标规定限值

8.2 **工程控制:** 局部除尘通风

8.3 **呼吸防护:** 粉尘超标时佩戴KN95防尘口罩; 大量处置用防毒呼吸器

8.4 **手部防护:** 丁腈/橡胶耐化学品手套

8.5 **眼部防护:** 化学护目镜

8.6 身体防护：防尘工作服

第9部分 理化特性

外观：淡黄色至浅棕黄色固体粉末

pH值：3.0~6.0（1%悬浮液）

熔点：148.7~152.5℃（伴随分解）

蒸气压(20℃)： $< 5.7 \times 10^{-6}$ Pa

密度：1.5 g/cm³

溶解度：水 0.16 g/L（20℃）；易溶于丙酮、二氯甲烷、乙腈；微溶于甲醇、甲苯

稳定性：常温稳定；遇强光、高温会缓慢降解

分解温度：> 152℃

第10部分 稳定性和反应性

10.1 稳定性：常温密闭条件稳定

10.2 危险反应：与强氧化剂可发生反应

10.3 应避免条件：高温、明火、强光

10.4 不相容物质：强氧化剂、浓强碱

10.5 有害分解产物：氮氧化物、硫氧化物、一氧化碳

第11部分 毒理学信息

急性经口LD50（大鼠）：> 2000 mg/kg

急性经皮LD50（大鼠）：> 2000 mg/kg

毒性：低毒；对皮肤、眼睛有刺激性

生殖毒性：疑似损害胎儿

致癌性：无明确致癌证据

第12部分 生态学信息

12.1 生态毒性：对鱼类、甲壳类、藻类高毒；对蜜蜂、家蚕有毒

12.2 持久性与降解：土壤中可降解；水体中光降解

12.3 生物富集：低生物富集潜力

12.4 迁移性：弱吸附于土壤

12.5 PBT/vPvB评估：不属于PBT/vPvB物质

12.6 其他：严禁进入自然水体

第13部分 废弃处置

残余化学品：按危险废物，交由有资质危废单位处置；不得直接丢弃、排入水体

包装：清空包装，按当地法规回收或危废处置；不可重复盛装食品饲料

第14部分 运输信息

UN编号：UN3077

正式运输名称：对环境有害的固态物质，未另列明（硝磺草酮）

危险类别：9类（环境危害物质）

包装类别：III类包装

海运/空运：按9类危险品运输；禁止与食品、饲料同柜运输；防止雨淋、暴晒

第15部分 法规信息

中国法规：《危险化学品安全管理条例》、农药管理条例；GHS化学品分类；农药进出口相关管理规定

其他：出口目的国当地化学品、农药法规

第16部分 其他信息

修订日期：2026-09-13；版本 V1.0

说明：本SDS基于现有公开资料编制，仅供外贸、安全参考；现场操作需专业培训

Safety Data Sheet

English · Mesotrione 98% TC

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND SUPPLIER

1.1 Product identifier: Mesotrione 98% TC

1.2 CAS No.: 104206-82-8 / HS code: 2930909044

1.3 Company: Hubei Daheng Agricultural Technology Development Co., Ltd.

1.4 Address: Group 9, Baozhuang Village, Huancheng Sub district, Zaoyang City, Hubei Province, P.R.China

1.5 Recommended use: Herbicide technical concentrate for pesticide formulation production

1.6 Restriction: Not for direct field spraying, not for food or feed use

SECTION 2: HAZARDS IDENTIFICATION

2.1 GHS Classification: Skin irritation Category 2; Serious eye damage/eye irritation Category 2; Reproductive toxicity — Suspected damaging to fetus; Hazardous to aquatic environment Acute Category 1, Chronic Category 1

2.2 Signal word: WARNING

2.3 Hazard pictograms: Corrosion, Environment

2.4 Hazard Statements: H315 Causes skin irritation / H319 Causes serious eye irritation / H361d Suspected of damaging the unborn child / H410 Very toxic to aquatic life with long lasting effects

2.5 Precautionary Statements: P202 Do not handle until all safety precautions have been read and understood; P280 Wear protective gloves, eye protection, protective clothing; P264 Wash skin thoroughly after handling; P273 Avoid release to the environment; P302+P352 IF ON SKIN: Wash with plenty of water; P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, continue rinsing; P391 Collect spillage; P501 Dispose of contents/container in accordance with local regulation

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Mesotrione: ≥98.0%

CAS No.: 104206-82-8

Impurities & moisture: ≤2.0%

SECTION 4: FIRST-AID MEASURES

4.1 Inhalation: Remove victim to fresh air. Keep airway open. Seek medical help if discomfort occurs

4.2 Skin contact: Take off contaminated clothing, rinse skin thoroughly with plenty of running water for at least 15 minutes. If irritation persists, seek medical advice

4.3 Eye contact: Rinse cautiously with plenty of water for at least 15 minutes, lifting the eyelids. If irritation persists, seek medical advice immediately

