# **Broadase Abra N768**

Material Safety Data Sheet GHS(Global Harmonised System), Rev.06 (2015)

**Effective Date:** 08 March 2016

**Emergency contact:** +86 13500009122

# 1. PRODUCT IDENTIFICATION AND COMPANY UNDERTAKING:

Product Name:	Broadase Abra N768
Chemical Name:	Cellulase
Supplier:	BroadTex Biotech Co., Ltd
	13th, No.30 Taishi Industry Area, Jiantai Road, Dongchong Town, Nansha District, Guangzhou, GD, PRC
	Tel: (86) 20-39927279 FAX: (86) 20-39927276

# 2. COMPOSITION / INFORMATION ON INGREDIENTS:

CHEMICALS NAME	% by weight	CAS NUMBER
Alcohol Ethoxylates	30 %	166736-08-9.
Cellulase	6	9012-54-8
Starch	64	9005-25-8

#### 3. HAZARDOUS IDENTIFICATION:

#### i. GHS label elements:

The substance is classified and labeled according to the Globally Harmonized System (GHS).

# ii. Hazard pictograms



Signal Word Danger

Classification of the substance or mixture

**Regulation (EC) No 1272/2008** 

Serious eye damage/eye irritation Category 2 - (H319)

Respiratory sensitisation Category 1 - (H334)

#### **Hazard statements**

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P284 - Wear respiratory protection

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P264 - Wash hands thoroughly after handling

P280 - Wear eye protection/ face protection

P305 + P351 + P338 - 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

#### Other Hazards

None known

# **4. FIRST AID MEASURES:**

Inhalation:	Effects: May cause respiratory allergies. Symptoms may occur after a latency period has elapsed.  Symptoms: Shortness of breath, wheezing, and laboured coughing.  First Aid: Remove victim from area of exposure. If symptoms of irritation or respiratory allergy occur, consult a doctor.
Skin Contact:	Effects: May be irritating. Symptoms: Redness. First Aid: Remove victim from area of exposure. If symptoms of irritation occur, consult a doctor.
Eyes Contact:	Effects: May be irritating. Symptoms: Redness First Aid: Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Consult a doctor in event of any complaints.
Ingestion:	Effects: May be irritating.  Symptoms: Effects or symptoms are not known.  First Aid: Rinse mouth and throat thoroughly with water. Consult a doctor in event of any complaints.

# **5. FIRE-FIGHTING MEASURES:**

Extinguishing measures:	Suitable : Water, foam, halones. Not suitable : None.			
Thermal (de)composition products:				
Protective equipment :	Self-contained breathing apparatus.			
Specific hazards:	Inhalation of aerosol may result in sensitization. Avoid any contact with the substance.			

# **6. ACCIDENTAL RELEASE MEASURES:**

Personal precautions:	Handle in closed systems and use local exhaust ventilation when there is a potential for aerosol release. Use appropriate personal protection (see Section 8). Avoid any contact with the liquid. Provide for sufficient ventilation.
Environmental precautions :	Do not allow to enter natural waters or soil.
Methods for cleaning up:	Use appropriate personal protection (see Section 8). Avoid any contact with the liquid. Contain spilled liquid. Take up spilled substance by mechanical means or with a vacuum cleaner equipped with a high efficiency filter. After spillage avoid raising aerosols or dust from dried preparation. Avoid splashing and high pressure washing (formation of aerosols). Provide for sufficient ventilation.

# 7. HANDLING AND STORAGE:

Handling:	Use appropriate personal protection (see Section 8). Avoid any contact with the liquid. Avoid the formation of aerosols and dust from dry product. Ventilate areas.
Storage:	Keep in a cool, dry place at 24 - 26 ℃
Specific uses:	See Section 1: use of the substance/preparation.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Occupational exposure limits MAC value:	No occupational exposure limits are known.				
Other exposure limits:	None.				
Occupational Exposure Controls:	Use closed systems and processes for handling enzymes. Supplement with local exhaust ventilation.				
Respiratory protection:	Wear suitable respiratory protection in case of aerosol formation. P3 filters are recommended.				
Hand protection:	Practical experience has shown that gloves of nitrile rubber, butyl rubber, latex, and polyvinyl chloride (PVC) offer sufficient protection.				
Breakthrough time:	Replace damaged gloves.				
Eye protection:	Safety glasses, goggles, or face shield.				
Skin protection:	Protective clothing				
Environmental exposure controls:	Avoid dispersion to the environment.				

# 9. PHYSICALLY AND CHEMICAL PROPERTIES:

Appearance:	owder form		
Color:	Light Yellowish		
Odour:	Slight fementation odour		
Solubility in water:	Soluble		

# 10. STABILITY AND REACTIVITY:

General:	Stable under storage conditions
Condition to avoid:	None
Material to avoid:	None
Hazardous decomposition products:	None

# 11. TOXICOLOGICAL INFORMATION:

Irritation:	Eyes: May be irritating. Skin: May be irritating. Respiratory system: May be irritating.
Acute toxicity:	Oral : LD50 rat: >5000 mg/kg. Dermal : Information not available. Inhalation : Information not available.
Chronic toxicity:	Oral : Information not available.  Dermal : Information not available.  Inhalation : Information not available.
Other Information:	Inhalation: Repeated Inhalation of enzyme aerosol, resulting from improper handling, may induce sensitization and may cause allergic type reactions in sensitized individuals.  Skin: Prolonged or repeated skin contact may be irritating.  Oral: Not toxic.
Carcinogenicity:	Information not available.
Mutagenicity:	Not mutagenic.
Reproduction toxicity:	Information not available.

# 12. ECOLOGICAL INFORMATION:

Ecotoxicity:	The preparation is believed not to be dangerous to the environment with respect to mobility, persistence and degradability, bioaccumulative potential, aquatic toxicity and other data relating to ecotoxicity.
Persistence- degradability:	The substance is readily biodegradable.
Bioaccumulative potential:	Bioaccumulative in aquatic organisms is not expected.
Other adverse effects	Not applicable.

## 13. DISPOSAL CONSIDERATIONS:

Methods of disposal:	No special disp	se methods	required,	expect	to	be in	accordance	with	current	authority
	regulations.									

## 14. TRASPORTATION INFORMATION:

Special precautions:	None known
Proper shipping name:	Not a dangerous goods according to transport regulations.
National transport regulations:	No additional national transport regulations are known to the supplier

## 15. REGULATORY INFORMATION:

Labelling according to Directive 67/548/EC and 1999/45/EC.

**Contains**: Cellulase (enzyme).

This product is labelled by the supplier in accordance to the EC regulations.

This product is hazardous within the meaning of directive 88/379/ECC.

HARMFUL Symbol : Xn

**Risk phrases**: R42: May cause sensitization by inhalation.

**Safety phrases**: S22: Do not breathe dust.

S23 : Do not breathe spray. S24 : Avoid contact with skin.

## 16. OTHER INFORMATION:

The above information is based on data available to us and considered to be accurate. However, NO WARRANTY is expressed or implied regarding the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. As the information contained herein may be applied under conditions beyond our control and with which we are unfamiliar, we do not assume any responsibility for the results of its use. This information is furnished upon the condition that the persons receiving it shall make their own determination of the effects, properties and protections which pertain to their particular conditions.