SAFETY DATA SHEET

according to Regulation (EC) No 1272/2008 (CLP)

Chlorimuron-ethyl 25% WP

Shanghai Bosman Industrial Co., Limited

Product name	**Chlorimuron-ethyl 25% WP**	SDS number	**BM-SDS-9740**
Version	**1.0**	Revision date	**27 November 2026**
Supersedes	**Not applicable (first issue)**	Print date	**27 November 2026**
Language	**EN**	Format	**GHS / CLP - 16 sections**

1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name	Chlorimuron-ethyl 25% WP
Product type	Sulfonylurea (pyrimidinylsulfonylurea) herbicide, wettable powder (WP), 25% active ingredient [COA_LOCAL]
Active substance	Chlorimuron-ethyl (CAS 90982-32-4, EC 618-690-2; CIPAC 806.202; US EPA chemical code 128901) [PUBCHEM, ECHA_CL]
IUPAC name	Ethyl 2-(4-chloro-6-methoxypyrimidin-2-ylcarbamoylsulfamoyl)benzoate [PUBCHEM]

1.2 Relevant identified uses and uses advised against

Identified use	Professional plant-protection product (sulfonylurea herbicide) for post-emergence control of broad-leaved weeds in soya beans, peanuts and other labelled crops. For professional users only. [PUBCHEM, PMRA]
Uses advised against	Any use other than the identified use. Not for domestic or residential use. Do not use on crops or sites not stated on the label. [GHS_STD]

1.3 Details of the supplier of the safety data sheet

Supplier	Shanghai Bosman Industrial Co., Limited
Address	No. 1611, North Sichuan Road, Hongkou District, Shanghai 200080, P.R. China
Telephone	+86 21 6306 5878
Fax	+86 21 6091 1557
E-mail	info@bosmangroup.com
Website	www.bosmangroup.com

1.4 Emergency telephone number

24-hour emergency line	+86 21 6356 6528 (Shanghai Bosman Industrial Co., Limited, 24 h)
Poison centre	Contact your local poisons information centre or emergency services (e.g. 120 in mainland China) in case of poisoning.

2 HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

No harmonised entry in CLP Annex VI. Mixture classification per Regulation (EC) No 1272/2008 additivity principles and the mainstream ECHA C&L notification: Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410). [ECHA_CL]



SIGNAL WORD
WARNING

H-code	Hazard statement	Class / category
H400	Very toxic to aquatic life	Aquatic Acute 1
H410	Very toxic to aquatic life with long lasting effects	Aquatic Chronic 1
EUH401	To avoid risks to human health and the environment, comply with the instructions for use	Supplemental

2.2 Precautionary statements

- P273 Avoid release to the environment.
- P391 Collect spillage.
- P501 Dispose of contents and container to a licensed hazardous-waste contractor.

2.3 Other hazards

Pure-substance notifications in the ECHA C&L inventory also record H332 (harmful if inhaled, 44.2% of notifiers) and H373 (may cause damage to organs through prolonged or repeated exposure, 15.1%). These are notifier self-classifications for the pure substance, not harmonised entries and not a consensus. The 25% WP mixture is assessed under the CLP mixture rules; the predominant hazard is the aquatic-environment classification. [ECHA_CL]

Not a PBT / vPvB substance (logP < 3). PPDB screening states no endocrine-disruption problem known for the active substance. [PPDB]

3 COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	EC No.	Concentration	Classification
Chlorimuron-ethyl	90982-32-4	618-690-2	25% (w/w)	Aquatic Acute 1 H400; Chronic 1 H410
Wetting, dispersing and carrier ingredients	-	-	to 100%	Not classified / OPEN

Non-hazardous formulation ingredients are listed without an individual classification. The mixture classification reflects the composition and the CLP additivity principles. [COA_LOCAL, ECHA_CL]

4 FIRST-AID MEASURES

General advice	Move the person out of the contaminated area. Show this safety data sheet to the doctor in attendance. Never give anything by mouth to an unconscious person. [GHS_STD]
Inhalation	Move the person into fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician. [GHS_STD]
Skin contact	Take off all contaminated clothing immediately. Wash the skin thoroughly with soap and plenty of water. If irritation or a rash develops, seek medical advice. [GHS_STD]
Eye contact	Rinse cautiously with water for at least 15 minutes, holding the eyelids open. Remove contact lenses if present and easy to do. Get medical advice if irritation develops. [GHS_STD]
Ingestion	Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention. [GHS_STD]
Medical treatment	No specific antidote. Treat symptomatically and supportively. [GHS_STD]

