[PC Code 108702]
EPA REG No. 62719-LAO

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

OFFICE OF PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

31/JUL/2007

MEMORANDUM

Subject: Name of Pesticide Product: GF-1274
EPA Reg. No. /File Symbol: 62719-LAO
DP Barcode: 332129
Decision No: 369825
PC Code: 108702 XDE-742: N-(5,7-dimethoxy[1,2,4]triazolo [1,5-a]pyrimidin-2-yl)-2-methoxy-4-(trifluoromethyl)-3-pyridinesulfonamide

From: Tracy Keigwin
Technical Review Branch
Registration Division (7505C)

Brant T. Baker
7-31-2007

To: James Stone
Herbicide Branch
Registration Division (7505C)

Applicant: Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

FORMULATION FROM LABEL:

Active Ingredient(s):	% by wt.
XDE-742	7.5
Inert Ingredient(s):	92.5
Total:	100.0%

ACTION REQUESTED: RM requests review of acute toxicity data for GF-1274, EPA File Symbol 62719-LAO.

BACKGROUND: Dow AgroSciences LLC has submitted 5 acute toxicity studies (MRIDs 46907703, 46907704, 46907706 – 469077089), one acute inhalation toxicity waiver (MRID 46907705) and 5 Study Profile Templates (SPT) (MRIDs 46907709 – 46907713) in support of the registration of GF-1274, EPA File Symbol 62719-LAO. This product contains the proposed new active ingredient N-(5,7-dimethoxy[1,2,4]-triazolo[1,5-a]pyrimidin-2-yl)-2-methoxy-4-(trifluoromethyl)-3-pyridinesulfonamide, referred to by Dow AgroSciences LLC by the common name of "XDE-742" . The product label states that this end-use product is a "postemergence herbicide for the control of annual grass and broadleaf weeds in winter wheat". The 5 submitted acute toxicity studies were conducted at NOTOX B.V., Hambakenwetering 7, 5231 DD's-Hertogenbosch, The Netherlands.

OF NOTE: This acute toxicity action for GF-1274 is part of a joint review process with Canada, Australia, and the United States for the active ingredient pyroxsulam (XDE-742). TRB did not receive any comments from Canada regarding the draft acute toxicity review for GF-1274 because GF-1274 is not proposed for use in Canada (e-mail communication between D. Ramsingh and T. Keigwin, June 5, 2007). To date, we have not received any comments from Australia for the draft acute toxicity review of GF-1274. After verifying that the draft acute toxicity review for GF-1274 had been posted to CIRCA (the draft review was posted on May 24, 2007; conversation between D. McCall, M. Hashim, and T. Keigwin, July 30, 2007), TRB asked if Joanne Miller could contact the registrant to determine if Australia had any comments, or even if the study had been reviewed by them. Although she has contacted the registrant, to date we have not received a response. The PM team has requested that we finalize our review and if comments are received from Australia in the future then TRB will revise this review accordingly (conversation between J. Miller and T. Keigwin, July 31, 2007).

OF ADDITIONAL NOTE: The registrant has requested a waiver from the requirement of an acute inhalation toxicity study. In support of their request, they have submitted a justification for the waiver, based on the formulation of the product, the lack of irritation and corrosiveness, the low volatility of the product, and the wish to preserve laboratory animals.

