

DP Barcode : D180289
 PC Code No : 006315
 EEB Out : AUG 27 1992

To: Linda DeLuise
 Product Manager 52
 Special Review and Reregistration Division (H7508W)

From: Douglas J. Urban, Acting Chief
 Ecological Effects Branch/EFED (H7507C)

Attached, please find the EEB review of...

Reg./File # : 006315-6836
 Chemical Name : Bromo-3-chloro-5,5-dimethylhydantoin
 Type Product :
 Product Name :
 Company Name : Lonza Inc.
 Purpose : List C Phase IV

Action Code : 602 Date Due : 8/18/92
 Reviewer : Renee Lamb

EEB Guideline/MRID Summary Table: The review in this package contains an evaluation of the following:

GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT
71-1(A)	930760-02	S	72-2(A)	930760-07	S	72-7(A)		
71-1(B)			72-2(A)	930760-22	Y	72-7(B)		
71-2(A)	930760-03	S	72-3(A)	930760-08	Y	122-1(A)		
71-2(B)	930760-04	S	72-3(B)	930760-09	Y	122-1(B)		
71-3			72-3(C)	930760-10	Y	122-2		
71-4(A)			72-3(D)			123-1(A)		
71-4(B)			72-3(E)			123-1(B)		
71-5(A)			72-3(F)			123-2		
71-5(B)			72-4(A)			124-1		
72-1(A)	930760-05	S	72-4(B)			124-2		
72-1(A)	930760-20	Y	72-5			141-1		
72-1(C)	930760-06	S	72-6			141-2		
72-1(C)	930760-27	Y				141-5		

Y=Acceptable (Study satisfied Guideline)/Concur
 P=Partial (Study partially fulfilled Guideline but additional information is needed)
 S=Supplemental (Study provided useful information but Guideline was not satisfied)
 N=Unacceptable (Study was rejected)/Nonconcur

DP Barcode : D180289
 PC Code No : 006315
 EEB Out :

To: Linda DeLuise
 Product Manager 52
 Special Review and Reregistration Division (H7508W)

From: Douglas J. Urban, Acting Chief
 Ecological Effects Branch/EFED (H7507C)

Attached, please find the EEB review of...

Reg./File # : 006315-6836
 Chemical Name : Bromo-3-chloro-5,5-dimethylhydantoin
 Type Product :
 Product Name :
 Company Name : Lonza Inc.
 Purpose : List C Phase IV

Action Code : 602 Date Due : 8/18/92
 Reviewer : Renee Lamb

EEB Guideline/MRID Summary Table: The review in this package contains an evaluation of the following:

GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT
71-1(A)	930760-02	S	72-2(A)	930760-07	S	72-7(A)		
71-1(B)			72-2(A)	930760-22	Y	72-7(B)		
71-2(A)	930760-03	S	72-3(A)	930760-08	Y	122-1(A)		
71-2(B)	930760-04	S	72-3(B)	930760-09	Y	122-1(B)		
71-3			72-3(C)	930760-10	Y	122-2		
71-4(A)			72-3(D)			123-1(A)		
71-4(B)			72-3(E)			123-1(B)		
71-5(A)			72-3(F)			123-2		
71-5(B)			72-4(A)			124-1		
72-1(A)	930760-05	S	72-4(B)			124-2		
72-1(A)	930760-20	Y	72-5			141-1		
72-1(C)	930760-06	S	72-6			141-2		
72-1(C)	930760-27	Y				141-5		

Y=Acceptable (Study satisfied Guideline)/Concur
 P=Partial (Study partially fulfilled Guideline but additional information is needed)
 S=Supplemental (Study provided useful information but Guideline was not satisfied)
 N=Unacceptable (Study was rejected)/Nonconcur

2

DP BARCODE: D180289

REREG CASE # 305

CASE: 800364
SUBMISSION: S420682

DATA PACKAGE RECORD
BEAN SHEET

DATE: 07/06/92
Page 1 of 2

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REREGISTRATION ACTION: 602 PHASE 3 RESPONSE SUBMIS.
CHEMICALS: 006315 Bromo-3-chloro-5,5-dimethyl-2,4-imidazolidinedione 100.00

ID#: 006315-006836
COMPANY: 006836 LONZA INC
PRODUCT MANAGER: 52 LINDA DELUISE 703-308-8065 ROOM: CS1 3F3
PM TEAM REVIEWER: TOM MYERS 703-308-8074 ROOM: CS1 4N1
RECEIVED DATE: 07/25/90 DUE OUT DATE: 10/23/90

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 180289 EXPEDITE: N DATE SENT: 07/06/92 DATE RET.: / /
CHEMICAL: 006315 Bromo-3-chloro-5,5-dimethyl-2,4-imidazolidinedione
DP TYPE: 101 Phase IV Review
ADMIN DUE DATE: 09/14/92 CSF: N LABEL: N

ASSIGNED TO	DATE IN	DATE OUT
DIV : EFED	7/7/92	/ /
BRAN: EEB	7/8/92	/ /
SECT: IO	/ /	/ /
REVR :	/ /	/ /
CONTR:	/ /	/ /

* * * DATA REVIEW INSTRUCTIONS * * *

* For the attached reregistration case, please identify all applicable data requirements and note those for which adequate data have not been submitted to the Agency.

Please find the following documents attached for this case/chemical/registrant Phase 4 review:

BEAD reviewed LUIS report dated June 17, 1992
Phase 2 Draft Addendum report
Phase 2 EFED/EEB Science review.

MRID	GDLN
93076000	Phase 3 Chemical response worksheet
93076999	Phas3 3 Registrant's correspondence

Please note: the following documents have already been received by EFED/EEB, and can be located on PRATS Barcode # D176480

MRID	GDLN
93076002	71-1(a) P3 Summary of MRID 137088
93076003	71-2(a) P3 Summary of MRID 137087
93076004	71-2 P3 Summary of MRID 137089
93076005	72-1(a) P3 Summary of MRID 137090
93076006	72-1(c) P3 Summary of MRID 139551

DP BARCODE: D180289

REREG CASE # 3055

CASE: 800364
SUBMISSION: S420682

DATA PACKAGE RECORD
BEAN SHEET

DATE: 07/06/92
Page 1 of 2

* * * DATA REVIEW INSTRUCTIONS * * *

93076007	72-2(a)	P3	Summary of MRID 139091
93076008	72-3(a)	P3	Summary of MRID 40993103
93076009	72-3(b)	P3	Summary of MRID 40993101
93076010	72-3(c)	P3	Summary of MRID 40993102
93076020	72-1(a)	P3	Summary of MRID 145356
93076022	72-2	P3	Summary of MRID 145357
93076027	72-1(c)	P3	Summary of MRID 145358

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
180023	TB-2/IO	06/27/92	09/05/92	Y	N	N
180049	OREB/IO	06/29/92	09/07/92	Y	N	N
180107	SACB/IO	06/30/92	09/08/92	Y	N	N
180224	RSCB/IO	07/02/92	09/10/92	Y	N	N
180250	EFGB	07/02/92	09/10/92	Y	N	N



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

MEMORANDUM

Subject: Bromo-3-chloro-5,5-dimethylhydantoin (006315) Phase IV review for Lonza Inc.