5 FIRE-FIGHTING MEASURES

Suitable media	Water spray, dry powder, foam or carbon dioxide. [GHS_STD]
Unsuitable media	Do not use a solid water stream - it may scatter and spread the fire. [GHS_STD]
Special hazards	Thermal decomposition may release toxic and irritant gases (oxides of carbon, nitrogen, sulfur and hydrogen chloride). Closed containers exposed to heat may rupture. [GHS_STD]
Protective equipment	Wear self-contained breathing apparatus and full protective clothing. Contain fire water run-off; do not allow it to enter drains or watercourses. [GHS_STD]

6 ACCIDENTAL RELEASE MEASURES

Personal precautions	Evacuate non-essential personnel. Wear the PPE specified in Section 8. Avoid breathing dust. Avoid contact with skin and eyes. Ensure adequate ventilation. [GHS_STD]
Environmental precautions	Do not allow the product to enter drains, sewers, watercourses or groundwater. The product is very toxic to aquatic life; collect spillage. [ECHA_CL, GHS_STD]
Cleaning up	Sweep up or absorb the material with an inert absorbent (sand, earth, vermiculite) and place in a labelled, closed container for disposal. Wash the contaminated area with water and detergent. [GHS_STD]

7 HANDLING AND STORAGE

Handling	Keep containers tightly closed and labelled. Handle in well-ventilated areas, away from food, feed and drinking water. Avoid contact with skin, eyes and clothing; do not breathe dust. Wash hands and face after handling. [GHS_STD]
Storage	Store in the original, tightly closed container in a cool, dry, well-ventilated place, protected from direct sunlight and frost. Keep locked up and out of reach of children; store separately from food, feed, seed and drinking water. [GHS_STD]
Stability note	The active substance hydrolyses faster at higher pH; keep the product dry and away from strong alkalis. [PPDB]
Specific end use	Professional plant-protection product; observe the instructions for use and label restrictions. [GHS_STD]

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters	No binding occupational exposure limit established for the mixture; apply general hygiene standards of good occupational practice. [GHS_STD]
Engineering controls	Use only in well-ventilated areas, preferably under local exhaust ventilation. Avoid generating dust. [GHS_STD]
Eye protection	Tight-fitting protective goggles (EN 166). [GHS_STD]
Hand protection	Chemical-resistant gloves (e.g. nitrile rubber, EN 374); replace when contaminated. [GHS_STD]
Skin protection	Long-sleeved protective clothing, closed footwear and, where dust is generated, an overall with hood. [GHS_STD]
Respiratory protection	Where exposure limits may be exceeded or dust is generated, wear a particulate respirator (EN 149, FFP2 or higher). [GHS_STD]

Do not eat, drink or smoke in work areas. Remove and wash contaminated clothing before reuse. [GHS_STD]

9 PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Physical state	Off-white powder (WP) [COA_LOCAL]
Active content	24.5-26.0 % (w/w); batches 20190218-15 / -16 measured 25.1 / 25.2 % [COA_LOCAL]
pH (1% suspension)	5.0-9.0 (1% aqueous suspension, WP specification); batches 20190218-15 / -16 measured 6.6 / 6.5 [COA_LOCAL]
Suspensibility	>= 80 %; batches 20190218-15 / -16 measured 98 % [COA_LOCAL]
Fineness (through 325 um)	>= 98 % through 325 um (fineness); batches 20190218-15 / -16 measured 99 % [COA_LOCAL]
Water content	<= 3.0 %; batches 20190218-15 / -16 measured 1.0 % [COA_LOCAL]
Wetting time	<= 90 s; batches 20190218-15 / -16 measured 42 / 43 s [COA_LOCAL]
Persistent foam	<= 25 mL; batches 20190218-15 / -16 measured 12 mL [COA_LOCAL]
Melting point (pure AI)	181 deg C (pure active substance); not applicable to the WP formulation [PHYS_PUB]
Vapour pressure (pure AI)	4.9 x 10^-7 mPa at 25 deg C (pure active substance) [PHYS_PUB]
Water solubility (pure AI)	pH-dependent: 9 mg/L at pH 5 and 1200 mg/L at pH 7 (25 deg C) - pure active substance data [PHYS_PUB]
log Pow (pure AI)	0.11 at pH 7 (dissociated species); 2.50 for the neutral species - active substance data [PHYS_PUB]
pKa (pure AI)	4.20 at 25 deg C [PHYS_PUB]
Density (pure AI)	1.51 g/cm3 at 25 deg C (pure active substance); bulk density of the WP formulation OPEN [PHYS_PUB]
Explosive / oxidising	Not classified as explosive or oxidising [GHS_STD]

