

Safety Data Sheet



Jaguar® Selective Herbicide

Version 2 / AUS
102000027891

Revision Date: 20.04.2020
Print Date: 20.04.2020

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Trade name Jaguar® Selective Herbicide
Product code (UVP) 81010587

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

Use Herbicide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer Cropscience Pty Ltd
ABN 87 000 226 022
Level 1, 8 Redfern Road
3123 Hawthorn East
Victoria
Australia

Telephone (03) 9248 6888
Telefax (03) 9248 6800
Responsible Department 1800 804 479 Technical Information Service
Website www.crop.bayer.com.au

1.4 Emergency telephone no.

Emergency telephone no. 1800 033 111 IXOM Operations Pty Ltd

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Australian GHS Regulation

Acute toxicity: Category 4
H302 Harmful if swallowed.

Acute toxicity: Category 4
H332 Harmful if inhaled.

Skin corrosion/irritation: Category 2
H315 Causes skin irritation.

Eye irritation: Category 2A
H319 Causes serious eye irritation.

Skin sensitisation: Category 1
H317 May cause an allergic skin reaction.

Carcinogenicity: Category 2
H351 Suspected of causing cancer.

Reproductive toxicity: Category 1B

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- H360 May damage fertility or the unborn child.
Specific target organ toxicity - single exposure: Category 3
H335 May cause respiratory irritation.
Aspiration hazard: Category 1
H304 May be fatal if swallowed and enters airways.
Acute aquatic toxicity: Category 1
H400 Very toxic to aquatic life.
Chronic aquatic toxicity: Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

Bromoxynil octanoate
Diflufenican
N-Methyl-2-pyrrolidone
Solvent Naphtha (petroleum), heavy aromatic

Signal word: Danger

Hazard statements

- H302 Harmful if swallowed.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H360 May damage fertility or the unborn child.
H335 May cause respiratory irritation.
H304 May be fatal if swallowed and enters airways.

Precautionary statements

- P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing mist/ spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ eye protection/ face protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/ physician.
P330 Rinse mouth.
P331 Do NOT induce vomiting.
P302 + P352 IF ON SKIN: Wash with plenty of water/ soap.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor/physician if you feel unwell.
P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulation.

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2.3 Other hazards

No other hazards known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Bromoxynil/Diflufenican 250:25 g/l
Emulsifiable concentrate (EC)

Chemical name	CAS-No.	Concentration [%]
Bromoxynil octanoate	1689-99-2	34.00
Diflufenican	83164-33-4	2.30
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	>= 30.00 - <= 40.00
N-Methyl-2-pyrrolidone	872-50-4	>= 10.00 - <= 20.00
Naphthalene	91-20-3	< 4.00
2-Ethylhexan-1-ol	104-76-7	< 3.00
Other ingredients (non-hazardous) to 100%		

SECTION 4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Safety Data Sheet to the doctor.

4.1 Description of first aid measures

Inhalation	Move the victim to fresh air and keep at rest. Oxygen or artificial respiration if needed. If symptoms persist, call a physician.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Risk of product entering the lungs on vomiting after ingestion. Rinse out mouth and give water in small sips to drink. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	Local:, Sensitisation, Irritation, Systemic:, Lethargy, Thirst, Anxiety, Hyperventilation, tachycardia, Muscle rigidity, Nausea, Vomiting, Sweating, Salivation, Convulsions
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4.3 Indication of any immediate medical attention and special treatment needed



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Risks	Contains hydrocarbon solvents. May pose an aspiration pneumonia hazard.
Treatment	Watch for pulmonary edema, which may develop in serious cases of poisoning even after 24-48 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. In case of hyperthermia physical cooling is advisable; in case of muscle rigidity muscle relaxants and mechanical ventilation may support in counteracting hyperthermia. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

5.2 Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire., In the event of fire the following may be released:, Hydrogen bromide (HBr), Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Nitrogen oxides (NOx), Carbon dioxide (CO₂), Carbon monoxide (CO)

5.3 Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit.

Further information Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth. Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code •3Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions Keep people away from and upwind of spill/leak. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment. When dealing with a spillage do not eat, drink or smoke.

6.2 Environmental precautions Retain and dispose of contaminated wash water. Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities.



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6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

Additional advice If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal.

6.4 Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion Keep away from heat and sources of ignition. Vapours may form explosive mixture with air. Take measures to prevent the build up of electrostatic charge.

Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes separately. Remove contaminated clothing immediately and dispose of safely. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in original container. Store in a place accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from freezing. Keep away from direct sunlight.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Bromoxynil octanoate	1689-99-2	0.21 mg/m ³ (SK-SEN)		OES BCS*
Diflufenican	83164-33-4	5.5 mg/m ³ (TWA)		OES BCS*
N-Methyl-2-pyrrolidone	872-50-4	309 mg/m ³ /75 ppm (STEL)	12 2011	AU NOEL
N-Methyl-2-pyrrolidone	872-50-4	103 mg/m ³ /25 ppm (TWA)	12 2011	AU NOEL
N-Methyl-2-pyrrolidone	872-50-4	19 ppm (TWA)		OES BCS*
Naphthalene	91-20-3	79 mg/m ³ /15 ppm	12 2011	AU NOEL

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		(STEL)		
Naphthalene	91-20-3	52 mg/m ³ /10 ppm (TWA)	12 2011	AU NOEL
Naphthalene	91-20-3	10 ppm (TLV)		OES BCS*

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

8.2 Exposure controls

Respiratory protection

Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent.

Hand protection

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Material	Nitrile rubber
Rate of permeability	> 480 min
Glove thickness	> 0.4 mm
Protective index	Class 6
Directive	Protective gloves complying with EN 374.

Eye protection

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent) and faceshield (conforming to EN166, Field of Use = 3 or equivalent).

Skin and body protection

Wear standard coveralls and Category 3 Type 4 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

General protective measures

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the above mentioned recommendations would apply.

Engineering Controls

Advice on safe handling Use only in area provided with appropriate exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form Liquid, clear

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Colour	light yellow to dark brown
Odour	aromatic
Odour Threshold	No data available
pH	ca. 4.2 (10 %) (23 °C) (deionized water)
Melting point/range	No data available
Boiling Point	No data available
Flash point	66 °C
Flammability	No data available
Auto-ignition temperature	> 200 °C The data refer to the solvent.
Self-accelarating decomposition temperature (SADT)	No data available
Upper explosion limit	7.00 %(V) The data refer to the solvent.
Lower explosion limit	0.6 %(V) The data refer to the solvent.
Vapour pressure	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Relative density	No data available
Density	ca. 1.09 g/cm ³ (20 °C)
Water solubility	emulsifiable
Partition coefficient: n-octanol/water	Diflufenican: log Pow: 4.2 N-methyl-2-pyrrolidone: log Pow: -0.46 (25 °C) Bromoxynil octanoate: log Pow: 5.4
Viscosity, kinematic	No data available
Oxidizing properties	No data available
Explosivity	No data available
9.2 Other information	Further safety related physical-chemical data are not known.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition Stable under normal conditions.

10.2 Chemical stability Stable under recommended storage conditions.



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10.3 Possibility of hazardous reactions	No hazardous reactions known.
10.4 Conditions to avoid	Elevated temperatures Heat, flames and sparks.
10.5 Incompatible materials	Strong acids, Strong bases, Oxidizing agents, Store only in the original container.
10.6 Hazardous decomposition products	Thermal decomposition can lead to release of: Hydrogen bromide (HBr) Hydrogen cyanide (hydrocyanic acid) Hydrogen fluoride Oxides of carbon Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	LD50 (Rat) 1,113 mg/kg Test conducted with a similar formulation.
Acute inhalation toxicity	LC50 (Rat) 2.1 mg/l Exposure time: 4 h Irritating to respiratory system. The information is derived from the properties of the individual components.
Acute dermal toxicity	LD50 (Rat) > 2,000 mg/kg Test conducted with a similar formulation.
Skin corrosion/irritation	No skin irritation (Rabbit) Test conducted with a similar formulation.
Serious eye damage/eye irritation	Irritating to eyes. (Rabbit) Test conducted with a similar formulation.
Respiratory or skin sensitisation	Skin: Sensitising (Guinea pig) The information is derived from the properties of the individual components.

Assessment mutagenicity

Bromoxynil octanoate was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Diflufenican was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

N-methyl-2-pyrrolidone was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Bromoxynil octanoate caused at high dose levels an increased incidence of tumours in the following organ(s): Liver. The mechanism of tumour formation is not considered to be relevant to man.

Diflufenican was not carcinogenic in lifetime feeding studies in rats and mice.

N-methyl-2-pyrrolidone was not carcinogenic in lifetime feeding studies in rats and mice.

Naphthalene caused an increased incidence of tumours after chronic inhalation of high vapour concentrations in the following organ: Respiratory Tract. The tumours seen with naphthalene were

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caused through a non-genotoxic mechanism, which is not relevant at low doses.

Assessment toxicity to reproduction

Bromoxynil octanoate did not cause reproductive toxicity in a two-generation study in rats.
Diflufenican did not cause reproductive toxicity in a two-generation study in rats.
N-methyl-2-pyrrolidone caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. N-methyl-2-pyrrolidone caused a reduced pup survival, a reduced litter size and a reduced pup weight.

Assessment developmental toxicity

Bromoxynil octanoate caused a delayed foetal growth, an increased incidence of non-specific malformations. Bromoxynil octanoate caused developmental toxicity only at dose levels toxic to the dams.
Diflufenican did not cause developmental toxicity in rats and rabbits.
N-methyl-2-pyrrolidone caused developmental toxicity only at dose levels toxic to the dams. N-methyl-2-pyrrolidone caused a reduced pup survival.