From: Doug Urban, Acting Branch Chief
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C) *Doug Urban 8/26/92*

To: Linda DeLuise PM 52
Special Review and Reregistration Division (H7508W)

Attached please find the Ecological Effects Branch Phase IV review for Bromo-3-chloro-5,5-dimethylhydantoin chemical number 006315.

The new EEB policy (8/06/92) to support registration of industrial microbiocide uses now requires a limited set of data. Although EEB does not do a risk assessment on these uses, the data is required in order to determine precautionary labeling. EEB believes the proximity of these installations to marine and estuarine environments, thus the increased exposure to non target organisms, justifies requiring the additional data.

There were no new data submissions with this package. However, the following summaries of previously reviewed studies were submitted:

MRID NUMBER	CATEGORY	GUIDELINE
930760-03	Supplemental*	71-2(a)
930760-02	Supplemental*	71-1(a)
930760-04	Supplemental*	71-2(a)
930760-05	Supplemental*	72-1(a)
930760-06	Supplemental*	72-1(c)
930760-07	Supplemental*	72-2(a)
930760-20	Core	72-1(a)
930760-27	Core	72-1(c)
930760-22	Core	72-2(a)
930760-08	Core	72-3(a)
930760-09	Core	72-3(b)
930760-10	Core	72-3(c)

*Study can be ungraded to core.

If there are any questions contact Renee Lamb at 305-5294.

Date: 8/12/92
 Case No: 3055
 Chemical No: 006315 (D180289)

PHASE IV
 DATA REQUIREMENTS FOR
 ECOLOGICAL EFFECTS BRANCH

Does EPA Have Data To Satisfy This Requirement? (Yes, No)
 Use Pattern²
 Composition¹
 Bibliographic Citation
 Must Additional Data Be Submitted under FIFRA(s)(2)(B)?

	Composition ¹	Use Pattern ²	Does EPA Have Data To Satisfy This Requirement? (Yes, No)	Bibliographic Citation	Must Additional Data Be Submitted under FIFRA(s)(2)(B)?
6 Basic Studies In Bold					
71-1(a) Acute Avian Oral, Quail/Duck	TGAI	D,F,G,M	Y ³	930760-02*, 137088	Y
71-1(b) Acute Avian Oral, Quail/Duck	(TEP)				
71-2(a) Acute Avian Diet, Quail	TGAI	D,F,G,M	Y ³	930760-03*, 137087	Y
71-2(b) Acute Avian Diet, Duck	TGAI	D,F	Y ³	930760-04*, 137089	Y
71-3 Wild Mammal Toxicity					
71-4(a) Avian Reproduction Quail	TGAI	D	N		R ⁴
71-4(b) Avian Reproduction Duck	TGAI	D	N		R ⁴
71-5(a) Simulated Terrestrial Field Study					
71-5(b) Actual Terrestrial Field Study					
72-1(a) Acute Fish Toxicity Bluegill	TGAI	D	Y	930760-20, 145356, 930760-05*, 137090	N ⁵
72-1(b) Acute Fish Toxicity Bluegill	(TEP)				
72-1(c) Acute Fish Toxicity Rainbow Trout	TGAI	D,F,G,M	Y	930760-27, 145356, 930760-06*, 139551	N ⁵
72-1(d) Acute Fish Toxicity Rainbow Trout	(TEP)				
72-2(a) Acute Aquatic Invertebrate Toxicity	TGAI	D,F,G,M	Y	930760-22, 145357, 930760-07*, 139091	N ⁵
72-2(b) Acute Aquatic Invertebrate Toxicity	(TEP)				
72-3(a) Acute Estu/Mari Tox Fish	TGAI	D ⁴ ,F ⁶	Y ⁶	930760-08, 409931-03	N/R ⁴
72-3(b) Acute Estu/Mari Tox Mollusk	TGAI	D ⁴ ,F ⁶	Y ⁶	930760-09, 409931-01	N/R ⁴
72-3(c) Acute Estu,Mari Tox Shrimp	TGAI	D ⁴ ,F ⁶	Y ⁶	930760-10, 409931-02	N/R ⁴

* In Bibliographic Citation column indicates study may be upgradeable

Date: 8/12/92
 Case No: 3055
 Chemical No: 006315

PHASE IV
 DATA REQUIREMENTS FOR
 ECOLOGICAL EFFECTS BRANCH

5

Data Requirements	Composition ¹	Use Pattern ²	Does EPA Have Data To Satisfy This Requirement? (Yes, No)	Bibliographic Citation	Must Additional Data Be Submitted under FIFRA2(c)(2)(B)?
72-3(d) Acute Estu/Mari Tox Fish	(TEP)				
72-3(e) Acute Estu/Mari Tox Mollusk	(TEP)				
72-3(f) Acute Estu/Mari Tox Shrimp	(TEP)				
72-4(a) Early Life-Stage Fish	TGAI	D	N		R ⁴
72-4(b) Live-Cycle Aquatic Invertebrate	TGAI	D	N		R ⁴
72-5 Life-Cycle Fish					
72-6 Aquatic Org. Accumulation					
72-7(a) Simulated Aquatic Field Study					
72-7(b) Actual Aquatic Field Study					
122-1(a) Seed Germ./Seedling Emerg.					
122-1(b) Vegetative Vigor					
122-2 Aquatic Plant Growth					
123-1(a) Seed Germ./Seedling Emerg.					
123-1(b) Vegetative Vigor					
123-2 Aquatic Plant Growth					
124-1 Terrestrial Field Study					
124-2 Aquatic Field Study					
141-1 Honey Bee Acute Contact					
141-2 Honey Bee Residue on Foliage					
141-5 Field Test for Pollinators					

* In Bibliographic Citation column Indicates study may be upgradeable

1. Composition: TGA=Technical grade of the active ingredient; PAIFA=Pure active ingredient, radiolabeled; TEP=Typical end-use product
2. Use Patterns: A=Terrestrial Food Crop; B=Terrestrial Feed Crop; C=Terrestrial Non-Food Crop; D=Aquatic Food Crop; E=Aquatic Non-Food Outdoor; F=Aquatic Non-Food Industrial; G=Aquatic Non-Food Residential; H=Greenhouse Food Crop; I=Greenhouse Non-Food Crop; J=Forestry; K=Outdoor Residential; L=Indoor Food; M=Indoor Non-Food; N=Indoor Medical; O=Indoor Residential; Z=Use Group for Site 00000
3. Data for one avian dietary study and one avian acute oral study (bobwhite quail preferred) are required for uses not requiring a risk assessment. The other uses require two avian dietary studies.
4. These studies are reserved for the use in irrigation systems pending review of EFGWB data. From the label, it appears that the chemical can be applied continuously except when fertilizers and pesticides are applied through the system. Its use on agricultural premises indicates that exposure of fish and wildlife, including estuarine organisms, is probable.
5. Although, the 830760-05, -06, and -07 studies are deficient, the others, -20, -27, -22, fulfill the guideline requirement.
6. Estuarine studies are required to support the following uses: once through water cooling systems, pulp/paper mills, secondary oil recovery injection water, and oil recovery drilling muds/packer fluids.