TRB recommends against granting a waiver for the acute inhalation toxicity study. This product is a wettable granule. It is diluted with water before application and may be applied via ground or aerial methods. The registrant has stated that the product does not break down easily and that less than 1% of the wettable granule particles would be less than 50μm. When diluted, the registrant states that "virtually all droplets produced by conventional field sprayers are too large to respire into the lungs (i.e. > 30 μm)" and that "the majority, if not all of a potential inhalation dose that is breathed into the mouth will impact in the nasopharyngeal region resulting in exposure via the oral route, not via inhalation". The particle sizes referenced above by the registrant do not meet the requirements for an acute inhalation toxicity study to be waived. In order for a product to be considered essentially non-inhalable, 99% of the particles must be greater than 100 μm in diameter (Memorandum from M. Stasikowski to OPP Health Effects Division staff, "Waiver Criteria for Multiple-Exposure Inhalation Toxicity Studies", August 15, 2002). Additionally, it is noted that when a large particle is inhaled, considerable local damage may occur if the particles are absorbed, due to the volume of material that they contain. A ten fold increase in particle diameter may result in an approximate 1000-fold increase in particle volume diameter (Memorandum from M. Stasikowski to OPP Health Effects Division staff, "Waiver Criteria for Multiple-Exposure Inhalation Toxicity Studies", August 15, 2002). Additionally, the sprayed volume median diameter (VDM) to which a human is exposed to is much smaller than the application nozzle VDM. When an aqueous mixture is aerially applied, the application droplets shrink rapidly as they fall due to water evaporation. The degree of shrinkage depends on temperature, relative humidity, particle size, and the length of time that the droplets are suspended in the air. A droplet that is 300 μm in diameter when it leaves the application nozzle may be considerably smaller when it reaches the ground (perhaps 20 μm). Since humans are capable of inhaling particles >100 μm, it is reasonable to expect a significant portion of these particles to be inhalable. While most large particles are captured in the nose, some are capable of reaching the lungs, where they may do considerable local damage if absorbed, due to their potential volume (E-mail communication from J. Whalan to T. Keigwin).

With regard to the acute toxicity of GF-1274 via other routes of exposure - a category III or IV rating in one route of exposure does not necessarily translate to the same in another. TRB agrees with the registrant in our desire to not expend laboratory animals needlessly. However, this is a new active ingredient. The potential acute toxicity of this active ingredient must be ascertained via all routes of exposure. An acute inhalation study is required for this product.

RECOMMENDATIONS: The acute inhalation toxicity waiver was found unacceptable (as detailed above). The remaining acute toxicity studies submitted by Dow AgroSciences LLC are acceptable. The preliminary acute toxicity profile for GF-1274, EPA File Symbol 62719-LAO is as follows:

acute oral toxicity	IV	Acceptable	MRID 46907703
acute oral toxicity Study Profile Template			MRID 46907709
acute dermal toxicity	IV	Acceptable	MRID 46907704
acute dermal toxicity Study Profile Template			MRID 46907710
acute inhalation toxicity	**Waiver unacceptable**		MRID 46907705
primary eye irritation	III	Acceptable	MRID 46907706
primary eye irritation Study Profile Template			MRID 46907711
primary skin irritation	IV	Acceptable	MRID 46907707
primary skin irritation Study Profile Template			MRID 46907712
dermal sensitization	Negative	Acceptable	MRID 46907708
dermal sensitization Study Profile Template			MRID 46907713

PRECAUTIONARY LANGUAGE.

TRB will provide the precautionary labeling for this product when an acceptable acute inhalation toxicity study has been submitted.

Reviewer: Tracy Keigwin May 15, 2007
Product Manager (EPA): 23

STUDY TYPE: Acute Oral Toxicity - rat; OPPTS 870.1100; OECD 425

TEST MATERIAL (% a.i.): GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules.

CITATION: Janssen, P.J.M. Assessment of Acute Oral Toxicity with GF-1274 in the Rat (Up and Down Procedure). NOTOX B.V., Hambakenwetering 7, 5231 DD's-Hertogenbosch, The Netherlands. NOTOX Project 433913, DAS study no. 050143. October 14, 2005. MRID 46907703. Unpublished.

