SAFETY DATA SHEET

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

Acetamiprid 20% SL

Shanghai Bosman Industrial Co., Limited

Product name	**Acetamiprid 20% SL**	SDS number	**BM-SDS-0134**
Version	**3.0**	Revision date	**03 November 2026**
Supersedes	**Version 2.1**	Print date	**03 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	Acetamiprid 20% SL
Product type	Soluble concentrate (SL) - plant protection product
Active substance	Acetamiprid (CAS 135410-20-7)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use	Systemic insecticide for the control of sucking insects (aphids, whiteflies, thrips, leafhoppers) on a wide range of agricultural and horticultural crops. For professional use only.
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.

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 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP), Annex I.

H360D	Reproductive toxicity, Category 1B — May damage the unborn child.
H302	Acute toxicity, oral, Category 4 — Harmful if swallowed.
H312	Acute toxicity, dermal, Category 4 — Harmful in contact with skin.
H332	Acute toxicity, inhalation, Category 4 — Harmful if inhaled.

H319	Serious eye damage / eye irritation, Category 2 — Causes serious eye irritation.

2.2 Label elements



SIGNAL WORD
DANGER

H360D H302 H312 H332 H319	May damage the unborn child. Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes serious eye irritation.

Supplemental hazard statements: EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements - Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust, fume, gas, mist, vapours or spray.
P264	Wash hands and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing, eye protection and face protection.

Precautionary statements - Response

P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice or attention.
P312	Call a POISON CENTER or doctor if you feel unwell.
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice or attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Precautionary statements - Storage

P405	Store locked up.

Precautionary statements - Disposal

P501	Dispose of contents and container to a licensed hazardous-waste contractor.

2.3 Other hazards

This mixture contains N,N-dimethylformamide, a substance of very high concern included in Annex XIV of Regulation (EC) No 1907/2006 for its reprotoxic properties. No component is considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at a concentration of 0.1 % (w/w) or higher.

This mixture does not contain any substance that is identified as having endocrine-disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100, at a concentration of 0.1 % (w/w) or higher.

3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable - this product is a mixture.

3.2 Mixtures

Component	CAS No.	EC No.	Concentration	Classification (CLP)
Acetamiprid	135410-20-7	603-921-8	20 % w/w	Acute Tox. 3 (H301); Aquatic Chronic 3 (H412)
N,N-Dimethylformamide	68-12-2	200-679-5	74 % w/w	Repr. 1B (H360D); Acute Tox. 4 (H312, H332); Eye Irrit. 2 (H319); STOT SE 3 (H335)
Emulsifier (nonylphenol ethoxylate type)	99734-09-5	-	6 % w/w	Not classified as hazardous at the concentration present

The classification of the mixture has been derived from the composition using the additivity formulae and concentration limits of Annex I to Regulation (EC) No 1272/2008. The oral ATE of the mixture is 730 mg/kg, the dermal ATE is 1 290 mg/kg and the inhalation ATE (vapour) is 15 mg/L.

N,N-Dimethylformamide is included in Annex XIV (Authorisation List) of Regulation (EC) No 1907/2006. Use of this mixture within the European Union may require an authorisation.

4 FIRST AID MEASURES

4.1 Description of 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.

After inhalation — Move the person into fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

After skin contact — Take off all contaminated clothing immediately. Wash the skin thoroughly with soap and plenty of water. If skin irritation or a rash develops, seek medical advice.

After eye contact — Rinse cautiously with water for at least 15 minutes, holding the eyelids open. Remove contact lenses if present and easy to do. Continue rinsing. Get medical advice if irritation develops.

After ingestion — Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Early symptoms of overexposure to N,N-dimethylformamide include nausea, vomiting, abdominal pain, loss of appetite and facial flushing, and may be followed after a latent period of 6 to 24 hours by hepatic injury. Acetamiprid may cause headache, dizziness and, in severe cases, muscular weakness and respiratory depression. Eye contact causes irritation with redness and pain.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No specific antidote is known. Because hepatic damage after dimethylformamide exposure may be delayed, observation for at least 24 to 48 hours and monitoring of liver function are recommended after significant exposure. Ethanol ingestion increases the toxicity of dimethylformamide and must be avoided. Do not induce vomiting because of the risk of aspiration.

5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable media — Water spray, alcohol-resistant foam, dry chemical powder or carbon dioxide.

Unsuitable media — Do not use a solid water stream - it may scatter and spread the fire.

