

**PUBLIC INFORMATION SHEET FOR  
DIRECT USE AS FOOD AND FEED, OR FOR PROCESSING  
PROPOSAL FOR DIRECT USE AS FOOD  
AND FEED, OR FOR PROCESSING  
GMB151 SOYBEAN**

1. Applicant's Name  
**BASF Philippines, Inc.  
on behalf of BASF Agricultural Solutions Seed US LLC**
2. Applicant's Address  
**Units 3 & 4, Upper Penthouse, CTP ASEAN Tower  
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Alabang, Muntinlupa City - 1781, Metro Manila**
3. Telephone Number/ Facsimile Number, E-Mail Address of the Applicant  
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Email Address: [danahjean.campano@basf.com](mailto:danahjean.campano@basf.com)**
4. Name of Responsible Officer/Authorized Representative  
**Danah Jean Campano**
5. Description of the Regulated Article for Direct Use (mention the crop, transformation event, new trait conferred, name of the gene transferred, method of transformation, and advantages of the trait conferred)  
**GMB151 contains *cry14Ab-1.b* gene, which encodes the Cry14Ab-1 protein, and *hppdPf-4Pa* gene, which encodes the modified 4-hydroxyphenylpyruvate dioxygenase (HPPD-4) protein. The Cry14Ab-1 protein confers resistance to soybean cyst nematode and HPPD-4 protein confers tolerance to HPPD inhibitors herbicides, such as isoxaflutole.**
6. If to be imported, Country(ies) of Origin of the Regulated Article: **Brazil**
7. Brief Summary of Potential Effects on Human and Animal Health and the Environment (summarize human and animal health and environmental assessments done and studies implemented indicating potential effects on human and animal health and the environment)  
**GMB151 soybean was developed to produce Cry14Ab-1 protein, coded by the *cry14Ab-1.b* gene, which confers resistance to soybean cyst nematode and 4-hydroxyphenylpyruvate dioxygenase (HPPD-4) protein, coded by the *hppdPf-4Pa* gene, which confers tolerance to HPPD inhibitor herbicides such as isoxaflutole.**  
**A thorough safety assessment was conducted for both the Cry14Ab-1 and HPPD-4 proteins as expressed in GMB151 soybean. No adverse effects were observed for either protein. The source organism of the Cry14Ab-1 protein, *Bacillus thuringiensis* (Bt), is ubiquitous in the environment, is not known for allergenicity, and has a history of safe use as microbial Bt-derived biopesticides. Cry proteins have an established history of safe use and have been used for insect control in crops for over 50 years. The Cry14Ab-1 protein has no significant amino acid sequence similarity to known allergens or toxins, is rapidly degraded in simulated gastric fluid and exhibited no effects in an acute oral mouse toxicity test. The source organism of the HPPD-4 protein, *Pseudomonas fluorescens*, is a non-pathogenic bacterium which is ubiquitous in nature and has a history of safe use. HPPD proteins are ubiquitous in nature across all kingdoms: bacteria, fungi, plants and animals. The HPPD-4 protein has no significant amino acid sequence similarity to known allergens or toxins, is rapidly degraded in simulated gastric fluid and exhibited no effects in an acute oral mouse toxicity test.**

Composition analysis and a comparative assessment demonstrated that GMB151 grain is comparable to that of the non-GM counterpart and reference varieties. These results demonstrate that GMB151 soybean does not pose a plant pest risk and supports the food and feed safety assessment.

Overall, no adverse effects on the health of humans or animals are expected from the consumption of GMB151 soybean products under normal conditions of use. The GMB151 soybean is considered as safe and nutritious as its non-GM counterpart.

8. Brief Summary of Potential Benefits (Describe how the new trait will benefit farming, the farmer, the environment, and society as a whole)

**GMB151 soybean was developed to provide growers protection of their soybean crop from the devastating effect of soybean cyst nematode as well as new options for weed control using HPPD inhibitor herbicides, such as isoxaflutole.**

9. Countries Where Approvals Have Been Granted (for FFP)

**To date, GMB151 soybean has been extensively assessed of its safety and granted approvals for food and feed uses in countries namely: Australia, Brazil, New Zealand, Canada, South Africa, Colombia, USA, EU and Paraguay.**

