

SAFETY DATA SHEET

Version : 23
Revision date: 17.03.2020
Date of First Issue : 01.02.06



ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

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

- 1.1 Product identifier**
Product Name Wolf Trax Boron DDP
CAS No. Mixture
EC No. Mixture
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Identified Use(s) Fertiliser (Plant food)
Uses Advised Against Not to be used as a seed treatment.
- 1.3 Details of the supplier of the safety data sheet**
Company Identification Wolf Trax Europe LTD
One London Wall
London, UK EC2Y 5AB
+4529363549
Telephone
Website www.compassminerals.com
E-mail techservicesrequests@compassminerals.com
- 1.4 Emergency telephone number**
Emergency Phone No. +44 (0)870 5329723
Languages spoken English

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
- 2.1.1 Regulation (EC) No. 1272/2008 (CLP)** Repr. 1B: H360FD
- 2.2 Label elements**
Product Name Wolf Trax Boron DDP
Hazard Pictogram(s)

- Signal Word(s) Danger
- Contains: Disodium Octoborate Tetrahydrate, Potassium Tetraborate Tetrahydrate and Boric Acid.
- Hazard Statement(s) H360FD: May damage fertility. May damage the unborn child.
- Precautionary Statement(s)
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P405: Store locked up.
P501: Disposal should be in accordance with local, state or national legislation.
- 2.3 Other hazards** None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.2 Mixtures** - Substances in preparations / mixtures

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EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard classification
Disodium Octoborate Tetrahydrate	<75	12280-03-4	234-541-0	Not yet assigned in the supply chain	Repr. 1B: H360FD (Exposure route - Oral)
Potassium Tetraborate Tetrahydrate	<20	12045-78-2	215-575-5	Not yet assigned in the supply chain	Repr. 1B: H360FD (Exposure route - Oral) SCL = $\geq 5.5\%$
Boric Acid	> 5	10043-35-3	233-139-2	Not yet assigned in the supply chain	Repr. 2; H361d (Exposure route - Oral) SCL = $\geq 6.8\%$

For full text of H phrases see section 16.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Inhalation

Skin Contact

Eye Contact

Ingestion

Obtain special instructions before use. Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Avoid breathing dust. Avoid all contact. Avoid exposure during pregnancy. Do not ingest. If swallowed then seek immediate medical assistance. Contaminated clothing should be laundered before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention.

IF ON SKIN (or hair): Remove contaminated clothing and wash all affected areas with plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs, get medical advice/attention.

IF IN EYES: Remove contact lenses if worn. Hold eye open and rinse slowly and gently with water for 15-20 minutes. Get medical attention if eye irritation develops or persists.

IF SWALLOWED: Rinse mouth. Drink one glass of water. Do not induce vomiting unless instructed to do so by medical personnel. IF exposed or concerned: Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

May damage fertility. May damage the unborn child.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to a physician:

Treat symptomatically. Pregnant women should not be exposed to this product.

IF SWALLOWED: Ingestion of > 5g: Maintain adequate kidney function and force fluids.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media

Unsuitable extinguishing media

As appropriate for surrounding fire. Water spray, foam, dry powder or CO₂.

Do not use water jet. Direct water jet may spread the fire.

5.2 Special hazards arising from the substance or mixture

Not flammable, Non-combustible or Explosive. The substance(s) have flame retardant properties. May give off noxious and toxic fumes in a fire. Hazardous decomposition product(s): None. Combustion products: Carbon monoxide, Carbon dioxide.

5.3 Advice for fire-fighters

Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

- | | |
|--|---|
| 6.1 Personal precautions, protective equipment and emergency procedures | Obtain special instructions before use. Ensure operatives are trained to minimise exposures. Ensure suitable personal protection during removal of spillages. Shut off leaks if without risk. Ensure adequate ventilation. Avoid all contact. Avoid breathing dust. Avoid dust generation. Avoid exposure during pregnancy. Do not ingest. If swallowed then seek immediate medical assistance. |
| 6.2 Environmental precautions | Avoid release to the environment. Do not allow to enter drains, sewers or watercourses. |
| 6.3 Methods and material for containment and cleaning up | Sweep spilled substances into containers. If appropriate moisten first to prevent dusting. Recommended: Vacuum spilled material. Avoid dust generation. Collect mechanically and dispose of according to Section 13. Ventilate the area and wash spill site after material pick-up is complete. |
| 6.4 Reference to other sections | See Section: 8, 13 |

SECTION 7: HANDLING AND STORAGE

- | | |
|--|---|
| 7.1 Precautions for safe handling | Obtain special instructions before use. Ensure operatives are trained to minimise exposures. Ensure adequate ventilation. Avoid all contact. Do not ingest. If swallowed then seek immediate medical assistance. Wear appropriate personal protective equipment, avoid direct contact. Avoid dust generation. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Store locked up. Pregnant women should not be exposed to this product. |
| 7.2 Conditions for safe storage, including any incompatibilities
Storage temperature
Storage measures
Incompatible materials | Store in a cool/low-temperature, well-ventilated (dry) place. Keep container closed when not in use. Keep away from moisture.
Ambient
Keep only in original container.
Keep away from: Oxidizing agent, Strong reducing agent. |
| 7.3 Specific end use(s) | Fertiliser (Plant food). See Section: 1.2. |

