DATA REQUIREMENTS FOR

Data Code	Title	Data	Conditions	Volume No
0	Index	required		and Pages
<u>U</u> 1	Label	R R		
<u>, </u>	Chemistry requirements for the registration of a	K		
L	technical grade of active ingredient (TGAI) or an			
	integrated system product.			
2.1	Applicant's Name and Office Address	R		
2.2	Manufacturer's Name and Office Address and	R		
	Manufacturing Plant's Name and Address			
2.3	Product Trade Name	R		
2.3.1	Other Names	R		
2.4	Common Name	R		
2.5	Chemical Name	R		
2.6	Chemical Abstracts Registry Number	R		
2.7	Structural Formula	R		
2.8	Molecular Formula	R		
2.9	Molecular Weight	R		
2.11	Manufacturing Methods for the TGAI			
2.11.1	Manufacturing Summary	R		
2.11.2	Description of Starting Materials	R		
2.11.3	Detailed Production Process Description	R		
2.11.4	Discussion of Formation of Impurities	R		
2.12	Specifications			
2.12.1	Establishing Certified Limits	R		
2.12.2	Control Product Specification Form	R		
2.13	Preliminary Analysis			
2.13.1	Methodology/Validation	R		
2.13.2	Confirmation of Identity	R		
2.13.3	Batch Data	R		
2.13.4	Impurities of Toxicological Concern	CR	If applicable	
2.14	Chemical and Physical Properties			
2.14.1	Colour	R		
2.14.2	Physical State	R		
2.14.3	Odour	R		
2.14.4	Melting Point / Melting Range	R	Solid at room temperature.	
2.14.5	Boiling Point / Boiling Range	R	Liquid at room temperature.	
2.14.6	Density or Specific Gravity	R		
2.14.7	Water Solubility (mg/L)	R	See 8.2.1	
2.14.8	Solvent Solubility (mg/L)	R		
2.14.9	Vapour Pressure	R	See 8.2.1	
2.14.10	Dissociation Constant	R	See 8.2.1	

DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume No and Pages
2.14.11	Octanol/Water Partition Coefficient	R	See 8.2.1	
2.14.12	UV/Visible Absorption Spectra	R	See 8.2.1	
2.14.13	Stability (Temperature, Metals)	R		
2.14.14	Storage Stability Data	CR	Required for integrated system products	
2.15	Sample(s) of Analytical Standards and ROC	R		
2.16	Other Studies/Data/Reports	CR	If available	
4	Toxicology			
4.1	Summaries	R		
4.2	Acute Studies - TGAI			
4.2.1	Acute Oral	R		
4.2.2	Acute Dermal	R		
4.2.3	Acute Inhalation	R		
4.2.4	Primary Eye Irritation	R		
4.2.5	Primary Dermal Irritation	R		
4.2.6	Dermal Sensitization	R		
4.2.7	Potentiation/Interaction	CR	If available	
4.2.8	Antidote	CR	If available	
4.2.9	Other Acute Studies	CR	If available	
4.3	Short-term Studies — TGAI			
4.3.1	Short-term Oral (90-day rodent)	R		
4.3.2	Short-term Oral (90-day and/or 12-month dog)	CR	If available	
4.3.3	Short-term Oral (28-day)	CR	If available	
4.3.4	Short-term Dermal (90-day)	CR	If available	
4.3.5	Short-term Dermal (21/28-day)	R		
4.3.6	Short-term Inhalation (90-day)	CR	Required if there is the likelihood of significant repeated inhalation exposure to the product as a gas, vapor or aerosol	
4.3.7	Short-term Inhalation (21/28-day)	CR	If available	
4.3.8	Other Short-term Studies	CR	If available	
4.3.8 4.4	Long-term Studies — TGAI	CK	ii availauic	
	Chronic (rodent)	R	4.4.1 and 4.4.2 could be submitted as a combined study under 4.4.4	
4.4.2	Oncogenicity (rodent species 1)	R	4.4.1 and 4.4.2 could be submitted as a combined study under 4.4.4	
4.4.3	Oncogenicity (rodent species 2)	R		