5.2 Special hazards arising from the substance or mixture

On heating, the product decomposes and releases toxic fumes including nitrogen oxides, carbon monoxide and hydrogen cyanide. The solvent component may produce flammable vapours above its flash point. Fire water run-off may be hazardous to the aquatic environment.

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing. Contain fire water run-off; do not allow it to enter drains or watercourses. Cool closed containers with water spray. Collect contaminated fire-fighting water separately.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Wear the personal protective equipment specified in Section 8. Avoid breathing vapour, mist or spray. Avoid contact with skin and eyes. Ensure adequate ventilation. Remove all sources of ignition where the product is flammable.

6.2 Environmental precautions

Do not allow the product to enter drains, sewers, watercourses or groundwater. Prevent the material from spreading. Notify the relevant authorities if the product has entered a watercourse or sewer, or has contaminated soil or vegetation.

6.3 Methods and material for containment and cleaning up

Absorb the spill with an inert absorbent (sand, earth, diatomaceous earth, vermiculite) and place it in a labelled, closed container for disposal. Do not use combustible absorbents such as sawdust. Wash the contaminated surface with water and detergent; collect the washings for disposal. Where the product has entered a watercourse, inform the competent authority.

6.4 Reference to other sections

See Section 8 for personal protection and Section 13 for disposal.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Use only outdoors or in a well-ventilated area. Provide local exhaust ventilation where vapour or mist may be generated.
- Avoid breathing vapour, mist or spray. Avoid contact with skin, eyes and clothing.
- Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling and before breaks.
- Take off contaminated clothing and wash it before reuse.
- Pregnant and breast-feeding women and persons with known liver disease should not work with this product.

7.2 Conditions for safe storage, including any incompatibilities

- Store locked up in a cool, dry, well-ventilated place in the tightly closed original container.
- Keep away from sources of heat and ignition and from direct sunlight.
- Store separately from food, drink, feed and seed, and out of reach of children.
- Keep away from acids, alkalis and oxidising agents.
- Store at temperatures between 5 °C and 35 °C; protect from frost.

7.3 Specific end use(s)

Systemic insecticide for the control of sucking insects (aphids, whiteflies, thrips, leafhoppers) on a wide range of agricultural and horticultural crops. For professional use only.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Component	Limit value	Type	Basis
N,N-Dimethylformamide	15 mg/m³	TWA (8 h), skin notation	Directive 2000/39/EC; national OEL to be verified
N,N-Dimethylformamide	30 mg/m³	STEL (15 min), skin notation	Directive 2000/39/EC
Acetamiprid	Not established	-	no binding OEL in the European Union

The skin notation indicates that percutaneous absorption may contribute significantly to total exposure; air monitoring alone is not sufficient to assess the risk.

8.2 Exposure controls

Provide local exhaust ventilation at points of vapour or mist generation and adequate general ventilation. Where engineering controls do not keep exposure below the occupational exposure limit, use respiratory protection. Provide an eyewash station and safety shower in the immediate work area.

Protective equipment	Requirement
Respiratory protection	Where ventilation is inadequate, wear a respirator with a combination filter (type A2/P2 or equivalent) for organic vapours and particulates.
Hand protection	Chemical-resistant gloves (butyl rubber, nitrile rubber or laminated film, minimum thickness 0.4 mm). Dimethylformamide penetrates many elastomers; verify the breakthrough time with the glove manufacturer and replace gloves frequently.
Eye protection	Tightly fitting safety goggles (EN 166) and, where splash exposure is possible, a face shield.
Skin and body	Long-sleeved chemical-resistant clothing, boots and an apron. Dimethylformamide readily penetrates skin and clothing.
Hygiene measures	Wash hands, forearms and face thoroughly with soap and water after handling and before eating, drinking, smoking or using the toilet. Shower at the end of the shift. Do not take work clothing home.

Do not allow the product to come into contact with food, drink or feed. Contaminated clothing should be removed immediately and laundered before reuse. Because dimethylformamide is absorbed through the skin, gloves and protective clothing are mandatory even where airborne concentrations are low.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Property	Value
Physical state	Liquid
Colour	Light yellow to amber
Odour	Slight, characteristic amine-like odour
Odour threshold	Not determined
pH	5.0 - 7.0 (as supplied)
Melting point / freezing point	< -20 °C (estimated from solvent content)
Boiling point	Not determined (solvent begins to evaporate above 60 °C)
Flash point	Not determined; the formulation contains a combustible solvent and should be treated as combustible (closed cup)
Flammability	Combustible liquid; not classified as a flammable liquid on the basis of the available data
Vapour pressure	Approx. 0.5 kPa at 20 °C (dimethylformamide contributes)
Relative density	1.05 - 1.10 g/cm³ (20 °C) (OECD 109)
Solubility in water	Completely miscible with water
Partition coefficient (log Pow)	0.80 at 25 °C (acetamiprid); -1.01 (dimethylformamide) (OECD 107)
Auto-ignition temperature	Not determined
Decomposition temperature	No decomposition below 150 °C
Viscosity	Not determined
Explosive properties	Not explosive (assessment by structure)
Oxidising properties	Not oxidising (assessment by structure)