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- | | |
|--|--|
| 8.1 Control parameters | |
| 8.1.1 Occupational Exposure Limits | The UK HSE (EH40) recommends the following limits for dusts: 10 mg/m ³ (8hr TWA) total inhalable dust; 5 mg/m ³ (8hr TWA) total respirable dust. |
| 8.1.2 Biological limit value | Not established. |
| 8.1.3 PNECs and DNELs | Not established. |
| 8.2 Exposure controls | |
| 8.2.1 Appropriate engineering controls | Ensure operatives are trained to minimise exposures. No special requirements. Provide adequate ventilation when using the material and follow the principles of good occupational hygiene to control personal exposures. Avoid dust generation. |
| 8.2.2 Individual protection measures, such as personal protective equipment (PPE) | An approved dust mask should be worn. Keep good industrial hygiene. Wear appropriate personal protective equipment, avoid direct contact. Avoid all contact. Do not eat, drink or smoke at the work place. Wash hands before breaks and after work. Avoid exposure during pregnancy. |

Eye/ face protection



Use eye protection according to EN 166, designed to protect against dusts.

Skin protection



Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.
Suitable materials: Butyl rubber, Nitrile rubber.

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Respiratory protection



Body protection: Wear suitable coveralls to prevent exposure to the skin.

Wear suitable respiratory protective equipment if processing involves working in areas where dusts or vapours are likely to be evolved.
Recommended: EN149

Thermal hazards

Not applicable.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Pink Powder
Odour	Odourless
Odour threshold	Not determined.
pH	7.5 (5% Aqueous solution)
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not determined.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information

None known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Stability and reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Reaction with strong reducing agents such as metal hydrides or alkali metals will generate hydrogen gas which could create an explosive hazard.
10.4 Conditions to avoid	Keep away from moisture.
10.5 Incompatible materials	Keep away from: Oxidizing agent, Strong reducing agent.
10.6 Hazardous decomposition product(s)	Combustion products: Carbon monoxide, Carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	All test data taken from existing ECHA registrations for the substances mentioned.
Acute toxicity - Ingestion	Mixture: Based on available data, the classification criteria are not met.
Acute toxicity - Inhalation	Acute Toxicity Estimate Mixture Calculation: LD50 > 2000 mg/kg bw/day.
Acute toxicity - Skin Contact	Mixture: Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Acute Toxicity Estimate Mixture Calculation: LD50 > 2000 mg/kg bw/day.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
	Mixture: Based on available data, the classification criteria are not met.

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Respiratory or skin sensitization
Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity

Disodium Octoborate Tetrahydrate:

Boric Acid:

Dipotassium tetraborate tetrahydrate:

STOT - single exposure
STOT - repeated exposure
Aspiration hazard

11.2 Other information

Mixture: Based on available data, the classification criteria are not met.
Mixture: Based on available data, the classification criteria are not met.
Mixture: Based on available data, the classification criteria are not met.
Mixture: Repr. 1B; H360FD: May damage fertility. May damage the unborn child.
Repr. 1B; May damage fertility. May damage the unborn child.
All data read across from: Boric Acid
Reproductive toxicity: Rats exposed to the high dose of 336 mg/kg bw boric acid (corresponding to a level of 58.5 mg B/kg bw) were sterile. (Weir RJ & Fisher RS, 1972)
Developmental toxicity: The highest dose was very toxic to dams and 90 % of implants were resorbed at the highest dose level, and 72 % of surviving foetuses had cardiac or great vessel malformations or increase in resorptions were reported in the mid and low dose groups. (OECD 414)
Repr. 1B; May damage fertility. May damage the unborn child.
Reproductive toxicity: Rats exposed to the high dose of 336 mg/kg bw boric acid (corresponding to a level of 58.5 mg B/kg bw) were sterile. (Weir RJ & Fisher RS, 1972)
Developmental toxicity: The highest dose was very toxic to dams and 90 % of implants were resorbed at the highest dose level, and 72 % of surviving foetuses had cardiac or great vessel malformations or increase in resorptions were reported in the mid and low dose groups. (OECD 414)
Repr. 2; May damage the unborn child.
Weight of evidence approach: Dipotassium tetraborate tetrahydrate: It is improbable that the substance will cause reproductive or developmental effects in humans.
Mixture: Based on available data, the classification criteria are not met.
Mixture: Based on available data, the classification criteria are not met.
Mixture: Based on available data, the classification criteria are not met.