DATA REQUIREMENTS FOR

Data Code	Title	Data	Conditions	Volume No
		required		and Pages
4.4.4	Combined Chronic/Oncogenicity (rodent)	CR	4.4.1 and 4.4.2 could be	
			submitted as a combined study	
			under 4.4.4	
4.4.5	Other Long-term Studies	CR	If available	
4.5	Special Studies — TGAI			
4.5.1	Multigeneration Reproduction (rodent)	R		
4.5.2	Prenatal Developmental Toxicity (rodent)	R		
4.5.3	Prenatal Developmental Toxicity (non-rodent)	R		
4.5.4	Genotoxicity: Bacterial Reverse Mutation Assay	R		
4.5.5	Genotoxicity: In vitro Mammalian Cell Assay	R		
4.5.6	Genotoxicity: In vitro Mammalian Clastogenicity	CR	Required if not addressed in	
			study submitted for 4.5.5	
4.5.7	Genotoxicity: In vivo Cytogenetics	R		
4.5.8	Other Genotoxicity Studies	CR	If available	
4.5.9	Metabolism/Toxicokinetics in Mammals (laboratory	R		
	animals)			
4.5.10	Acute Delayed Neurotoxicity (hen)	CR	Required if the test substance is	
			an organophosphorus substance	
			or is structurally related to other	
			substances that may cause	
			delayed neurotoxicity	
4.5.11	28-day Delayed Neurotoxicity (hen)	CR	Required if results of acute	
			delayed neurotoxicity study	
			indicates effects, or if other	
			available data indicate the	
			potential for this type of	
			delayed neurotoxicity	
4.5.12	Acute Neurotoxicity (rat)	CR	Required if there is neurotoxic	
			potential	
4.5.13	90-day Neurotoxicity (rat)	CR	Required if there is neurotoxic	
			potential	

DATA REQUIREMENTS FOR

Data Code	Title	Data	Conditions	Volume No
		required		and Pages
4.5.14	Developmental Neurotoxicity	CR	Required if neurological effects	
			are observed in other studies	
			Should be considered if test	
			substance:	
			i) causes neuropathology or	
			neurotoxicity in adults;	
			ii) is hormonally active in vivo;	
			or	
			iii) causes other types of	
			nervous system involvement at	
			a developmental stage	
4.8	Other Studies/Data/Reports	CR	If available	
8	Environmental Chemistry and Fate			
8.1	Summaries	R		
8.2	Laboratory Studies			
8.2.1	Summary of Physicochemical Properties to Include,	R	Data submitted under 2.14.7,	
	Solubility in Water, Vapour Pressure, Dissociation		2.14.9, 2.14.10, 2.14.11, and	
	Constant, Octanol: Water Partition Coefficient, UV-Visible		2.14.13	
	Absorption (See part 2), (TGAI)			
8.2.2	Analytical Methodology (parent compound and			
	transformation products)			
8.2.2.1	Soil	R		
8.2.2.2	Sediment	CR	If there is a potential for aquatic	
			exposure	
8.2.2.3	Water	CR	See 8.2.2.2	
8.2.2.4	Biota	R		
8.2.3	Laboratory Studies of Transformation			
8.2.3.1	Summary	R		
8.2.3.2	Hydrolysis	R		
8.2.3.3	Phototransformation			
8.2.3.3.1	Soil	CR	If not hydrolysed or	
			biotransformed (i.e., persistent)	
8.2.3.3.2	Water	CR	If there is a potential for aquatic	
			exposure	
8.2.3.4	Biotransformation in Soil			
8.2.3.4.2	Aerobic Soil 20°-30°C	R		
8.2.3.5	Biotransformation in Aquatic Systems			
8.2.3.5.2	Aerobic Water 20°-30°C	CR	If there is a potential for aquatic	
			exposure.	
8.2.4	Laboratory Studies of Mobility			
8.2.4.1	Summary	R		

DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume No and Pages
8.2.4.2	Adsorption/Desorption	CR	One of 8.2.4.2; 8.2.4.3.1; 8.2.4.3.2; or 8.2.4.4 is required (R)	3
8.2.4.3	Soil Column Leaching			
8.2.4.3.1	Unaged Soil	CR	See 8.2.4.2	
8.2.4.3.2	Aged Soil	CR	See 8.2.4.2	
8.2.4.4	Soil TLC Leaching	CR	See 8.2.4.2	
8.2.4.5	Volatilization	CR	If volatilization is indicated by vapour pressure or Henry's Law Constant	
8.4	Storage, Disposal and Decontamination (TGAI and EP)			
8.4.1	Summary	R		
8.5	Other Environmental Fate Studies (TGAI and EP)			
8.5.1	Summary	CR	Based on concerns arising from results of other studies	
8.6	Other Studies/Data/Reports	CR	If available	
9	Environmental Toxicology			
9.1	Summary	R		
9.2	Non-Target Terrestrial Invertebrates			
9.2.1	Summary	R		
9.2.3	Earthworms (TGAI)			
9.2.3.1	Acute Toxicity	CR	If there is a potential for exposure	
9.2.4	Bees/Pollinators (TGAI)		i	
9.2.4.1	Acute Contact	CR	If there is a potential for exposure	
9.2.4.2	Acute Oral	CR	See 9.2.4.1	
9.2.4.3	Hive Study (including brood)	CR	If there is a potential for exposure, especially for Insect Growth Regulators (IGRs)	
9.2.5	Predators	CR	If there is a potential for exposure	
9.2.6	Parasites	CR	See 9.2.5	
9.2.7	Other Terrestrial Invertebrates	CR	See 9.2.5	
9.2.8	Laboratory Studies with EP	CR	If there is a potential for exposure and components of the EUP are of concern	
9.2.9	Field Studies (EP)	CR	Based on concerns arising from results of other studies	
9.3	Non-Target Freshwater Invertebrates			
9.3.1	Summary	CR		