10 STABILITY AND REACTIVITY

Reactivity / stability Stable under recommended storage and handling conditions. The active substance hydrolyses in water with DT50 17-25 d at pH 5 (25 deg C) and faster at higher pH; keep dry. [PPDB]

Conditions to avoid Avoid heat, sparks, open flames and prolonged exposure to moisture. Protect from direct sunlight and temperatures exceeding 50 deg C. [GHS_STD]

Materials to avoid Strong oxidising agents, strong acids and strong alkalis. Keep away from food, feed and drinking water. [GHS_STD]

Hazardous decomposition Combustion or thermal decomposition may form carbon oxides, nitrogen oxides, sulfur oxides and hydrogen chloride. [GHS_STD]

11 TOXICOLOGICAL INFORMATION

Endpoint	Result	Source
Acute oral	Rat oral LD50 4102 mg/kg (male) / 4236 mg/kg (female); alternative registration datum >5000 mg/kg (EPA HED 2004) - active substance data	TOX_PUB
Acute dermal	Rabbit dermal LD50 >2000 mg/kg (active substance)	TOX_PUB
Acute inhalation	Rat inhalation LC50 (4 h) >5 mg/L air - active substance data	TOX_PUB
Skin irritation	Not a skin irritant (rabbit)	TOX_PUB
Eye irritation	Not an eye irritant (rabbit)	TOX_PUB
Sensitisation	Not a skin sensitiser (guinea pig)	TOX_PUB
Subchronic / NOEL	Rat 2-year NOEL 250 ppm (approx. 12.5 mg/kg bw/day), hematologic effects at higher doses; dog 1-year NOEL 250 ppm (6.25 mg/kg bw/day); mouse 18-month NOEL 1250 ppm; no carcinogenicity in rat or mouse	TOX_PUB
Mutagenicity	Negative in Ames test, CHO cells in vitro, in vivo rat bone-marrow cytogenetics and rat liver UDS	TOX_PUB

Endpoint	Result	Source
Carcinogenicity	No carcinogenic potential in rat (2-year) or mouse (18-month) studies	TOX_PUB
Reproductive toxicity	Rat development NOEL 30 mg/kg bw/day (maternal and fetal); rabbit maternal/fetal NOEL 60 / 15 mg/kg bw/day, no teratogenicity at any dose; two-generation rat reproduction NOEL 250 ppm	TOX_PUB
STOT	Critical chronic effect system: hematologic (EPA IRIS); repeated-dose studies show blood effects at high dose only	EPA_IRIS
Aspiration	Not classified (no aspiration-hazard data; powder formulation)	OPEN
WHO / EPA class	WHO acute toxicity class III (slightly hazardous); US EPA formulation toxicity category III	TOX_PUB
ADI / RfD / ARfD	Institution-specific: EPA IRIS chronic RfD 0.02 mg/kg bw/day; ADI 0.020 mg/kg bw/day (JMPR-derived value per public reference compilation); PMRA ADI 0.04 mg/kg bw/day with ARfD 0.3 mg/kg bw	EPA_IRIS / JMPR_REF / PMRA