4.4 Ingestion: Do not induce vomiting. Take this SDS with the patient to medical help. No specific antidote; treat symptomatically

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media: Dry powder, carbon dioxide, foam. Do not use a high-pressure water jet on burning material; prevent dust dispersal

5.2 Special hazards: Thermal decomposition releases toxic nitrogen oxides and sulphur oxides; dust may form an explosive atmosphere with an ignition source

5.3 Protection of fire-fighters: Wear full breathing apparatus and protective clothing, fight the fire from upwind

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear dust mask, goggles and chemical-resistant gloves; keep unprotected persons away

6.2 Environmental precautions: Do not allow to enter drains, rivers, lakes or water bodies

6.3 Spillage: Small spills — absorb with inert sand or earth and collect. Large spills — contain with a bund, collect into closed containers and dispose as hazardous waste. Avoid sweeping up dust

6.4 Clean-up: Wash the contaminated area with water and collect the washings; do not discharge directly

SECTION 7: HANDLING AND STORAGE

7.1 Handling: Closed operation with local exhaust ventilation; avoid dust generation; do not inhale dust; no eating, drinking or smoking in the work area; wear full PPE

7.2 Storage: Store sealed in a cool, dry, well-ventilated warehouse; keep away from heat, ignition sources, food and feed; store separately from oxidising agents and strong acids; keep locked and out of reach of children

7.3 Incompatible materials: Strong oxidising agents, strong bases

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Occupational exposure limits: No national limit specified

8.2 Engineering controls: Local dust extraction and ventilation

8.3 Respiratory protection: KN95 dust mask when dust levels are exceeded; air-purifying respirator for bulk handling

8.4 Hand protection: Nitrile or rubber chemical-resistant gloves

8.5 Eye protection: Chemical safety goggles

8.6 Body protection: Dust-proof work clothing

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pale yellow to light brown solid powder

pH value: 3.0~6.0 (1% suspension)

Melting point: 148.7~152.5°C (with decomposition)

Vapour pressure (20°C): $<5.7 \times 10^{-6}$ Pa

Density: 1.5 g/cm³

Solubility: Water 0.16 g/L (20°C); soluble in acetone, dichloromethane, acetonitrile; slightly soluble in methanol, toluene

Stability: Stable at ambient temperature; degrades slowly under strong light or high temperature

Decomposition temperature: > 152°C

SECTION 10: STABILITY AND REACTIVITY

10.1 Stability: Stable under sealed ambient conditions

10.2 Hazardous reactions: May react with strong oxidising agents

10.3 Conditions to avoid: High temperature, open flame, strong light

10.4 Incompatible materials: Strong oxidising agents, concentrated strong bases

10.5 Hazardous decomposition products: Nitrogen oxides, sulphur oxides, carbon monoxide

SECTION 11: TOXICOLOGICAL INFORMATION

Acute oral LD50 (rat): >2000 mg/kg

Acute dermal LD50 (rat): >2000 mg/kg

Toxicity: Low toxicity; irritating to skin and eyes

Reproductive toxicity: Suspected of damaging the unborn child

Carcinogenicity: No confirmed carcinogenicity data

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity: Very toxic to fish, crustacea and algae; toxic to bees and silkworm

12.2 Persistence and degradability: Degradable in soil; photodegradable in water

12.3 Bioaccumulation: Low bioaccumulation potential

12.4 Mobility: Weakly adsorbed in soil

12.5 PBT/vPvB assessment: Not a PBT or vPvB substance

12.6 Other: Prevent entry into natural water bodies

SECTION 13: DISPOSAL CONSIDERATIONS

Residual product: Dispose as hazardous waste via a licensed hazardous waste treatment organisation; do not discard or discharge to water

Containers: Empty containers shall be recycled or disposed of according to local regulation; do not reuse for food or feed

SECTION 14: TRANSPORT INFORMATION

UN Number: UN3077

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Mesotrione)

Hazard class: Class 9 (environmentally hazardous substance)

Packing group: III

Sea/air transport: Ship as Class 9 dangerous goods; do not ship together with food or feed; protect from rain and direct sunlight

SECTION 15: REGULATORY INFORMATION

China regulations: Regulation on the Safe Management of Hazardous Chemicals, Pesticide Administration Regulation, GHS classification system, pesticide import and export rules

Other: Local chemical and pesticide law in the destination country applies

SECTION 16: OTHER INFORMATION

Revision date: 2026-09-13; Version V1.0

Note: This SDS is compiled from available public data for foreign trade and safety reference. Operators require professional training before handling

DAZZLING® · Hubei Daheng Agricultural Science and Technology Development Co., Ltd.

Specification values are those of the factory technical data sheet and are subject to the certificate of analysis issued with each batch. HS commodity codes are quoted for guidance — confirm the applicable code for the declared product name and use with your customs broker.