Assessment STOT Specific target organ toxicity – single exposure

Bromoxynil octanoate: Based on available data, the classification criteria are not met.
Diflufenican: Based on available data, the classification criteria are not met.
N-methyl-2-pyrrolidone: May cause respiratory irritation.

Assessment STOT Specific target organ toxicity – repeated exposure

Bromoxynil octanoate caused specific target organ toxicity in experimental animal studies in the following organ(s): Liver. The observed effects do not appear to be relevant for humans.
Diflufenican did not cause specific target organ toxicity in experimental animal studies.
N-methyl-2-pyrrolidone caused specific target organ toxicity in experimental animal studies in the following organ(s): Testes.

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

Harmful if inhaled.
May cause skin irritation., Skin sensitiser
Causes eye irritation.
Harmful if swallowed.

Early onset symptoms related to exposure

Refer to Section 4

Delayed health effects from exposure

Refer to Section 11

Exposure levels and health effects

Refer to Section 4

Interactive effects

Not known

When specific chemical data is not available

Not applicable



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Mixture of chemicals

Refer to Section 2.1

Further information

No further toxicological information is available.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)) > 0.109 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient diflufenican.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 0.046 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient bromoxynil octanoate.
EC50 (Daphnia magna (Water flea)) > 0.24 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient diflufenican.

Toxicity to aquatic plants

EC50 (Desmodesmus subspicatus (green algae)) 1 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient bromoxynil octanoate.
EC50 (Algae) > 10 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient diflufenican.

Toxicity to other organisms

LD50 (Colinus virginianus (Bobwhite quail)) > 2,150 mg/kg
The value mentioned relates to the active ingredient diflufenican.
LD50 (Anas platyrhynchos (Mallard duck)) > 4,000 mg/kg
The value mentioned relates to the active ingredient diflufenican.
LD50 (Anas platyrhynchos (Mallard duck)) 2,350 mg/kg
The value mentioned relates to the active ingredient bromoxynil octanoate.
LD50 (Colinus virginianus (Bobwhite quail)) 170 mg/kg
The value mentioned relates to the active ingredient bromoxynil octanoate.

12.2 Persistence and degradability

Biodegradability

Diflufenican:
Not rapidly biodegradable
N-methyl-2-pyrrolidone:
rapidly biodegradable
Bromoxynil octanoate:
Not rapidly biodegradable

Koc

Diflufenican: Koc: 3417
Bromoxynil octanoate: Koc: 639

12.3 Bioaccumulative potential

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Bioaccumulation Diflufenican: Bioconcentration factor (BCF) 1,596
Does not bioaccumulate.
N-methyl-2-pyrrolidone: Bioconcentration factor (BCF) 3.16
Does not bioaccumulate.
Bromoxynil octanoate: Bioconcentration factor (BCF) 230
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil Diflufenican: Slightly mobile in soils
N-methyl-2-pyrrolidone: Highly mobile in soils
Bromoxynil octanoate: Slightly mobile in soils

12.5 Other adverse effects

Additional ecological information No other effects to be mentioned.

SECTION 13. DISPOSAL CONSIDERATIONS

Refillable containers:

If tamper evident seals are broken prior to initial use then the integrity of the contents cannot be assured. Empty container by pumping through dry-break connection system. Do not attempt to breach the valve system or the filling point, or contaminate the container with water or other products. Ensure that the coupler, pump, meter and hoses are disconnected, triple rinsed and drained after each use. When empty, or contents no longer required, return the container to the point of purchase. This container remains the property of Bayer CropScience Pty Ltd.

Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.

Do not reuse container for any other purpose.

SECTION 14. TRANSPORT INFORMATION

ADG

UN number	3082
Transport hazard class(es)	9
Subsidiary Risk	None
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BROMOXYNIL OCTANOATE SOLUTION)
Hazchem Code	•3Z

AU01: Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;

- a) packagings that do not incorporate a receptacle exceeding 500 kg(L); or
- b) IBCs

IMDG

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UN number	3082
Transport hazard class(es)	9
Subsidiary Risk	None
Packaging group	III
Marine pollutant	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BROMOXYNIL OCTANOATE SOLUTION)

IATA

UN number	3082
Transport hazard class(es)	9
Subsidiary Risk	None
Packaging group	III
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BROMOXYNIL OCTANOATE SOLUTION)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 40383

SUSMP classification (Poison Schedule)

Schedule 6 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 16. OTHER INFORMATION

Trademark information Jaguar® is a Registered Trademark of the Bayer Group.

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
AU OEL	Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)
CAS-Nr.	Chemical Abstracts Service number
CEILING	Ceiling Limit Value
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous

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	Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
OES BCS	OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"
PEAK	PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SK-SEN	Skin sensitizer
SKIN_DES	SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.
STEL	STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
TWA	TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Reason for Revision: Section 2: Hazards Identification. Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Section 9: Physical and Chemical Properties. Section 11: Toxicological Information.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.