12 ECOLOGICAL INFORMATION

Endpoint	Result	Source
Fish (96 h LC50)	Rainbow trout 96 h LC50 >8.4 mg/L (EPA ECOTOX verified); bluegill sunfish 96 h LC50 >100 mg/L; older upper-limit datum >1000 mg/L - active substance data	PPDB
Daphnia (48 h EC50)	Daphnia magna 48 h EC50 >10 mg/L; older upper-limit datum 1000 mg/L - active substance data	PPDB
Algae / aquatic plant	No dedicated algal endpoint in public databases (OPEN); the most sensitive aquatic endpoint is the aquatic plant Lemna gibba 7 d EC50 0.00045 mg/L (frond bio mass), driving the aquatic risk assessment	PPDB / OPEN
Aquatic plant detail	Lemna gibba 7 d EC50 (biomass) 0.00045 mg/L (0.45 ug/L); ErC50 45 ug/L; frond-count EC50 0.27 ug/L	PPDB
Bees	Bee contact LD50 (48 h) 12.5 ug/bee - active substance data	PPDB
Earthworms	Earthworm (Eisenia foetida) 14 d LC50 >4050 mg/kg soil	PPDB
Birds	Mallard duck acute oral LD50 (14 d) >2510 mg/kg; dietary LC50 (mallard, bobwhite quail) >5620 ppm	PPDB
Beneficial arthropods	Not stated in supplied sources (OPEN)	OPEN
Persistence / degradation	Hydrolysis DT50 17-25 d (pH 5, 25 deg C), degradation accelerates with increasing pH (typical sulfonylurea behaviour); aerobic soil DT50 40 d (typical) / 28 d (field); not persistent in alkaline water	PPDB
Bioaccumulation	Low bioaccumulation potential based on neutral logP 2.50 (< 3); rapid and extensive metabolism in animals	PPDB / PHYS_PUB
Mobility in soil	Koc 30-170 L/kg (high to very high mobility); Kd strongly pH-dependent (>1.60 at pH 4.5 falling to <0.03 at pH 6.5); GUS leaching index 2.86 (high leaching potential)	PPDB
PBT / vPvB	Not a PBT / vPvB substance (logP < 3, not persistent under alkaline conditions)	PPDB

Very toxic to aquatic life with long lasting effects; the aquatic plant (Lemna gibba) endpoint is the most sensitive known aquatic endpoint. Avoid release to the environment; collect spillage. [ECHA_CL, PPDB]

13 DISPOSAL CONSIDERATIONS

Waste treatment	Dispose of the product and container as hazardous waste in accordance with local, national and international regulations. [GHS_STD]
Containers	Triple-rinse emptied containers and add rinsings to the spray tank; puncture or crush and offer for recycling where facilities exist. [GHS_STD]
Precautions	Do not contaminate ponds, watercourses or ditches with the product or empty container. [GHS_STD]

14 TRANSPORT INFORMATION

Item	Value
UN number	UN3077 [UN_TDG]
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains chlorimuron-ethyl) [UN_TDG]
Class	9 [UN_TDG]
Packing group	III [UN_TDG]
Marine pollutant	Yes (environmentally hazardous) [UN_TDG]

Transport under UN3077, Class 9, PG III (environmentally hazardous substance, solid, n.o.s.). Do not transport together with foodstuffs, feed or drinking water. [UN_TDG, GHS_STD]

15 REGULATORY INFORMATION

CLP classification No harmonised CLP Annex VI entry for chlorimuron-ethyl; mixture classification per Reg (EC) 1272/2008 additivity and mainstream ECHA C&L notification: H400 / H410, Warning, GHS09. [ECHA_CL]

EU plant-protection status Not approved under Regulation (EC) No 1107/2009; no CLP Annex VI harmonised classification; REACH registration inactive - confirm destination-market registration status before supply [REG_STATUS]

WHO classification WHO acute toxicity class III (slightly hazardous); US EPA formulation toxicity category III [TOX_PUB]

Seveso III Not stated in a harmonised entry (OPEN); classify against Annex I of Directive 2012/18/EU per national implementation [OPEN]

Endocrine disruptors PPDB screening states no endocrine-disruption problem known for the active substance [PPDB]