DATA REQUIREMENTS FOR

Data Code	Title	Data	Conditions	Volume No
0.2.2	D 1 1 1 1 1	required	TC (1	and Pages
9.3.2	Daphnia sp. Acute	CR	If there is a potential for	
0.2.2		G.P.	freshwater exposure	
9.3.3	Daphnia sp. Chronic (Life-Cycle)	CR	Most sensitive (i.e., one of)	
			daphnid (9.3.3); or fish	
			(9.5.3.1), where there is	
			concern based on acute effects,	
			persistence, potential for	
			exposure or frequency of	
			application	
9.3.4	Laboratory Studies with Other Species	CR	If there is a potential for	
			exposure	
9.5	Fish			
9.5.1	Summaries	CR		
9.5.2	Acute Studies			
9.5.2.1	Cold Water Fish (rainbow trout)	CR	If there is a potential for	
			freshwater exposure	
9.5.2.2	Warm Water Fish (bluegill sunfish)	CR	See 9.5.2.1	
9.5.2.3	Other Freshwater Fish Species	CR	If there is a potential for	
,	The state of the s		exposure.	
9.5.3	Sublethal and Chronic Studies		F	
9.5.3.1	Fish, Early Life Cycle Tox. Test	CR	Most sensitive (i.e., one of)	
7.5.5.1	I isii, Earry Eric Cycle Tox. Test	CK	daphnid (9.3.3); or fish	
			(9.5.3.1), where there is	
			concern based on acute effects,	
			persistence, potential for	
			exposure or frequency of	
			application	
9.5.3.2	Fish, Life Cycle Tox. Test	CR	Where there is concern based	
7.3.3.2	I isii, Eile Cycle I ox. I est	CK	on acute effects, persistence,	
			potential for exposure or	
			frequency of application	
9.5.6	Bioaccumulation	CR	If there is a potential for	
9.5.0		CK	exposure and log Kow is	
			greater than or equal to 3	
9.6	Wild Birds		greater than or equal to 3	
9.6.1	Summary	CR		
9.6.2	Acute Studies	CK		
	Oral (LD50) Bobwhite Quail	CD	One of 0.6.2.1 5:: 0.6.2.2 ::	
9.6.2.1	Otal (LD30) Boownite Quall	CR	One of 9.6.2.1 or 9.6.2.2 is	
			required (R), if there is a	
			potential for avian exposure	
9.6.2.2	Oral (LD50) Mallard Duck	CR	See 9.6.2.1	

DATA REQUIREMENTS FOR

USE SITE CATEGORY (USC # 33): Residential Outdoor - TGAI

Data Code	Title	Data	Conditions	Volume No
		required		and Pages
9.6.2.3	Oral (LD50) Other Species	CR	If avian acute oral toxicity is of	
			concern and there is a potential	
			for exposure	
9.6.2.4	Dietary (LC50) Bobwhite Quail	CR	If there is a potential for avian	
			exposure	
9.6.2.5	Dietary (LC50) Mallard Duck	CR	See 9.6.2.4	
9.6.2.6	Dietary (LC50) Other Species	CR	If avian acute dietary toxicity is	
			of concern and there is a	
			potential for exposure	
9.6.3	Chronic Studies			
9.6.3.1	Avian Reproduction Bobwhite Quail	CR	Triggered by acute effects,	
			persistence, bioconcentration	
			potential, mammalian	
			reproductive effects, potential	
			for exposure or frequency of	
			application	
9.6.3.2	Avian Reproduction Mallard Duck	CR	See 9.6.3.1	
9.6.3.3	Avian Reproduction Other Species	CR	See 9.6.3.1	
9.6.6	Special Studies Related to the Intended Use-Pattern (TGAI or EP)	CR	See 9.6.5	
9.7	Wild Mammals			
9.7.1	Summary	CR	Based on concerns arising from	
			results of other studies	
9.8	Non-Target Plants			
9.8.1	Summary	CR		
9.8.2	Fresh Water Algae	CR	If there is a potential for	
			freshwater exposure	
9.8.4	Terrestrial Vascular Plants	CR	If there is a potential for	
			exposure	
9.8.5	Aquatic Vascular Plants	CR	See 9.8.4	
9.9	Other Studies/Data/Reports	CR	If available	
12.5	Foreign Reviews			
12.5.2	Foreign Reviews of Chemistry Requirements for TGAIs or	CR		
	Integrated System Products			
12.5.4	Foreign Reviews of Toxicology	CR		
12.5.8	Foreign Reviews of Environmental Chemistry and Fate	CR		
12.5.9	Foreign Reviews of Environmental Toxicology	CR		
12.7	Comprehensive Data Summaries	R		

August 15, 2005