LIST C

SRRD/GCSB TRANSMITTAL SHEET FOR PARTS B/C/D

To EEB on 6/25/90 Pkg #: C-111 Chemical/Case #: 6315, 3055

Categories: MICROBICIDE Use Patterns: 6, 7, 12, 13

Chemical: DITHALD DIALLYL HYDANTOIN

Submitter: LONZA

Chemical Review Manager: DMMYERS Phone #: 308 8074

Label(s) attached: Yes () / No ().

Branch: EEB Review Section: _____

Reviewer : _____

Signature : _____

Date : / /

Section Head: _____

Signature : _____

Date : / /

Branch Chief: JAMES W. AKERMAN

Signature : James W. Akerman

Date : 6/25/90

GENERAL COMMENTS

See worksheet and attached

comment sheet

6.7
12.12

ECOLOGICAL EFFECTS BRANCH
Data Requirements for...

	D	W	C
✓ 71-1(a) Acute Avian Oral Quail/Duck			
71-1(b) Acute Avian Oral Quail/Duck TEP			
✓ 71-2(a) Acute Avian Diet/Quail			
71-2(b) Acute Avian Diet/Duck			
71-3 Wild Mammal Toxicity			
71-4(a) Avian Repro. Quail			
71-4(b) Avian Repro. Duck			
71-5(a) Simulated Field Study			
71-5(b) Actual Field Study			
✓ 72-1(a) Fish Toxicity Bluegill			
72-1(b) Fish Toxicity Bluegill/TEP			
✓ 72-1(c) Fish Toxicity Rainbow Trout			
72-1(d) Fish Toxicity Rainbow Trout/TEP			
✓ 72-2(a) Invertebrate Toxicity			
72-2(b) Invertebrate Toxicity/TEP			
✓ 72-3(a) Estu/Mari Tox Fish			
✓ 72-3(b) Estu/Mari Tox Mollusk			
✓ 72-3(c) Estu/Mari Tox Shrimp			
72-3(d) Estu/Mari Tox Fish/TEP			
72-3(e) Estu/Mari Tox Mollusk/TEP			
72-3(f) Estu/Mari Tox Shrimp/TEP			
✓ 72-4(a) Early Life Stage Fish			✓
✓ 72-4(b) Life Cycle Invertebrate			✓
72-5 Life Cycle Fish			
72-6 Aquatic Org. Accumulation			

	D	W	C
72-7(a) Simul. Field-Aquatic Organisms			
72-7(b) Actual Field-Aquatic Organisms			
122-1(a) Seed Germ/Seedling Emerg.			
122-1(b) Vegetative Vigor			
122-2 Aquatic Plant Growth			
123-1(a) Seed Germ/Seedling Emerg.			
123-1(b) Vegetative Vigor			
123-2 Aquatic Plant Growth			
124-1 Terrestrial Field			
124-2 Aquatic Field			
141-1 Honey Bee Acute Contact			
141-2 Honey Bee Residue on Foliage			
141-5 Field Test for Pollinators			

ca

(R)

SRRD/GCSB — ENCODING/DECODING SHEET — PARTS B/C/D

The following tables should be used to encode Categories and Use Patterns on the SRRD/GCSB Transmittal Sheet for Parts B/C/D.

CATEGORIES	USE PATTERNS
Acaricide (miticide)..... A	1. Terrestrial/Food
Antifoulant..... Z	2. Terrestrial/Feed
Avicide E	3. Terrestrial Non-Food
Biochemical Pest Control Agents.. B	4. Aquatic Food
Bird Repellant..... C	5. Aquatic Non-Food (Outdoor)
Degradation Product..... Y	6. Aquatic Non-Food (Industrial)
Desiccant..... D	7. Aquatic Non-Food (Residential)
Fungicide F	8. Greenhouse Food
Growth Regulator G	9. Greenhouse Non-Food
Herbicide H	10. Forestry
Inerts X	11. Residential Outdoor
Insecticide I	12. Indoor Food
Microbial Pest Control Agent..... M	13. Indoor Non-Food
Molluscicide..... L	14. Indoor Medical
Nematicide N	15. Indoor Residential
Nitrification Inhibitor..... Q	
Other O	
Piscicide P	
Rodenticide R	
Safener..... S	
Termiticide T	
Wood Preservative W	

The following table may be used to decode the Part B Table 8 (How I will comply with this data requirement).

LIST B/C/D RESPONSE CODES

1. Previously submitted acceptable study. Raw data are available.
2. Previously submitted study. Raw data NOT available.
3. Previously committed to supply a new study.
4. Will submit a new study.
5. Offer to share the cost of development of a new study.
6. Will submit an EXISTING study not previously submitted.
7. See attached correspondence regarding this study.
8. Intend to delete use(s) for which this study is a requirement.

3055

Early life stage fish and life cycle
invertebrate requirements

Registrant has identified the early life stage fish (72-4(a)) and life cycle invertebrate (72-4(b)) as required studies but has not responded on how these requirements will be ~~set~~ satisfied. EEB must await the registrant's response.

Jane W. Okuma

United States Environmental Protection Agency
Washington, DC 20460

Form Approved : 12/21/89
OMB No. : 2070-0106
Approval Expires: 12/31/92

REREGISTRATION PHASE 3 CHEMICAL RESPONSE WORKSHEET

1.a. Company Name LONZA INC FAIR LAWN, NJ	1.b. Company No. 006836	2.a. Chemical No. 006315	2.b. Chemical Name Bromo-3-chloro-5,5-dimethyl	2.c. Case No. 3055
---	-----------------------------------	------------------------------------	--	------------------------------

Summary of Registrant's Phase 2 Response		Phase 3 Response										
3	4	5	6	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	MRID Number Associated with Codes 1 and 6	Comply Codes Used in Phase 2 Response	Is Summary Provided?	Does Summary Identify Adverse Effects?	Is Referenced Study Provided?	Will Do Study?	Will Cost Share?	Will Provide Data Compensation?	Amending to Drop Use?	Correspondence Attached	Time Frame (Yrs.)
61-1	Chemical Identity	161208	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
61-2(a)	Begin. mat. & mfg. proc	137709 149238 161208	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
61-2(b)	Discussion of Impurities	149238 165354 161208	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
62-1	Preliminary Analysis	145360	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
62-2	Certification of limits	161208	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
62-3	Analytical Method	145360 161208	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1

16 Check here if registrant is submitting other information he or she believes supports reregistration.

17 Check here if registrant is submitting identification of adverse effects information other than summaries of studies listed above.