9.2 Other information - no additional information available.

10 STABILITY AND REACTIVITY

10.1 Reactivity
No hazardous reaction is known under the recommended conditions of storage and use.

10.2 Chemical stability
Stable for at least two years when stored in the closed original container under the stated conditions. The product is hydrolytically stable in neutral and weakly acidic media and decomposes in strongly alkaline media.

10.3 Possibility of hazardous reactions
No hazardous polymerisation occurs. Contact with strong oxidising agents may cause an exothermic reaction.

10.4 Conditions to avoid
Alkalis, strong acids, heat, open flames, sparks and direct sunlight.

10.5 Incompatible materials
Strong oxidising agents, strong acids and strong alkalis. Do not mix with alkaline materials or with copper-based products.

10.6 Hazardous decomposition products
Thermal decomposition may release nitrogen oxides, carbon monoxide, carbon dioxide and hydrogen cyanide.

11 TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Endpoint	Result	Species / basis
Acute oral toxicity	LD50 146 - 217 mg/kg (rat)	acetamiprid, technical
Acute dermal toxicity	LD50 > 2 000 mg/kg (rat)	acetamiprid, technical
Acute inhalation toxicity	LC50 > 0.29 mg/L (rat)	acetamiprid, technical
ATE (mixture, oral)	730 mg/kg	calculated - Acute Tox. 4 (H302)
ATE (mixture, dermal)	1 290 mg/kg	calculated - Acute Tox. 4 (H312)
ATE (mixture, inhalation, vapour)	15 mg/L	calculated - Acute Tox. 4 (H332)
Skin corrosion / irritation	Not irritating (rabbit)	acetamiprid, technical
Serious eye damage / irritation	Irritating to eyes (H319)	attributed to the dimethylformamide content
Respiratory or skin sensitisation	Not a skin sensitiser (guinea pig)	acetamiprid, technical
Germ cell mutagenicity	Negative in the Ames test	acetamiprid, technical
Carcinogenicity	Not classified	acetamiprid, technical
Reproductive toxicity	May damage the unborn child (Repr. 1B, H360D)	N,N-dimethylformamide, Annex VI Index No. 616-001-00-X
STOT - single exposure	May cause respiratory irritation (H335)	N,N-dimethylformamide
STOT - repeated exposure	Liver is the principal target organ after repeated exposure	N,N-dimethylformamide; NOAEL not established for the mixture
Aspiration hazard	Not classified	-
NOEL	7.1 mg/kg bw/day (2 years, rat); 20.3 mg/kg bw/day (18 months, mouse); 20 mg/kg bw/day (1 year, dog)	acetamiprid, technical

11.2 Symptoms and effects
See Section 4.2. Dimethylformamide is readily absorbed through the skin and is a reproductive toxicant in experimental animals; exposure of pregnant women must be avoided. Acute overexposure may cause liver injury after a latent period.

11.3 Other information

The mixture has not been tested as a whole. The classification has been derived from the harmonised classifications of the components (Annex VI to Regulation (EC) No 1272/2008) using the bridging principles and calculation methods of Annex I. The mixture does not contain any substance classified as a category 1A or 1B carcinogen above 0.1 %.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Organism	Result	Test condition
Fish, acute	LC50 (96 h) > 100 mg/L	carp - acetamiprid, technical
Aquatic invertebrates	EC50 (48 h) > 200 mg/L	Daphnia magna - acetamiprid
Algae	EC50 (72 h) > 98.3 mg/L	acetamiprid, technical
Chronic aquatic toxicity	NOEC (96 h) 98.3 mg/L	acetamiprid; not classified as hazardous to the aquatic environment
Bees	LD50 (oral) 8.1 µg/bee	acetamiprid - toxic to bees by direct exposure; do not apply to flowering crops
Birds	LD50 (oral) 180 mg/kg	bobwhite quail - acetamiprid

12.2 Persistence and degradability

Acetamiprid is not readily biodegradable but degrades in soil with a half-life of 1 to 23 days. Dimethylformamide is readily biodegradable.