16 OTHER INFORMATION

16.1 Source key

Key	Source
COA_LOCAL	Local quality-control report for the 25% WP formulation (PRODUCTS/Chlorimuron ethyl 25% WP/COA.png; sampling 2019-02-19, report 2019-03-15, batches 20190218-15 and 20190219-16) - product specification and measured values. Third-party identities removed.
PUBCHEM	PubChem/NIH public compound record CID 56160 - identifiers, molecular formula C15H15ClN4O6S, mass 414.8, XLogP 2.7, GHS notification summary and EPA IRIS linkage for chlorimuron-ethyl
ECHA_CL	ECHA C&L inventory (EC 618-690-2) - aggregated notifications from 7 notifiers: H332 (44.2%), H373 (15.1%), H400/H410 (51.2%); no harmonised CLP Annex VI entry; REACH registration inactive
UN_TDG	UN Model Regulations transport classification applied by comparable solid sulfonylurea formulations - UN3077, Class 9, PG III, environmentally hazardous substance, solid, n.o.s.
PHYS_PUB	Public physical-chemical reference data (Pesticide Manual-derived compilations) - melting point 181 deg C, vapour pressure 4.9e-7 mPa at 25 deg C, water solubility 9 mg/L (pH 5) / 1200 mg/L (pH 7) at 25 deg C, logP 0.11 (pH 7) / 2.50 (neutral), pKa 4.20, density 1.51 g/cm3, Henry 1.7e-10 Pa m3/mol
TOX_PUB	Public toxicology compilations (Pesticide Manual; US EPA HED human-health risk assessment 2004) - rat oral LD50 4102 (male) / 4236 (female) mg/kg with alternative registration datum >5000 mg/kg, rabbit dermal LD50 >2000 mg/kg, rat inhalation LC50 >5 mg/L air (4 h), non-irritating (rabbit skin/eye), non-sensitising (guinea pig), WHO acute toxicity class III
EPA_IRIS	US EPA IRIS substance 406 (chlorimuron-ethyl) - chronic RfD 2e-2 mg/kg-day; critical effect system: hematologic
PMRA	Health Canada PMRA re-evaluation consultation document 2018 (H113-27-2018-14) - ADI 0.04 mg/kg bw/day, ARfD 0.3 mg/kg bw, residue definition = parent chlorimuron-ethyl, HPLC/LC-MS methods LOQ 0.01-0.05 ppm, dietary exposure <3.1% of ADI
PPDB	AERU University of Hertfordshire PPDB record 1145 (chlorimuron-ethyl) - trout 96 h LC50 >8.4 mg/L (EPA ECOTOX verified), daphnia 48 h EC50 >10 mg/L, Lemna gibba 7 d EC50 0.00045 mg/L (highest aquatic-plant risk), bee contact LD50 12.5 ug/bee, earthworm 14 d LC50 >4050 mg/kg, mallard oral LD50 >2510 mg/kg, dietary LC50 >5620 ppm; aerobic soil DT50 40 d typical / 28 d field, hydrolysis DT50 17-25 d (pH 5, 25 deg C), Koc 30-170 L/kg, GUS 2.86

Key	Source
REG_STATUS	EU regulatory status - chlorimuron-ethyl is not approved under Regulation (EC) No 1107/2009 and has no CLP Annex VI harmonised entry; REACH registration status inactive
JMPR_REF	No dedicated FAO/WHO JMPR monograph located for chlorimuron-ethyl; ADI 0.020 mg/kg bw/day cited in public reference compilations is a JMPR-derived value (rat 2-year NOEL 12.5 mg/kg bw/day, safety factor 100) - not an independently published JMPR conclusion
GHS_STD	Standard precautionary and safety text per GHS/CLP guidance and Bosman SDS house style
OPEN	Not stated in any supplied or authoritative public source - open item, value NOT estimated

16.2 Revision and disclaimer

Version 1.0, 27 November 2026. First issue in the current Bosman SDS layout; content compiled from 12 named sources and re-verified. The active substance has no harmonised CLP Annex VI classification and is not approved under Regulation (EC) No 1107/2009. No dedicated FAO/WHO JMPR monograph was located; the ADI 0.020 mg/kg bw/day cited in public compilations is a JMPR-derived value, and institution-specific reference doses differ (EPA IRIS RfD 0.02; PMRA ADI 0.04 / ARfD 0.3) - each value is cited with its institution. Pure-substance ECHA notifications record H332 and H373 for the pure substance; this 25% WP mixture is classified under the CLP mixture rules as H400 / H410. Values not stated in named sources are marked OPEN and were NOT estimated. No third-party supplier, manufacturer, trade name or brand appears in this document.

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