18 Certification
I certify that the statements that I have made on this form and all attachments therein are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.

19 Contact
Joseph R. Robinson

20 Phone
(201) 274-2432

Joseph R. Robinson
(SIGNATURE)

7/24/90 *
(DATE)

IF YOU HAVE ANY QUESTIONS OR OTHER CONCERNS ABOUT PHASE 3 PLEASE CALL 800-552-8879

*Revised February 13, 1991

Joseph R. Robinson
Signature

2/14/91
Date

FEB 15 1991

1.a. Company Name LONZA INC FAIR LAWN, NJ		1.b. Company No. 006836		2.a. Chemical No. 006315		2.b. Chemical Name Bromo-3-chloro-5,5-dimethy		2.c. Case No. 3055				
Summary of Registrant's Phase 2 Response												
3	4	5	6	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	MRID Number Associated With Codes 1 and 6	Comply Codes Used in Phase 2 Response	Is Summary Provided?	Does Summary Identify Adverse Effects?	Is Reformatted Study Provided?	Will Do Study?	Will Cost Share?	Have/Will Provide Data Compensation?	Am Amending to Drop Use?	Correspondence Attached	Time Frame (Yrs.)
63-2	Color.	161208	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-3	Physical State	161208	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-4	Odor	161208	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-5	Melting Point	161208	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-6	Boiling Point			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
63-7	Density	161208	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-8	Solubility	161208	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-9	Vapor Pressure			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
63-10	Dissociation Constant		6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
63-11	Oct/Water partition Coef.		6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
63-12	pH	161208	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-13	Stability	* NOT FOUND	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-14	Oxidizing/Reducing Action	* NOT FOUND	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-15	Flammability			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-16	Explosibility		6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-17	Storage stability	* NOT FOUND	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
63-18	Viscosity			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-19	Miscibility			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
63-20	Corrosion characteristics		6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
63-21	Dielectric breakdown volt			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1

5

1.a. Company Name LONZA INC FAIR LAWN, NJ		1.b. Company No. 006836		2.a. Chemical No. 006315		2.b. Chemical Name Bromo-3-chloro-5,5-dimethy		2.c. Case No. 3055					
3	Guideline Reference Number	Summary of Registrant's Phase 2 Response				Phase 3 Response							
		4 Name of Requirement	5 MRID Number Associated With Codes 1 and 6	6 Comply Codes Used in Phase 2 Response	7 Is Summary Provided?	8 Does Summary Identify Adverse Effects?	9 Is Reformatted Study Provided?	10 Will Do Study?	11 Will Cost Share?	12 Have/Will Provide Data Contribution?	13 Amending to Drop Use?	14 Correspondence Attached	15 Time Frame (Yrs.)
71-1(a)	Acute avian oral quail/duck	128162	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
71-1(b)	Acute avn oral quail/duck TEP	137088		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
71-2(a)	Acute avian diet. quail	145353	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
71-2(b)	Acute avian diet. duck	84179		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
71-3	Wild mammal toxicity	145355		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
71-4(a)	Avian repro. quail	137087		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
71-4(b)	Avian repro. duck	149704		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
71-5(a)	Simulated field study	84525		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
71-5(b)	Actual field study	137089		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
72-1(a)	Fish toxicity bluegill	128165	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
		142070		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
		145356		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		137090		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
72-1(b)	Fish toxicity bluegill - TEP			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1

6

1.a. Company Name LONZA INC FAIR LAWN, NJ		1.b. Company No. 006836		2.a. Chemical No. 006315		2.b. Chemical Name Bromo-3-chloro-5,5-dimethy		2.c. Case No. 3055				
Summary of Registrant's Phase 2 Response												
3	4	5	6	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	MRID Number Associated With Comply Codes 1 and 6	Comply Codes Used in Phase 2 Response	Is Summary provided?	Does Summary Identify Adverse Effects?	Is Reformatted Study Provided?	Will Do Study?	Will Cost Share?	Will Provide Data Contribution?	Am Amending to Drop Use?	Correspondence Attached	Time Frame (Yrs.)
72-1(c)	Fish toxicity rainbow trout	128164 142069 139551 145358	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-1(d)	Fish tox rainbow trout-TEP			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-2(a)	Invertebrate toxicity	128166 145357 144968 139091	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-2(b)	Invertebrate toxicity - TEP			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-3(a)	Estu/mari tox. fish	40993103		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-3(b)	Estu/mari tox. mollusk	40993101		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-3(c)	Estu/mari tox. shrimp	40993102		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-3(d)	Estu/mari tox. fish - TEP			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-3(e)	Estu/mari tox. mollusk - TEP			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-3(f)	Estu/mari tox. shrimp - TEP			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-4(a)	Early life stage fish			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-4(b)	Life cycle invertebrate			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
72-5	Life cycle fish			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
72-6	Aquatic org. accumulation			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1

1.a. Company Name LONZA INC FAIR LAWN, NJ		1.b. Company No. 006836		2.a. Chemical No. 006315		2.b. Chemical Name Bromo-3-chloro-5,5-dimethy		2.c. Case No. 3055				
Summary of Registrant's Phase 2 Response				Phase 3 Response								
3	4	5	6	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	MRID Number Associated With Comply Codes 1 and 6	Comply Codes Used in Phase 2 Response	Is Summary Provided?	Does Summary Identify Adverse Effects?	Is Reformatted Study Provided?	Will Do Study?	Will Cost Share?	Have/Will Provide Data Compensation?	Am Amending to Drop Use?	Correspondence Attached	Time Frame (Yrs.)
72-7(a)	Simul. field-aquatic orgs.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
72-7(b)	Actual field-aquatic orgs.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
81-1 *	Acute oral tox. rat	84175	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
81-2	Acute dermal tox. rabbit/rat	161229 137105 84176	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
81-3	Acute inhal. tox rat	137110 128161 128167	1,5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
81-4	Primary eye irritation-rabbit	137107 84177 84173 165436 148762	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
81-5	Primary dermal irritation	137108 128159 84172	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
81-6	Dermal sensitization	137109 128158 161228 84178 137460	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1

*See additional study page 11.

