DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume Number and Pages
0	Index	R		
1	Label	R		
2	Chemistry requirements for the registration of			
	a 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	
2.14.11	Octanol/Water Partition Coefficient	R	See 8.2.1	
2.14.12	UV/Visible Absorption Spectra	R	See 8.2.1	

DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume Number and Pages
2.14.13	Stability (Temperature, Metals)	R		and Tages
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	
4.4	Long-term Studies — TGAI			
4.4.1	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		
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			

DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume Number and Pages
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 animals)	R		
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	
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			

DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume Number and Pages
8.2.1	Summary of Physicochemical Properties to	R	Data submitted under 2.14.7;	9
	Include: Solubility in Water, Vapour Pressure,		2.14.9; 2.14.10; 2.14.11; and	
	Dissociation Constant, Octanol/Water Partition		2.14.13	
	Coefficient, UV-Visible Absorption Spectra (See			
	part 2)			
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	CR	If there is a potential for	
o. <u></u> .	270 11	010	exposure	
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., if	
			persistent)	
8.2.3.3.2	Water	CR	If there is a potential for aquatic exposure	
8.2.3.3.3	Air	CR	If volatilization is indicated by vapour pressure or Henry's Law	
8.2.3.4	Diatum of any otion in Call		Constant	
8.2.3.4.2	Biotransformation in Soil Aerobic Soil 20°-30°C	R		
8.2.3.5	Biotransformation in Aquatic Systems	K		
8.2.3.5.2	Aerobic Water 20°-30°C	CR	If there is a potential for aquatic	
6.2.3.3.2	Actionic water 20 -50 C	CK	exposure.	
8.2.4	Laboratory Studies of Mobility			
8.2.4.1	Summary	R		
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)	
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	

DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume Number and Pages
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		If available	
9	Environmental Toxicology			
9.1	Summary	CR		
9.2	Non-Target Terrestrial Invertebrates			
9.2.1	Summaries	CR		
9.2.3	Earthworms			
9.2.3.1	Acute Toxicity	CR	If there is a potential for exposure	
9.2.7	Other Terrestrial Invertebrates	CR	If there is a potential for exposure	
9.3	Non-Target Freshwater Invertebrates			
9.3.1	Summary	CR	If there is a potential for freshwater exposure	
9.3.2	Daphnia sp. Acute	CR	See 9.3.1	
9.5	Fish			
9.5.1	Summaries	CR	If there is a potential for exposure	
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	
9.7	Wild Mammals			
9.7.1	Summary	CR	Based on concerns arising from results of other studies	
9.7.2	Other Studies	CR		
9.8	Non-Target Plants			
9.8.1	Summary	CR	If there is a potential for exposure	
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 9.8.2	<u> </u>
9.9	Other Studies/Data/Reports	CR	If available	
12.5	Foreign Reviews			

DATA REQUIREMENTS FOR

USE SITE CATEGORY (USC # 9): Livestock Non-Food - TGAI

Data Code	Title	Data required	Conditions	Volume Number and Pages
12.5.2	Foreign Reviews of Chemistry Requirements for TGAIs or Integrated System Products	CR		
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