

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Coccivac B, Coccivac D Formulation

Manufacturer or supplier's details

Company : MSD

Address : 126 E. Lincoln Avenue
Rahway, New Jersey U.S.A. 07065

Telephone : 908-740-4000

Emergency telephone number : 1-908-423-6000

E-mail address : EHSDATASTEWARD@msd.com

Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product

Restrictions on use :
Not applicable

2. HAZARDS IDENTIFICATION**GHS Classification**

Acute toxicity (Inhalation) : Category 4

Skin corrosion/irritation : Category 2

Serious eye damage/eye irritation : Category 2A

Respiratory sensitisation : Category 1

Skin sensitisation : Category 1

Germ cell mutagenicity : Category 1B

Carcinogenicity : Category 1B

Reproductive toxicity : Category 1B

Specific target organ toxicity - repeated exposure : Category 2 (Blood)

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 2

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue:
5.0	2023/04/04	1481173-00016	2022/10/01
			Date of first issue: 2017/03/23

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H340 May cause genetic defects.
H350 May cause cancer.
H360FD May damage fertility. May damage the unborn child.
H373 May cause damage to organs (Blood) through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mist or vapours.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284 Wear respiratory protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
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/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Eimeria Species (live)	Not Assigned	≥ 0.1 - ≤ 10
potassium dichromate	7778-50-9	2.5

4. FIRST AID MEASURES

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : If inhaled, remove to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
Get medical attention.
- In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Get medical attention.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
If easy to do, remove contact lens, if worn.
Get medical attention.
- If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention.
Rinse mouth thoroughly with water.
- Most important symptoms and effects, both acute and delayed : Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome).
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

May cause genetic defects.
May cause cancer.
May damage fertility. May damage the unborn child.
May cause damage to organs through prolonged or repeated exposure.

Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician : Treat symptomatically and supportively.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

Unsuitable extinguishing media : None known.

Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides
Metal oxides
Chromium compounds

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

Environmental precautions : Avoid release to the environment.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items

Coccivac B, Coccivac D Formulation

Version 5.0 Revision Date: 2023/04/04 SDS Number: 1481173-00016 Date of last issue: 2022/10/01
Date of first issue: 2017/03/23

employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

7. HANDLING AND STORAGE

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation.
- Advice on safe handling : Do not get on skin or clothing.
Do not breathe mist or vapours.
Do not swallow.
Do not get in eyes.
Wash skin thoroughly after handling.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
Keep container tightly closed.
Already sensitised individuals, and those susceptible to asthma, allergies, chronic or recurrent respiratory disease, should consult their physician regarding working with respiratory irritants or sensitisers.
Do not eat, drink or smoke when using this product.
Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Keep in properly labelled containers.
Store locked up.
Keep tightly closed.
Keep in a cool, well-ventilated place.
Store in accordance with the particular national regulations.
- Materials to avoid : Do not store with the following product types:
Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
potassium dichromate	7778-50-9	NAB	0.5 mg/m ³ (chromium (III))	ID OEL
	Further information: Not classified as carcinogenic to humans. Not enough data to classify these materials as carcinogenic to humans or animals			
		NAB	0.05 mg/m ³ (chromium)	ID OEL
	Further information: Confirmed human carcinogen			
		TWA (Inhalable particulate matter)	0.0002 mg/m ³ (Cr(VI): Hexavalent chromium)	ACGIH

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue:
5.0	2023/04/04	1481173-00016	2022/10/01
			Date of first issue: 2017/03/23

		STEL (Inhalable particulate matter)	0.0005 mg/m ³ (Cr(VI): Hexavalent chromium)	ACGIH
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Engineering measures : Minimize workplace exposure concentrations.
If sufficient ventilation is unavailable, use with local exhaust ventilation.