1.a. Company Name LONZA INC FAIR LAWN, NJ		1.b. Company No. 006836		2.a. Chemical No. 006315		2.b. Chemical Name Bromo-3-chloro-5,5-dimethyl		2.c. Case No. 3055				
Summary of Registrant's Phase 2 Response				Phase 3 Response								
3	4	5	6	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	HRIP Number Associated with Comply Codes 1 and 6	Comply Codes Used in Phase 2 Response	Is Summary provided?	Does Summary identify Adverse Effects?	Is Reformatted Study provided?	Will Do Study?	Will Cost Share?	Will Provide Data Component?	Am Amending to Drop Use?	Correspondence Attached	Time Frame (Yrs.)
81-7	Acute delayed neurotox hen	128160		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
82-1(a)	90-day feeding-rodent	* NOT FOUND	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
82-1(b)	90-day feeding-nonrodent		4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
82-2	21-day dermal-rabbit/rat (28-day)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
82-3	90-day dermal-rodent			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
82-4	90-day inhal.-rat			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
82-5(a)	90-day neurotox-hen			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
82-5(b)	90-day neurotox-mammal			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
83-1(a)	Chronic tox-rodent		5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
83-1(b)	Chronic tox - non-rodent		5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
83-2(a)	Oncogenicity - rat		5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
83-2(b)	Oncogenicity-mouse		5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
83-3(a)	Teratogenicity - rat	* NOT FOUND	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
83-3(b)	Teratogenicity - rabbit	164039	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
83-4	2-generation repro.-rat		5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
84-2(a) *	Gene mutation-ames	91292	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
84-2(b) *	Struct. chrom. aberration	40348201	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
84-4 *	Other genotoxic effects	164038	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
85-1	General metabolism		5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2

*See additional studies page 11.

19

1.a. Company Name LONZA INC FAIR LAWN, NJ		1.b. Company No. 006836		2.a. Chemical No. 006315		2.b. Chemical Name Bromo-3-chloro-5,5-dimethy		2.c. Case No. 3055				
Summary of Registrant's Phase 2 Response												
3	4	5	6	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	MRID Number Associated with Codes 1 and 6	Comply Codes Used in Phase 2 Response	Is Summary Provided?	Does Summary Identify Adverse Effects?	Is Reformulated Study Provided?	Will Do Study?	Will Cost Share?	Have/Will Provide Data Compensation?	Am Amending to Drop Use?	Correspondence Attached	Time Frame (Yrs.)
85-2	Dermal penetration			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
86-1	Domestic animal safety			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
122-1(a)	Seed germ/seedling emerg			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
122-1(b)	Vegetative vigor			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
122-2	Aquatic plant growth			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
123-1(a)	Seed germ/seedling emerg			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
123-1(b)	Vegetative vigor			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
123-2	Aquatic plant growth			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
124-1	Terrestrial field			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
124-2	Aquatic field			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
132-1(a)	Foliar residue dissipation			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
132-1(b)	Soil residue dissipation			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
133-3	Dermal passive dosimetry expo			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
133-4	Inhal. passive dosimetry expo			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
141-1	Honey bee acute contact			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
141-2	Honey bee residue on foliage			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
141-5	Field test for pollinators			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
160-5	Chemical identity	* NOT FOUND	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
161-1	Hydrolysis			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
161-2	Photodegradation-water			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1

1.a. Company Name LONZA INC FAIR LAWN, NJ		1.b. Company No. 006836		2.a. Chemical No. 006315		2.b. Chemical Name Bromo-3-chloro-5,5-dimethy		2.c. Case No. 3055				
Summary of Registrant's Phase 2 Response												
3	4	5	6	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	MRID Number Associated with Codes 1 and 6	Comply Codes Used in Phase 2 Response	Is Summary Provided?	Does Summary Identify Adverse Effects?	Is Reformatted Study Provided?	Will Do Study?	Will Cost Share?	Have/Will Provide Data Conpen-sation?	Am Amending to Drop Use?	Corres-pondence Attached	Time Frame (Yrs.)
161-3	Photodegradation-soil			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
161-4	Photodegradation-air			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
162-1	Aerobic soil metabolism			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
162-2	Anaerobic soil metabolism			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
162-3	Anaerobic aquatic metab.		4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
162-4	Aerobic aquatic metab.		4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
163-1	Leach/adsorp/desorption		4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
163-2	Volatility - lab			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
163-3	Volatility - field			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
164-1	Terrestrial field dissipation			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
164-2	Aquatic field dissipation		4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
164-3	Forest field dissipation			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
164-5	Long term soil dissipation			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
165-1	Confined rotational crop			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
165-2	Field rotational crop			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
165-3	Accumulation - irrig crop			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
165-4	Bioaccumulation in fish		4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
165-5	Bioaccum-aquatic non-target			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
166-1	Grd water-small prospect.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
166-2	Grd water-small, retrospect.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4

1.a. Company Name LONZA INC FAIR LAWN, NJ		1.b. Company No. 006836		2.a. Chemical No. 006315		2.b. Chemical Name Bromo-3-chloro-5,5-dimethy		2.c. Case No. 3055				
Summary of Registrant's Phase 2 Response												
3	4	5	6	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	MRID Number Associated with the Codes 1 and 6	Comply Codes Used in Phase 2 Response	Is Summary Provided?	Does Summary Identify Adverse Effects?	Is Reformatted Study Provided?	Will Do Study?	Will Cost Share?	May/Will Provide Data Compen-sation?	Am Amending to Drop Use?	Corres-pondence Attached	Time Frame (Yrs.)
166-3	Grd water-irrig retrospect.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
171-2	Chemical identity			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
171-3	Directions for use			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
171-4(a)	Nature of residue - plants			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
171-4(b)	Nature of residue - livestock			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
171-4(c)	Res. analyt. method - plant			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
171-4(d)	Res. analyt. method - animal			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
171-4(e)	Storage stability			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
171-4(f)	Mag. of res. potable H2O			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
171-4(g)	Mag. of res. in fish			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
171-4(h)	Mag. of res. irrigated crop			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
171-4(i)	Mag. of res. food handling			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
171-4(j)	Mag. meat/milk/poultry/egg			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
171-5	Reduction of residues			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
201-1	Droplet size spectrum			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
202-1	Drift field evaluation			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2

