

**SAFETY DATA SHEET**

According to EC-directive 2001/58/EC

***Bacillus thuringiensis, subsp. israelensis* 1200 SC**

Ref. Bti1200SCt/pl/000gb

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

<b>Product label name</b>	Teknar HP-D (trade name) <i>Bacillus thuringiensis, subsp. israelensis</i> , 1200 ITU/mg suspension concentrate GIFAP code: SC (aqueous)
<b>Use</b>	Biological insecticide (agricultural use)
<b>Supplier</b>	VALENT BIOSCIENCES CORPORATION 870 Technology Way, Suite 100 Libertyville, Illinois 60048 USA Tel.: +1 847 9684700
<b>Distributed by</b>	VALENT BIOSCIENCES a division of SUMITOMO CHEMICAL AGRO EUROPE S.A.S. Parc d'Affaires de Crécy 2, Rue Claude Chappe 69370 Saint-Didier-au-Mont-d'Or France Tel.: +33 478 64 32 60

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

This product is to be considered as a preparation in conformance to EC directives.

Information on hazardous ingredients:

**Chemical description** *Bacillus thuringiensis, subsp. israelensis*, 1200 ITU/mg suspension concentrate

**Composition/Information on ingredients**

Number	ITU/mg	CAS number	Chemical name
1	1200	68038-71-1	<i>Bacillus thuringiensis, subsp. israelensis</i>

  

Number	EC number	Annex-1 number	Symbol(s)	Risk phrase(s)
1	NA	NA	Xi	R43

**Other information** VBC code: not determined

**3. HAZARD IDENTIFICATION**

Classified as hazardous according to EU directives 1999/45/EC and 2001/60/EC:

IRRITANT (XI)

R43: May cause sensitisation by skin contact

**4. FIRST AID MEASURES**

<b>Symptoms and effects</b>	May cause sensitisation by skin contact.
<b>First aid</b>	
<b>General</b>	In cases of doubt, seek medical attention.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, seek medical advice.
<b>Skin</b>	Remove contaminated clothing. Wash immediately with soap and water.
<b>Eye</b>	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.
<b>Ingestion</b>	Rinse mouth. Never induce vomiting in unconscious or confused persons. Seek medical attention.
<b>Advice to physician</b>	Symptomatic treatment is advised.

**5. FIRE-FIGHTING MEASURES**

<b>Extinguishing media</b>	Dry chemical powder, carbon dioxide, foam.
<b>Unsuitable extinguishing media</b>	none known.
<b>Special exposure hazards</b>	none known.
<b>Hazardous decomposition/combustion products</b>	none known.



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<b>Protective equipment</b>	Wear self-contained breathing apparatus. Wear suitable protective clothing and eye/face protection.
<b>Other information</b>	Water used to extinguish a fire should not be allowed to enter the drainage system or watercourses.

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**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions</b>	Do not breathe spray mist. For personal protection see section 8.
<b>Environmental precautions</b>	Do not allow to escape into sewage system or water courses.
<b>Methods for cleaning up</b>	In case of spill (liquid), soak it up immediately with suitable absorbent such as sawdust or granular absorbent clay. Sweep up and dispose as waste following local regulations. Do not wash residues into drains or other waterways.

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**7. HANDLING AND STORAGE**

<b>Handling</b>	The usual precautions for handling chemicals should be observed. For personal protection see section 8.
<b>Fire and explosion prevention</b>	No specific recommendations.
<b>Storage requirements</b>	Store in a dry and cool place. Keep container in a well-ventilated place. Keep away from heat.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

<b>Engineering controls</b>	Provide adequate ventilation.
<b>Exposure limits</b>	No exposure limits have been established for this material.
<b>Personal protection</b>	
<b>Respiratory</b>	The usual precautions for handling chemicals should be observed.
<b>Hand</b>	Wear protective rubber gloves
<b>Eye</b>	Wear safety goggles or face shield.
<b>Skin and body</b>	Wear suitable protective clothing.
<b>Other information</b>	Launder clothes before reuse.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	liquid
<b>Colour</b>	brown
<b>Odour</b>	slight fish odour
<b>Boiling point/range</b>	not determined
<b>Freezing point/range</b>	not determined
<b>Flash point</b>	not applicable (aqueous suspension)
<b>Flammability</b>	not applicable (aqueous suspension)
<b>Autoignition temperature</b>	not determined (unlikely ; aqueous suspension)
<b>Explosive properties</b>	not explosive (unlikely ; aqueous suspension)
<b>Explosion limits</b>	not applicable
<b>Oxidising properties</b>	not applicable
<b>Vapour pressure</b>	not determined
<b>Density</b>	1.08 g/ml
<b>Bulk density</b>	not applicable
<b>Solubility in water</b>	suspends and partially soluble in water
<b>Solubility in other solvents</b>	not applicable
<b>pH value</b>	not determined
<b>Partition coefficient n-octanol/water</b>	not applicable
<b>Relative vapour density (air = 1)</b>	not determined
<b>Viscosity</b>	not determined
<b>Surface tension</b>	not determined

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**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable under recommended storage and handling conditions (see section 7).
<b>Conditions to avoid</b>	Avoid high temperatures. Alkalinity inactivates the product.
<b>Materials to avoid</b>	Oxidizers.
<b>Hazardous decomposition products</b>	None known.