10. Brief Summary on Socio-economic, Cultural and Ethical considerations;

**This project pertains to BASF application for biosafety permit for direct use as food and feed, or for processing in the Philippines of GMB151 soybean, which is resistance to soybean cyst nematode and tolerant to isoxaflutole herbicide. GMB151 soybean was developed to produce Cry14Ab-1 protein, coded by the *cry14Ab-1.b* gene, which confers resistance to soybean cyst nematode and 4-hydroxyphenylpyruvate dioxygenase (HPPD-4) protein, coded by the *hppdPf-4Pa* gene, which confers tolerance to HPPD inhibitor herbicides such as isoxaflutole. It is to be noted that GMB151 soybean is not to be cultivated or propagated in the Philippines and this application is for direct use of the said event for food and feed or for processing in the country. GMB151 soybean would have potential socio-economic impact only on domestic consumption and trade when its importation is pursued by interested entities upon the granting of the relevant biosafety permit for direct use. Only upon materialization of soybean importation (of which BASF, Inc. is not engaged in and which is beyond the scope of this application) could significance of GMB151 soybean event consumption and trade be assessed. In case, it is however perceived that soybean commodity imports may or may not have the GMB151 event. It is likely that soybean events other than GMB151 are also present in soybean imports because there are other soybean events that have been assessed for food and feed safety and had been granted biosafety permits for direct use in the Philippines. GMB151 soybean event, if ever present, constitute only a portion of total soybean imports into Philippines.**

The public is hereby invited to submit their comments to the BPI Director (within 15 days from date of publication) on the Proposal for the direct use as food and feed, or for processing of **GMB151 Soybean**.


Director

Bureau of Plant Industry

San Andres, Malate, Manila

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Approved for Publication:

  
\_\_\_\_\_  
Director

Bureau of Plant Industry

Date: \_\_\_\_\_



**PAMPUBLIKONG IMPORMASYON UKOL PARA SA DIREKTANG PAGGAMIT  
BILANG PAGKAIN, PAKAIN SA HAYOP, O PARA SA PAGPOPROSESO**  
(upang maisakatuparan ng Aplikante at dapat na notarized)

**PANUKALA PARA SA DIREKTANG PAGGAMIT  
BILANG PAGKAIN, PAKAIN SA HAYOP O PARA SA PAGPOPROSESO**  
**GMB151 SOYA**

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**on behalf of BASF Agricultural Solutions Seed US LLC**
2. Address ng Aplikante  
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4. Pangalan ng Kaukulang Opisyal/Awtorisadong Kinatawan  
**Danah Jean Campano**
5. Deskripsyon ng Artikulo para sa Direktang Paggamit  
**GMB151 ay naglalaman ng *cry14Ab-1.b* gene, na nag- encode ng Cry14Ab-1 protina, at *hppdPF-4Pa* gene, na nag-encode ng binagong 4-hydroxyphenylpyruvate dioxygenase (HPPD-4) protina. Ang Cry14Ab-1 protina ay may resistance sa soybean cyst nematode at HPPD-4 protina ay may tolerance sa HPPD inhibitors herbicides, tulad ng isoxaflutole.**
6. Kung ma-import, Bansa /Mga bansang Pinagmulan ng Regulated Artikulo: **Brazil**
7. Maikling Buod ng Potensyal na Epekto sa Kalusugan ng Tao at Hayop at sa Kalikasan (ibuod ang mga pagsusuri sa kalusugan ng tao at hayop at sa kalikasan na ginawa at mga pag-aaral na ipinatupad na nagsasaad ng mga potensyal na epekto sa kalusugan ng tao at hayop at sa kalikasan)  
**GMB151 soya ay binuo upang makabuo ng Cry14Ab-1 protina, coded sa pamamagitan ng *cry14Ab-1.b* gene, na may resistance sa soybean cyst nematode at 4-hydroxyphenylpyruvate dioxygenase (HPPD-4) protina, coded sa pamamagitan ng *hppdf-4Pa* gene, na may tolerance sa HPD inhibitors tulad ng isoxaflutole.**  
**Ang isang puspung pagsusuri sa kaligtasan ay isinasagawa para sa parehong Cry14Ab-1 at HPPD-4 protina tulad ng ipinahayag sa GMB151 soybean. Walang masamang epekto na nakita para sa alinman na protina. Ang pinagmulang organismo ng Cry14Ab-1 protina, *Bacillus thuringiensis* (Bt), ay hindi kilala para sa allergenicity, at napatunayang ligtas na gamitin bilang microbial Bt-derive biopsticides. Napatunayan rin na ang Cry protina ay ligtas na gamitin at ginagamit para sa pagkontrol ng insekto sa mga pananim sa loob ng mahigit 50 taon. Ang Cry14Ab-1 protina ay walang amino acid sequence na may pagkakatulad sa mga known allergens o toxins, ito ay mabilis na nade-grade sa simulated gastric fluid at ipinapakitang walang epekto sa isang acute oral mouse toxicity test. Ang pinagmulan organismo ng HPPD-4 protina, *Pseudomonas fluorescens*, ay isang non-pathogenic bacterium na kung saan ay ubiquitous sa kalikasan at may patunay na ligtas gamitin. HPPD protina ay ubiquitous sa kalikasan sa lahat ng kaharian: baktery,**

fungi, halaman at hayop. Ang HPPD-4 protina ay walang makabuluhang pagkakatulad sa mga known allergens o toxins, eto ay mabilis na nade-grade sa simulated gastric fluid at ipinapakita walang epekto sa isang acute oral mouse toxicity test.