Personal protective equipment

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

Filter type : Particulates type

Hand protection

Material : Chemical-resistant gloves

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Eye protection : Wear the following personal protective equipment:
Safety goggles

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.
When using do not eat, drink or smoke.
Contaminated work clothing should not be allowed out of the workplace.
Wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : yellow, brown

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling : No data available

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

range

Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Flammability (liquids)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	No data available
Solubility(ies)		
Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Molecular weight	:	No data available
Particle size	:	Not applicable

10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Can react with strong oxidizing agents.
Conditions to avoid	:	None known.
Incompatible materials	:	Oxidizing agents
Hazardous decomposition	:	No hazardous decomposition products are known.

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

products

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure :

- Inhalation
- Skin contact
- Ingestion
- Eye contact

Acute toxicity

Harmful if inhaled.

Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 3.76 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:

Eimeria Species (live):

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

potassium dichromate:

Acute oral toxicity : LD50 (Rat): 90.5 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.094 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : Acute toxicity estimate: 1,100 mg/kg
Method: Expert judgement
Remarks: Based on national or regional regulation.

Skin corrosion/irritation

Causes skin irritation.

Components:

Eimeria Species (live):

Remarks : No data available

potassium dichromate:

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

Result	: Corrosive after 3 minutes to 1 hour of exposure
Remarks	: Based on national or regional regulation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:**Eimeria Species (live):**

Remarks	: No data available
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potassium dichromate:

Result	: Irreversible effects on the eye
Remarks	: Based on skin corrosivity.

Respiratory or skin sensitisation**Skin sensitisation**

May cause an allergic skin reaction.

Respiratory sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Components:**Eimeria Species (live):**

Remarks	: No data available
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potassium dichromate:

Exposure routes	: Skin contact
Result	: positive
Remarks	: Based on national or regional regulation.

Assessment	: Probability or evidence of skin sensitisation in humans
Remarks	: Based on national or regional regulation.

Exposure routes	: Inhalation
Result	: positive
Remarks	: Based on national or regional regulation.

Assessment	: Probability of respiratory sensitisation in humans based on animal testing
Remarks	: Based on national or regional regulation.

Germ cell mutagenicity

May cause genetic defects.

Components:**potassium dichromate:**

Genotoxicity in vitro	: Test Type: Bacterial reverse mutation assay (AMES) Result: positive
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Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

	Test Type: In vitro mammalian cell gene mutation test Result: positive
Genotoxicity in vivo	: Test Type: Rodent dominant lethal test (germ cell) (in vivo) Species: Mouse Application Route: Intraperitoneal injection Result: positive
Germ cell mutagenicity - Assessment	: Positive result(s) from in vivo somatic cell mutagenicity tests in mammals. Evidence that the substance has potential to cause mutations to germ cells Remarks: Based on national or regional regulation.

Carcinogenicity

May cause cancer.

Components:**potassium dichromate:**

Species	: Rat
Application Route	: inhalation (dust/mist/fume)
Exposure time	: 18 month(s)
Result	: positive
Remarks	: Based on data from similar materials

Species	: Mouse
Application Route	: inhalation (dust/mist/fume)
Exposure time	: 18 month(s)
Result	: positive
Remarks	: Based on data from similar materials

Carcinogenicity - Assessment	: Sufficient evidence of carcinogenicity in animal experiments Remarks: Based on national or regional regulation.
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Reproductive toxicity

May damage fertility. May damage the unborn child.

Components:**potassium dichromate:**

Effects on fertility	: Test Type: One-generation reproduction toxicity study Species: Mouse Application Route: Ingestion Result: positive
Effects on foetal development	: Test Type: Embryo-foetal development Species: Mouse Application Route: Ingestion Result: positive
Reproductive toxicity - Assessment	: Clear evidence of adverse effects on sexual function and fertility, based on animal experiments., Clear evidence of adverse effects on development, based on animal experiments. Remarks: Based on national or regional regulation.

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

II

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

May cause damage to organs (Blood) through prolonged or repeated exposure.

Components:**potassium dichromate:**

Exposure routes	:	inhalation (dust/mist/fume)
Target Organs	:	Blood
Assessment	:	Shown to produce significant health effects in animals at concentrations of 0.02 mg/l/6h/d or less.

Aspiration toxicity

Not classified based on available information.