**11. TOXICOLOGICAL INFORMATION**

<b>Name</b>	<b><i>Bacillus thuringiensis, subsp. israelensis</i>, 1200 ITU/mg suspension concentrate</b>
<b>Acute toxicity</b>	
<b>Oral LD50</b>	rat: >5000 mg/kg
<b>Dermal LD50</b>	rabbit: >2000 mg/kg
<b>Inhalation LC50</b>	rat (4 hours): >0.73 mg/l (whole body; highest feasible concentration)
<b>Irritation</b>	
<b>Skin</b>	not irritant
<b>Eye</b>	weak irritant
<b>Sensitization</b>	sensitizing (Lansteiner technique), not sensitizing (Buehler test) ; to be considered as sensitizing

The following data are applicable to a close active substance:

<b>Name</b>	<b><i>Bacillus thuringiensis, subsp. aizawai</i>, technical grade</b>
<b>Genotoxicity</b>	Reverse mutation test negative.

**12. ECOLOGICAL INFORMATION**

No experimental ecological data are available on the preparation as such. The following data are applicable to the ingredient(s) listed below:

<b>Name</b>	<b>Active substance, <i>Bacillus thuringiensis, subsp. israelensis</i> technical grade</b>
<b>Ecotoxicity</b>	
<b>Fish</b>	Acute toxicity, 96-h LC50 ( <i>Oncorhynchus mykiss</i> ): > 370 mg/l ( <i>Lepomis macrochirus</i> ): > 600 mg/l
<b>Daphnia</b>	Acute toxicity, 21-d EC50 ( <i>Daphnia magna</i> ): NOEL 5 mg/l
<b>Bees</b>	Acute oral toxicity, 14d-LD50 ( <i>Apis mellifera</i> ): >1737 µg/bee (> 10X the field rate)
<b>Birds</b>	Acute toxicity, 5d-LC50 (Bobwhite quail): > 3077 mg/kg (Mallard duck): > 3077 mg/kg
<b>Earthworm</b>	Acute toxicity, 14d-LC50: no data; <i>Bacillus thuringiensis</i> is naturally present in the soil.
<b>Fate</b>	
<b>Persistence and degradability</b>	Bti shows a rapid loss of activity in response to UV light.
<b>Degradation Biotic</b>	Not applicable.
<b>Degradation Abiotic</b>	Not applicable.
<b>Bioaccumulation</b>	Not applicable; the substance is not pathogenic to non-target organisms and has not been seen to reproduce in non-target organisms.
<b>Name</b>	<b>Close active substance, <i>Bacillus thuringiensis, subsp. aizawai</i>, technical grade</b>
<b>Algae</b>	Acute toxicity, 72h-EC50 ( <i>Selenastrum capricornutum</i> ): 275 mg/l

**13. DISPOSAL CONSIDERATIONS**

<b>Product</b>	According to local regulations. For further advice contact manufacturer
<b>Contaminated packaging</b>	According to local regulations

**14. TRANSPORT INFORMATION**

Land transport: ADR/RID

<b>ADR/RID class</b>	not restricted	<b>Packing group</b>	not relevant
<b>Label(s)</b>	not relevant	<b>Substance Identification no.</b>	not relevant
<b>Hazard Identification no.</b>	not relevant	<b>UN number</b>	none
<b>Trem-Card</b>	not relevant		
<b>Proper shipping name</b>	not relevant		

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Sea transport: IMO/IMDG code

<b>Class</b>	not restricted	<b>UN number</b>	none
<b>Marine pollutant</b>	no	<b>Packing group</b>	not relevant
<b>EMS</b>	not relevant		
<b>Proper shipping name</b>	not relevant		

Air transport: ICAO-TI/IATA-DGR

<b>Class</b>	not restricted	<b>UN number</b>	none
<b>Proper shipping name</b>	not relevant	<b>Packing group</b>	not relevant

**15. REGULATORY INFORMATION**

**Chemical description** *Bacillus thuringiensis, subsp. israelensis, 1200 ITU/mg suspension concentrate*  
GIFAP code: SC (aqueous)

**Labelling according to EC directives**

**EC-number**

See section 2

**Classification based on**

Tests (except for ecotoxicological classification, based on the active substance)



**Symbol(s)**

IRRITANT (Xi)

**R(isk) phrase(s)**

R43: May cause sensitisation by skin contact

**S(afety) phrase(s)**

S2: Keep out of the reach of children  
S13: Keep away from food, drink and animal feedingstuffs  
S20/21: When using do not eat, drink or smoke  
S24: Avoid contact with skin  
S37: Wear suitable gloves.

**16. OTHER INFORMATION**

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

**Full text of risk phrase(s) used in this document:**

R43: May cause sensitisation by skin contact

**History**

**Date of revision**

9 December 2004

**Revision**

0.00

**Composed by**

O. Mercier / D. Munday