12.3 Bioaccumulative potential

Acetamiprid has a low bioaccumulation potential (log Pow 0.80). Dimethylformamide is not bioaccumulative (log Pow -1.01).

12.4 Mobility in soil

Acetamiprid is highly mobile in soil and may reach groundwater. Dimethylformamide is miscible with water and highly mobile.

12.5 Results of PBT and vPvB assessment

No component meets the PBT or vPvB criteria of Annex XIII of Regulation (EC) No 1907/2006.

12.6 Endocrine disrupting properties

No endocrine-disrupting properties are identified in accordance with the criteria of Commission Delegated Regulation (EU) 2017/2100.

12.7 Other adverse effects

Do not allow the product to reach surface water, groundwater or drains. The product is toxic to bees and other pollinating insects; do not apply during flowering or when bees are foraging.

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of surplus product and contaminated absorbents as hazardous waste through a licensed contractor. Do not contaminate water, food or feed by disposal. Comply with national and local waste legislation.

- Do not contaminate ponds, watercourses or ditches with the product or the empty container.
- Dispose of surplus product and non-recyclable packaging through a licensed hazardous-waste contractor, in accordance with national and local regulations.
- Empty containers retain product residues and vapour; observe all label safeguards until the container has been cleaned and destroyed.
- Triple-rinse emptied containers and add the rinsings to the spray tank; then puncture or crush and offer for recycling where facilities exist.

14 TRANSPORT INFORMATION

Parameter	ADR / RID	IMDG	IATA
UN number	3082	3082	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (acetamiprid mixture)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (acetamiprid mixture)	Environmentally hazardous substance, liquid, n.o.s. (acetamiprid mixture)
Class	9	9	9
Packing group	III	III	III
Environmental hazard	Yes	Yes (marine pollutant)	Yes
Tunnel code	(E)	-	-
EmS / Special	ADR 5.3.6	F-A, S-F	A97, A158

14.6 Special precautions for user

Transport only in the packaging permitted for Class 9, packing group III. The transport document must state the UN number, the proper shipping name, the class and the packing group. Keep containers closed and upright.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable - the product is transported in packaged form only.

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP).
- Regulation (EC) No 1907/2006 (REACH). N,N-Dimethylformamide is included in Annex XIV (substances subject to authorisation) and in Annex XVII (entry 61) of that Regulation.
- Acetamiprid is approved as an active substance in the European Union under Regulation (EC) No 1107/2009 (Commission Implementing Regulation (EU) No 540/2011).
- Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values; Directive 2004/37/EC on the protection of workers from carcinogens and mutagens.
- Directive 2008/98/EC on waste and national implementing legislation.
- European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) and the IMDG Code.
- National legislation implementing the above instruments in the country of use applies in addition.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety reports for the active substance and for N,N-dimethylformamide are available under the REACH registration dossiers.

16 OTHER INFORMATION

16.1 Revision information

This version replaces the previous edition in full. The revision restructures the document into the 16-section GHS format, adds the classification and labelling elements required by Regulation (EC) No 1272/2008, converts the composition to a tabular mass-fraction basis with the classifications of all hazardous components, completes Sections 8, 9, 11 and 12, and removes internal formatting remarks from the published text. The reproductive toxicity classification (Repr. 1B) reflects the dimethylformamide content of the formulation.

16.2 Full text of hazard statements referred to in Sections 2 and 3

H360D	May damage the unborn child.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H319	Causes serious eye irritation.

H412	Harmful to aquatic life with long lasting effects.

16.3 Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ATE: Acute Toxicity Estimate. CAS: Chemical Abstracts Service. CLP: Classification, Labelling and Packaging (Regulation (EC) No 1272/2008). EC50: half maximal effective concentration. GHS: Globally Harmonised System. IMDG: International Maritime Dangerous Goods Code. LC50: lethal concentration, 50 %. LD50: lethal dose, 50 %. OEL: occupational exposure limit. PBT: persistent, bioaccumulative and toxic. PNEC: predicted no-effect concentration. STOT: specific target organ toxicity. vPvB: very persistent and very bioaccumulative.

16.4 Training advice

Users of this product must be trained in safe handling practice, in the correct use of personal protective equipment and in the first-aid measures described in Section 4. Label instructions and national training requirements apply.

16.5 Disclaimer

The information in this safety data sheet is based on the present state of knowledge and current legislation at the date of revision. It describes the product with regard to safety requirements and does not constitute a guarantee of any specific property. It remains the responsibility of the user to ensure that the product is used safely and in accordance with the label and applicable legislation. This safety data sheet is supplied for occupational health and safety purposes only.

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