Komposisyon pagsusuri at isang komparatibong pagtatasa ay nagpakita na ang butil ng GMB151 ay maihahambing sa mga hindi-GM counterpart at reference varieties. Ang mga resultang ito ay nagpapakita na ang GMB151 soya ay hindi nagtataglay ng plant-pest-risk at sumusuporta sa pagkain at feed safety assessment.

Sa kabuuan, walang masamang epekto sa kalusugan ng mga tao o hayop ang inaasahan mula sa pagkanin ng mga produkto ng GMB151 soybean sa ilalim ng normal na kondisyon ng paggamit. Ang soya ng GMB151 ay itinuturing na ligtas at masustansyang gaya ng non-GM counterpart neto.

8. 8. Maikling Buod ng Potensyal na Benepisyo (Ilarawan kung paano makikinabang ang bagong katangian sa pagsasaka, magsasaka, kapaligiran, at lipunan sa kabuuan)

GMB151 soya ay binuo upang magbigay ng proteksyon sa kanilang tanim na soya mula sa mapangwasak na epekto ng soybean cyst nematode pati na rin ang mga bagong opsyon pagpipilian para sa pagkontrol ng mga damo gamit ang HPD inhibitor herbicides, tulad ng isoxaflutole.

9. Mga Bansa kung Saan Nabigyan ng pag-apruba (para sa FFP)

Sa ngaun, ang GMB151 soybean ay na assess na ang kanyang safety sa maraming bansa at ipinagkaloob ang pag-apruba para magamit sa pagkain at feeds sa mga bansang: Australia, Brazil, New Zealand, Canada, South Africa, Colombia, USA, EU at Paraguay.

10. 10. Maikling Buod sa sosyo-ekonomiya, Kultura at Etikal na konsiderasyon;

Ang proyektong ito ay may kinalaman sa BASF application para sa direktang paggamit bilang pagkain at feed, o para sa pagproseso sa Pilipinas ng GMB151 soybean, na may resistance sa soybean cyst nematode at tolerant sa isoxaflutole herbicide. GMB151 soya ay binuo upang makabuo ng Cry14Ab-1 protina, coded sa pamamagitan ng *cry14Ab-1.b* gene, na may resistance sa soybean cyst nematode at 4-hydroxyphenylpyruvate dioxygenase (HPPD-4) protina, coded sa pamamagitan ng *hppdf-4Pa* gene, na may tolerance sa HPPD inhi

bitors tulad ng isoxaflutole. Ang GMB151 soybean ay hindi dapat tinanim o paramihin sa Pilipinas at ang aplikasyong ito ay para sa direktang paggamit para sa pagkain at feed o para sa pagproseso sa nasabing bansa. GMB151 soybean ay magkakaroon lamang ng potensyal na epekto sa sosyo-ekonomiya sa domestic consumption at kalakalan kapag ang kanyang pag-import ay isinasagawa ng mga interesadong entity sa pagbibigay ng may-katurang biosafety permit para sa direktang paggamit. Ang epekto sa pag konsuma at trade GMB 151 soybean ay maa-assessed lamang pag nag materialize na ang importasyon net (na kung saan BASF, Inc. ay hindi gumagawa at hindi saklaw ng application na ito). May posibilidad na ang mga soybean commodity imports ay mayroon or maari rin walang GMB151 event. Meron tsansa na may ibang Soybean events na nasa mga soya maliban sa GMB151 sapagkat, meron ibang soybean events na na-assess na nabigyan ng kaukulang Biosafety permits para sa direktang paggamit sa Pilipinas. GMB151 soybean event, kung meron, ay bumubuo lamang ng isang bahagi ng kabuuang importasyon ng soya sa Pilipinas.

Ang publiko ay inimitahang isumite ang kanilang mga komento sa BPI Director (sa loob ng 15 araw mula sa petsa ng paglalathala) sa Panukala para sa direktang paggamit bilang pagkain at feed, o para sa pagproseso ng GMB151 Soybean.

Director  
Bureau of Plant Industry  
San Andres, Malate, Manila  
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