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Mixture: Based on available data, the classification criteria are not met.
Estimated (96 hour) LC50 (Fish) > 100 mg/l

12.2 Persistence and degradability

Disodium Octoborate Tetrahydrate:

Boric Acid:

Dipotassium tetraborate tetrahydrate:

12.3 Bioaccumulative potential

Disodium Octoborate Tetrahydrate:

Boric Acid:

Dipotassium tetraborate tetrahydrate:

No data for the mixture as a whole.
Not applicable for inorganic substances
Not applicable for inorganic substances
Not applicable for inorganic substances
No data for the mixture as a whole.
The substance has no potential for bioaccumulation.
BCF: 121 L/kg (Unnamed publication , 1993)
The substance has no potential for bioaccumulation.
BCF: 0.558 L/kg (Fish) (Thompson et al. 1976)
The substance has no potential for bioaccumulation.
All data read across from: Boric Acid
BCF: 0.558 L/kg (Fish) (Thompson et al. 1976)

12.4 Mobility in soil

Disodium Octoborate Tetrahydrate:

Boric Acid:

Dipotassium tetraborate tetrahydrate:

No data for the mixture as a whole.
The substance has high mobility in soil.
Kd: 0.75 – 3.6 (Palmer et al. 1987).
The substance is predicted to have moderate mobility in soil.
ECHA Registration Endpoint summary
The substance is predicted to have moderate mobility in soil.
All data read across from: Boric Acid
The substance is predicted to have moderate mobility in soil.
ECHA Registration Endpoint summary

12.5 Results of PBT and vPvB assessment

None of the substances in this product fulfil the criteria for being regarded as a PBT or vPvB substance.

12.6 Other adverse effects

None known.

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of this material and its container as hazardous waste. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'.

	Road/Rail (ADR/RID)	Sea transport (IMDG)	Air (ICAO/IATA)
14.1 UN number	None assigned	None assigned	None assigned
14.2 UN proper shipping name	None assigned	None assigned	None assigned
14.3 Transport hazard class(es)	None assigned	None assigned	None assigned
14.4 Packing group	None assigned	None assigned	None assigned
14.5 Environmental hazards	None assigned	None assigned	None assigned
14.6 Special precautions for user	See Section: 2		
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable		
14.8 Additional Information	None		

SECTION 15: REGULATORY INFORMATION

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

15.1.1 EU regulations

Authorisations and/or Restrictions On Use

Disodium Octaborate Tetrahydrate, Boric Acid and Potassium Tetraborate Tetrahydrate: Entry 30: Restriction on supply of substances and mixtures to the general public, if classified as Repr. 1A or 1B.

Substance(s) of Very High Concern (SVHCs)

Boric Acid is included on the Candidate List of Substances of Very High Concern for Authorisation.

15.1.2 National regulations

Germany

Water hazard class: 1

Umweltbundesamt (UBA) Master List (Germany)

Boric acid

15.2 Chemical Safety Assessment

A chemical safety assessment is not required under REACH.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Updated version and date. Please review SDS with care.

The following sections have updates indicated by

References:

Existing EU ECHA registration(s) for: Disodium Octaborate Tetrahydrate (CAS No. 12008-41-2), Boric Acid (CAS No. 10043-35-3) and Dipotassium tetraborate tetrahydrate (CAS No. 12045-78-2).

Harmonised Classification(s) for Disodium Octaborate Tetrahydrate (CAS No. 12008-41-2), Boric Acid (CAS No. 10043-35-3).

Literature References:

1. Weir RJ & Fisher RS, 1972, Toxicologic studies on borax and boric acid., Toxicology and Applied Pharmacology 23: 351 - 364.
2. Palmer. MR, AJ Spivack and JM Edmond. 1987. Temperature and pH controls over isotopic fractionation during adsorption of boron on marine clay. Geochimica et Cosmochimica Acta Vol. 51, pp. 2319-2323.
3. Thompson et al. 1976. Toxicity, uptake and survey studies of boron in the marine environment. Water Research Vol. 10. pp 869 to 875, 1976.

This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830.

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP).	Classification Procedure
Repr. 1B; H360FD	Threshold Calculation

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LEGEND

ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service
DNEL	Derived No Effect Level
EC	European Community
EN	European Standard
EU	European Union
IATA	International Air Transport Association
ICAO/IATA	ICAO: International Civil Aviation Organization / IATA: International Air Transport Association
IMDG	International Maritime Dangerous Goods
kd	Partition Coefficient
LC50	Lethal concentration 50
LD50	Lethal dose 50
LTEL	Long Term Exposure Limit
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
UN	United Nations
vPvB	very Persistent and very Bioaccumulative

Hazard classification / Classification code:

Repr. 1B; Reproductive toxicity, Category 1B
Repr. 2; Reproductive toxicity, Category 2

Hazard Statement(s)

H360FD: May damage fertility. May damage the unborn child.
H361d: Suspected of damaging the unborn child.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

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