22

1.a. Company Name LONZA INC FAIR LAWN, NJ		1.b. Company No. 006836	2.a. Chemical No. 006315	2.b. Chemical Name Bromo-3-chloro-5,5-dimethy	2.c. Case No. 3055						
Phase 3 Response											
3	4	5	7	8	9	10	11	12	13	14	15
Guideline Reference Number	Name of Requirement	MRID Number Associated with Code 1	Is Summary provided?	Does Summary identify adverse effects?	Is Reformatted Study Provided?	Will Do Study?	Will Cost Share?	Will Provide Data Compensation?	Am Amending to Drop Use?	Correspondence Attached	Time Frame (Yrs.)
-- CROP --			Yes	Yes	Yes	Yes	Yes	Yes	Yes	<input type="checkbox"/>	
171-4(K)	Cropfield Trials		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
171-4(L)	Processed Food		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
-- CROP --			Yes	Yes	Yes	Yes	Yes	Yes	Yes	<input type="checkbox"/>	
171-4(K)	Cropfield Trials		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
171-4(L)	Processed Food		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
-- CROP --			Yes	Yes	Yes	Yes	Yes	Yes	Yes	<input type="checkbox"/>	
171-4(K)	Cropfield Trials		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
171-4(L)	Processed Food		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
-- CROP --			Yes	Yes	Yes	Yes	Yes	Yes	Yes	<input type="checkbox"/>	
171-4(K)	Cropfield Trials		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
171-4(L)	Processed Food		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
-- CROP --			Yes	Yes	Yes	Yes	Yes	Yes	Yes	<input type="checkbox"/>	
171-4(K)	Cropfield Trials		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
171-4(L)	Processed Food		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

23

1.a. Company Name LONZA INC FAIR LAWN, NJ		1.b. Company No. 006836		2.a. Chemical No. 006315		2.b. Chemical Name Bromo-3-chloro-5,5- dimethylhydantoin		2.c. Case No. 3055						
3	4 Guideline Reference Number	5 Name of Requirement	6 MRID Number Associated With Comply Code	Phase 3 Response										
				7 Is Summary Provided?	8 Does Summary Identify Adverse Effects?	9 Is Refer-matted Study Provided?	10 Will Do Study?	11 Will Cost Share?	12 Have/Will Provide Data Compen-sation?	13 Am Amending TO Drop Use?	14 Corres-pondence Attached	15 Time Frame (Yrs.)		
81-1		Acute oral tox. rat	137112	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
84-2(a)		Gene mutation - Ames	137100	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
84-2(a)		Gene mutation - Ames	137095	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
84-2(b)		Struct. chrom. aberrations	137101	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
84-2(b)		Struct. chrom. aberrations	137096	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
84-2		Gene mutation - mouse lymphoma	137103	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
84-2		Gene mutation - mouse lymphoma	137098	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
84-4		Other genotoxic effects	137102	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
84-4		Other genotoxic effects	137097	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

24



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 10 1990

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

Dear Phase 3 Submitter:

Your Reregistration Phase 3 submission captioned above has been screened for compliance with PR Notice 89-3, and has been found unacceptable for further review. Due to its size we have not returned your submission to you, but the entire package is available for pickup at during normal business hours at the street address listed below.

We have listed below the major problem areas we identified in our screening of your package. The presentation of your submission was too confusing to allow us to itemize every problem. Please review the Phase 3 guidance package, particularly PR Notice 89-3, before resubmitting your package.

- o There must be a valid MRID in column 5 for each summary and reformatted version of a previously submitted study being submitted.
- o All summaries and reformats submitted must correspond to appropriate marks in columns 7 and 9 of the Phase 3 Response Worksheet.
- o Submit one copy of each document.
- o Each summary and reformat must have a title that begins with the words "Phase 3 Summary (or Reformat) of MRID NNNNNNNN...".
- o Each summary and reformatted study must have a Good Laboratory Practice compliance statement on page 3 signed by the study director, the study sponsor, and the study submitter. See 40 CFR 160.12.
- o Page 4 of each summary must bear a Certification of Access to Raw Data using the mandatory language specified in Section VIII(D) of PR Notice 89-3 and one of the two alternative forms of the Certification of Accuracy of the Summary and Adequacy of the Study defined in Section VIII(E) of PR Notice 89-3.

If your corrected resubmission of these documents is received within three weeks of the date of this letter, your Phase 3 response will still be accepted. If you have any questions about the basis for these rejections, or about what you

25
12

must do to make these documents acceptable, please call (703)557-2363.

When you resubmit, identify your resubmission clearly as a "Phase 3 Resubmission" and submit it by mail to:

Reregistration Phase 3 Response
US EPA: Office of Pesticide Programs
PO Box 14890
Silver Spring, MD 20911-4890

or by private courier or express company to:

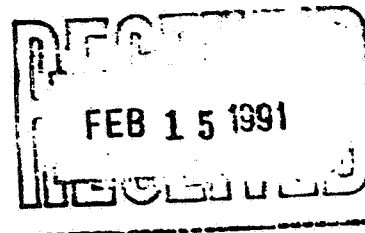
Reregistration Phase 3 Response
c/o Automated Sciences Group, Inc.
Attn: Norman Spurling
1010 Wayne Avenue, Suite 600
Silver Spring, MD 20910

Sincerely,

Teresa L. Downs for
John M. Carley, Manager
Phase 3 In-Processing

LONZA INC.
Corporate Headquarters
17-17 Route 208
Fair Lawn, N.J. 07410

February 14, 1991



Mr. Norman Spurling
Reregistration Phase 3 Response
c/o AUTOMATED SCIENCES GROUP, INC.
1010 Wayne Avenue, Suite 600
Silver Spring, MD 20910

RE: HALOHDANTOIN PHASE 3 REREGISTRATION DOCUMENTS

Dear Mr. Spurling:

Enclosed is one copy of the revised Phase 3 Reregistration response package for the following chemicals:

1. Bromo-3-chloro-5,5-dimethylhydantoin
Chemical Number 006315
2. Dibromo-5,5-dimethylhydantoin,
Chemical Number 006317
3. Dichloro-5,5-dimethylhydantoin
Chemical Number 028501
4. Dichloro-5-ethyl-5-methylhydantoin
Chemical Number 128826

The chemistry package submission for DANTOBROMTM represents data obtained on the commercial product as sold by Lonza. The process used for the manufacture of the product, as described in the package, results directly in the mixture of components given in the Confidential Statement of Formula. These components are not isolated separately, nor are they manufactured in purified form by Lonza.

Original Phase 2 submissions identified the separate chemical entities as the title compounds. These materials are not used by Lonza in the formulation of DANTOBROMTM. Halogen distribution in a mixed bromine/chlorine product of this type is an equilibrium process that results in a statistical distribution of all possible halogen isomers. Isolation of the pure components from this technical mixture is not a practical route to obtain the amounts required for a comprehensive analysis program.