Experience with human exposure**Components:****potassium dichromate:**

Inhalation	:	Target Organs: Bronchia Symptoms: Asthma, Sensitisation, mutagenic effects
Skin contact	:	Target Organs: Skin Symptoms: Sensitisation, Corrosion, Burn
Ingestion	:	Target Organs: Testis Symptoms: toxic effects for reproduction

12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****Eimeria Species (live):**

Toxicity to fish	:	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available
Toxicity to algae/aquatic plants	:	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	Remarks: No data available
Toxicity to microorganisms	:	Remarks: No data available

potassium dichromate:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 10 - 100 mg/l Exposure time: 96 h Remarks: Based on data from similar materials
Toxicity to daphnia and other	:	EC50 (Ceriodaphnia (water flea)): > 0.01 - 0.1 mg/l

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

aquatic invertebrates	Exposure time: 48 h Remarks: Based on data from similar materials
Toxicity to algae/aquatic plants	: ErC50 (Selenastrum capricornutum (green algae)): 0.659 mg/l Exposure time: 72 h EC10 (Selenastrum capricornutum (green algae)): 0.028 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	: 10
Toxicity to fish (Chronic toxicity)	: NOEC (Oncorhynchus mykiss (rainbow trout)): > 0.1 - 1 mg/l Exposure time: 60 d Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC (Ceriodaphnia dubia (water flea)): 0.084 mg/l Exposure time: 7 d
M-Factor (Chronic aquatic toxicity)	: 1
Toxicity to microorganisms	: EC50 (Photobacterium phosphoreum): 20 - 27 mg/l Exposure time: 30 h Remarks: Based on data from similar materials

Persistence and degradability**Components:****Eimeria Species (live):**

Biodegradability	: Remarks: No data available
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Bioaccumulative potential**Components:****Eimeria Species (live):**

Bioaccumulation	: Remarks: No data available
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Mobility in soil

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues	: Dispose of in accordance with local regulations. Do not dispose of waste into sewer.
Contaminated packaging	: Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

UN number	: UN 3082
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (potassium dichromate)
Class	: 9
Packing group	: III
Labels	: 9

IATA-DGR

UN/ID No.	: UN 3082
Proper shipping name	: Environmentally hazardous substance, liquid, n.o.s. (potassium dichromate)
Class	: 9
Packing group	: III
Labels	: Miscellaneous
Packing instruction (cargo aircraft)	: 964
Packing instruction (passenger aircraft)	: 964
Environmentally hazardous	: yes

IMDG-Code

UN number	: UN 3082
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (potassium dichromate)
Class	: 9
Packing group	: III
Labels	: 9
EmS Code	: F-A, S-F
Marine pollutant	: yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

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

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

Minister of Industry Regulation No. 23/M-IND/PER/4/2013 concerning the Revision of Minister of Industry Regulation No. 87/M-IND/PER/9/2009 concerning Globally Harmonized System of Classification and Labelling of Chemicals.

Regulation of the Minister of Health No. 472 of 1996 on the Safeguarding of Substances Hazardous to Health

Hazardous substances that must be registered : Not applicable

Government Regulation No. 74 of 2001 on the Management of Hazardous and Toxic Substances

Hazardous substances approved for use : Not applicable

Prohibited substances : Not applicable

Restricted substances : Not applicable

Regulation of the Ministry of Trade No. 7 of 2022 on Distribution and Control of Hazardous Materials

Type of hazardous materials subject to distribution and control, Annex I : Not applicable

Type of hazardous materials subject to distribution and control, Annex II : Not applicable

The components of this product are reported in the following inventories:

AICS : not determined

DSL : not determined

IECSC : not determined

16. OTHER INFORMATION

Revision Date : 2023/04/04

Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : yyyy/mm/dd

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

ID OEL : Indonesia. Occupational Exposure Limits

ACGIH / TWA : 8-hour, time-weighted average

ACGIH / STEL : Short-term exposure limit

Coccivac B, Coccivac D Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 2022/10/01
5.0	2023/04/04	1481173-00016	Date of first issue: 2017/03/23

ID OEL / NAB : Long term exposure limit

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

ID / EN