Continued

Mr. Norman Spurling
Reregistration Phase 3
Response

- 2 -

February 14, 1991

We intend to comply fully with all pertinent regulations but may require further guidance from EPA in this area.

We appreciate your patience in allowing us this extended deadline for the submission. We regret any inconvenience the previous submission may have caused.

Sincerely yours,

LONZA INC.



Joseph R. Robinson
Associate Director
Regulatory Services

JRR/ac

Enclosures

28
15

93076

CHANGES MADE TO REREGISTRATION PHASE 3 WORKSHEET

CASE: 3055
CHEMICAL: 006315
COMPANY: 006836

CHANGES MADE BY: N. Spurling
DATE: 2/19/91

Lonza reversed its guideline markings for 72-3(b) and 72-3(c) on the worksheet. I have returned them to the way they should be.

29

93076

After resubmission 2/15/91 these problems remain.
 These documents are still rejects. N. Spurling 2/20/91

Phase 3 Deficiency Listing - Page 1

Company (006836): LONZA INC
 Chemical (006315): Bromo-3-chloro-5,5-dimethylhydantoin

Guideline/ Crop	Old MRID	S/R	Deficiencies Noted
61-1	161208	S	<p>You have marked portions of the document confidential, but have not included a supplemental statement of data confidentiality claims. You must either delete these markings or include a complete supplemental statement of data confidentiality claims as defined in section VI (D) (4) and Attachment 4 of PR Notice 86-5. <i>p. 5</i></p> <p>Page 4 of each summary must bear a Certification of Access to Raw Data, using the mandatory language specified in section VIII(D) of PR Notice 89-3.</p> <p>Page 4 of each summary must bear one of the two alternative standard forms of the Certification of Accuracy of Summary and Adequacy of Study defined in section VIII(E) of PR Notice 89-3.</p>
61-2(a)	161208	S	
61-2(b)	161208	S	
81-4	165636	S	Page 4 of each summary must bear a Certification of Access to Raw Data, using the mandatory language specified in section VIII(D) of PR Notice 89-3.
81-6	137460	S	Page 4 of each summary must bear a Certification of Access to Raw Data, using the mandatory language specified in section VIII(D) of PR Notice 89-3.
63-2	161208	S	<p>Page 4 of each summary must bear a Certification of Access to Raw Data, using the mandatory language specified in section VIII(D) of PR Notice 89-3.</p> <p>Page 4 of each summary must bear one of the two alternative standard forms of the Certification of Accuracy of Summary</p>
63-3	161208	S	
63-4	161208	S	

30

17

Phase 3 Deficiency Listing - Page 2

Company (006836): LONZA INC

Chemical (006315): Bromo-3-chloro-5,5-dimethylhydantoin

Guideline/ Crop	Old MRID	S/R	Deficiencies Noted
63-5	161208	S	and Adequacy of Study defined in section VIII(E) of PR Notice 89-3.
63-7	161208	S	The old MRID cited in column 5 is invalid. You must determine the valid MRID for the previously submitted study you are citing.
63-8	161208	S	
63-12	161208	S	
63-13		S	
81-1	137112	S	Page 4 of each summary must bear a Certification of Access to Raw Data, using the mandatory language specified in section VIII(D) of PR Notice 89-3.

93076

- Status as of 2/20/91

Phase 3 Submission Directory - Page 1

Company (006836): LONZA INC
 Chemical (006315): Bromo-3-chloro-5,5-dimethylhydantoin

Guideline	Crop	Old MRID	Summary MRID	Reformat MRID
61-1		161208	Rejected	
61-2(a)		161208	Rejected	
61-2(b)		161208	Rejected	
63-2		161208	Rejected	
63-3		161208	Rejected	
63-4		161208	Rejected	
63-5		161208	Rejected	
63-7		161208	Rejected	
63-8		161208	Rejected	
63-12		161208	Rejected	
63-13			Rejected	
71-1(a)		137088	93076002	
71-2(a)		137087	93076003	
71-2(b)		137089	93076004	
72-1(a)		137090	93076005	
		145356	93076020	
72-1(c)		139551	93076006	
		145358	93076027	
72-2(a)		139091	93076007	
		145357	93076022	
72-3(a)		40993103	93076008	
72-3(b)		40993101	93076009	
72-3(c)		40993102	93076010	
81-1		137105	93076011	
		161229	93076012	
81-2		84176	93076013	
		137110	93076025	
81-3		137107	93076014	
81-4		137108	93076015	
		165636	Rejected	
81-5		84172	93076026	
		137109	93076017	
		161228	93076028	
81-6		137460	Rejected	
84-2(b)		40348201	93076021	
81-1		137112	Rejected	
84-2(a)		137100	93076031	
		137095	93076029	
84-2(b)		137101	93076032	
		137096	93076024	
84-2		137103	93076034	
		137098	93076035	

32

19

Phase 3 Submission Directory - Page 2

Company (006836): LONZA INC
Chemical (006315): Bromo-3-chloro-5,5-dimethylhydantoin

Guideline	Crop	Old MRID	Summary MRID	Reformat MRID
84-4		137102 137097	93076030 93076033	

Company: 006836 LONZA INC
FAIR LAWN, NJ

Chemical: 006315 Bromo-3-chloro-5,5-dimethylhydantoin

Case: 3055 EPA Manager: Tom Myers

GDLN #	DESCRIPTION	REGISTRANT'S REQUEST/MRID	EPA DECISION
--------	-------------	------------------------------	--------------

62-1 Preliminary Analysis

Comments: Data is required for the technical grade active ingredient. Refer to Subdivision D, Product Chemistry Guidelines.

72-4(a) Early life stage fish

Comments: A comply code was not marked on your Phase II response. Clarify your intentions in your Phase III response.

72-4(b) Life cycle invertebrate

Comments: See guideline 72-4(a).

122-2 Aquatic plant growth

Comments: This requirement is reserved.

165-5 Bioaccum-aquatic non-target

Comments: This requirement is reserved.

171-4(a) Nature of residue - plants

Comments: This requirement is reserved pending closer

Chemical: 006315
Company: 006836

GDLN #	DESCRIPTION	REGISTRANT'S REQUEST/MRID	EPA DECISION
--------	-------------	------------------------------	--------------

GDLN Comments Continued:

examination of the uses and product chemistry data
in Phases IV and V.

171-4(b) Nature of residue - livestock

Comments: See guideline 171-4(a).

171-4(c) Res. analyt. method - plant

Comments: See guideline 171-4(a).

171-4(d) Res. analyt. method - animal

Comments: See guideline 171-4(a).

171-4(e) Storage stability

Comments: See guideline 171-4(a).

171-4(i) Mag. of res. food handling

Comments: See guideline 171-4(a).

171-4(j) Mag. meat/milk/poultry/egg

Comments: See guideline 171-4(a).

General Comments For This Chemical:

Product chemistry data is required for each

Chemical: 006315
Company: 006836

GDLN #	DESCRIPTION	REGISTRANT'S REQUEST/MRID	EPA DECISION
--------	-------------	------------------------------	--------------

GDLN Comments Continued:

technical grade active ingredient being supported.

The following residue chemistry guidelines are also reserved pending closer examination of the uses and product chemistry data in Phases IV and V.

171-4(1) Processed food
171-6 Proposed tolerance
171-7 Support for tolerance
171-13 Anal. reference standard

Your testing proposal to use DMH/EMH as a testing material dated December 1, 1989 was superceded by an amended Phase II submission received on April 5, 1990. The amended Part B included a proposal to use DMH for environmental and toxicology testing and cited additional data.

Registration numbers 6836-112 and -119 were not included in reregistration because the active ingredients in these products (chemical numbers 11501 and 11502) were first registered after November of 1984. They are not candidates for reregistration at this time.

Applicability of test material for cited studies to fulfill data requirements for individual active ingredients will be determined in Phase IV.

LONZA INC.
Corporate Headquarters
17-17 Route 208
Fair Lawn, N.J. 07410

July 24, 1990

Mr. Tom Myers
Product Manager
Reregistration Phase 3 Response
U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
P.O. Box 14890
Silver Spring, MD 20911-4890

RE: PHASE 3 RESPONSE

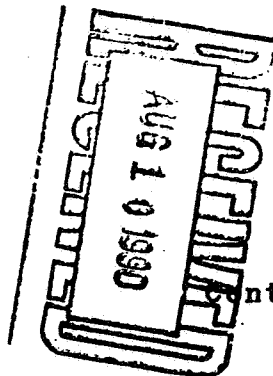
COMPANY NAME: Lonza Inc.
COMPANY NUMBER: 6836
CASE NUMBER: 3055
CASE NAME: Bromo-3-Chloro-5,5-Dimethylhydantoin
Dibromo-5,5-Dimethylhydantoin
Dichloro-5,5-Dimethylhydantoin
Dichloro-5-Ethyl-5-Methylhydantoin

CHEMICAL NUMBER: 6315; 6317; 28501; 128826

Dear Mr. Myers:

Lonza, by this letter, is agreeing to perform all of the necessary testing to maintain the following registrations:

<u>PRODUCT</u>	<u>EPA REG. NO.</u>
Glychlor Powder	6836-109
Bromchlor	6836-110
Glycoserve LAD	6836-111
Glycoserve	6836-112
Dantochlor RW	6836-113
Dantochlor	6836-114
Dantobrom RW	6836-115
Dantobrom S	6836-116
Dantobrom	6836-117
Dantobrom P	6836-118
Dantogard	6836-119
Glybrom RW-90	6836-120
Glybrom RW-92.5	6836-121
Glybrom RW-93.5	6836-122
Glybrom RW-95	6836-123
Glybrom RW-97.5	6836-124



Continued

40
9
1 of 3

July 24, 1990

Lonza has withdrawn our offer to cite the data currently being generated by Great Lakes Chemical Co. preferring to develop our own data package. All new data will be developed on dimethylhydantoin (DMH) as per the Agency's request and instruction. Per our conference call of July 20, 1990, C. Rice (EPA), S. Schatzow (Lonza attorney), and J. Conti (Lonza), all existing data meeting EPA "Adequacy Standards" conducted prior to July 1990 on any of the following:

- (A) dimethylhydantoin and/or its halogenated species and
- (B) ethylmethylhydantoin and/or its halogenated species could be used to satisfy requirements.

It is further stated that the chemistry package supplied on Dantobrom can be used to satisfy all component chemistry requirements since none of these chemicals are manufactured separately nor are they commercially available through Lonza.

It is the understanding of Lonza that this data package will satisfy:

- 1). All halogenated dimethyl and ethylmethyl hydantoins (EMH) i.e. 100% ethylmethyl hydantoin and 100% dimethylhydantoin and all combinations thereof.
- 2). All methylol derivatives of dimethyl and ethylmethyl hydantoin. Including compounds registered after November of 1984 to present i.e. Registration numbers 6836-111, 6836-112, 6836-119.
- 3). All esterified and ethoxylated derivatives of dimethyl and ethylmethyl hydantoin, currently there are no EPA registrations.

Based upon our evaluation for Phase 2 Reregistration, Lonza has determined our use group areas to be:

- 1). Aquatic non-food industrial
- 2). Aquatic non-food residential
- 3). Indoor food
- 4). Indoor non-food
- 5).

Continued

41

2

Mr. Tom Myers
EPA

- 3 -

July 24, 1990

Lonza looks forward to meeting with the Agency at anytime if further discussion or clarification of the above listed points is required.

Sincerely yours,

LONZA INC.



Joseph R. Robinson
Associate Director
Regulatory Services

JRR/le

cc: Mr. Jay Ellenberger
Generic Chemical Support Branch (H7508C)
Special Review and Reregistration Division
U.S. ENVIRONMENTAL PROTECTION AGENCY
1921 Jefferson Davis Highway
Arlington, VA 20222

Dr. Chris Rice
Office of Pesticide Programs (H7504C)
U.S. ENVIRONMENTAL PROTECTION AGENCY
401 M Street, SW
Washington, DC 20460

42
2

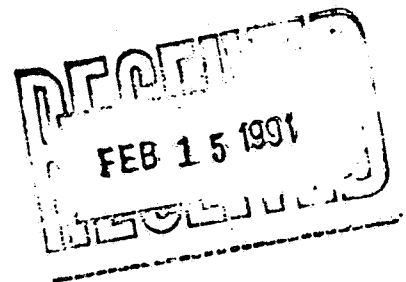
New Topic

CORRESPONDENCE

Guideline Reference:

63-6 Boiling Point

The halohydrantoin is a solid at room temperature.
Therefore, this requirement is not applicable.



CORRESPONDENCE

Guideline Reference:

63-9 Vapor Pressure

Halohydantoins have a melting point greater than 30°C.

Therefore, this requirement is not applicable.

45
6
2

CORRESPONDENCE

Guideline Reference:

63-10 Dissociation Constant

Conditionally required by Agency direction.

46
7
8

CORRESPONDENCE

Guideline Reference:

63-11 Octanol/Water Partition Coefficient

The halohydantoin is organic and polar. Therefore, this requirement is not applicable.

47
8
4

CORRESPONDENCE

Guideline Reference:

82-1(b) 90-Day Feeding - Nonrodent

A two-week palatability study, an eight-week dose range finding study and a one-year chronic toxicity study are scheduled to be conducted. The availability of these studies should preclude the requirement for this 90-day study.

48
9
5