SPONSOR: The Dow Chemical Company, Midland, MI for Dow Agro Sciences LLC, Indianapolis, IN

EXECUTIVE SUMMARY: In an acute oral toxicity study (MRID 46907703), 3 female Fischer 344 (F-344/Crl, SPF-Quality) rats (source: Charles River Deutschland, Sulzfeld, Germany; age: approximately 9 weeks; weight: 134-147g) were given a single oral dose of GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules approximately 50% w/w in water at a dose level of 5000 mg/kg body weight. Animals were observed for mortality/viability twice daily. Observations for clinical signs were taken at periodic intervals on study day 1 and once daily thereafter until study day 15. A necropsy examination was performed on all test animals.

Oral LD_{50} females is greater than 5000 mg/kg (0/3 died)

All animals (3/3 females) survived to study termination. "Hunched posture was noted among the animals on days 1 and 2. Piloerection and chromodacryorrhoea were noted among the animals on day 1". There was no adverse effect on the bodyweight gain due to test substance administration.

Watery clear cysts were seen in the ovaries of one animal at necropsy. The study author states that this is occasionally seen among rats of this age group and strain and does not believe it to be test substance related. No other gross abnormalities were observed at necropsy

Toxicity based on the lack of mortality in the female rat. Toxicity Category IV.

This acute oral study is classified as Acceptable. It does satisfy the guideline requirement for an acute oral study (OPPTS 870.1100; OECD 420) in the rat.

COMPLIANCE: Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

RESULTS and DISCUSSION:

Dose (mg/kg)	Mortality/Number Tested
	Females
5000*	0/3

* The test material for purposes of administration was dissolved or suspended in water to form an approximate 50% w/w suspension. This suspension was administered at 10 mL/kg.

A. Mortality - as noted in table.

B. Clinical observations - All animals (3/3 females) survived to study termination. "Hunched posture was noted among the animals on days 1 and 2. Piloerection and chromodacryorrhoea were noted among the animals on day 1". There was no adverse effect on the bodyweight gain due to test substance administration.

C. Gross Necropsy - Watery clear cysts were seen in the ovaries of one animal at necropsy. The study author states that this is occasionally seen among rats of this age group and strain and does not believe it to be test substance related. No other gross abnormalities were observed at necropsy

D. Reviewer's Conclusions: Agree with the study author that the acute oral LD_{50} for this product is greater than 5000 mg/kg

E. Deficiencies – None

Reviewer: Tracy Keigwin May 15, 2007
Product Manager (EPA): 23

STUDY TYPE: Acute Dermal Toxicity - Rat; OPPTS 870.1200; OECD 402

TEST MATERIAL (% a.i.): GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules.

CITATION: Janssen, P.J.M. Assessment of Acute Dermal Toxicity with GF-1274 in the Rat. NOTOX B.V., Hambakenwetering 7, 5231 DD's-Hertogenbosch, The Netherlands. NOTOX Project 433946, DAS study no. 050146. October 14, 2005. MRID 46907704. Unpublished.

SPONSOR: The Dow Chemical Company, Midland, MI for Dow Agro Sciences LLC, Indianapolis, IN

EXECUTIVE SUMMARY: In an acute dermal toxicity study (MRID 46907704) 5 male and 5 female Fischer 344 (F-344/Crl, SPF-Quality) (source: Charles River Deutschland, Sulzfeld, Germany; age: approximately 8 weeks; weight: males 162-177g, females 120-126g) were dermally exposed to GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules approximately 50% w/w in water at a dose of 5000 mg/kg bw. On the day prior to study initiation a 5 x 7 cm area on the back of the test animals was clipped. On the day of study initiation, a 5000 mg/kg application of the test substance (10 mL/kg of the 50% suspension) was "applied to a test area representing approximately 10% of the body surface area (25 cm^2 area on male animals and an 18 cm^2 area on females)". A surgical gauze patch was placed over the application area and covered with aluminium foil and an elastic bandage. "A piece of micropore tape was additionally used for fixation of the bandages in females only". After 24 hours all binding materials were removed and the test sites washed with tap water to remove any residual test substance". Animals were observed for mortality/viability twice daily. Observations for clinical signs were taken at periodic intervals on study day 1 and once daily thereafter until study day 15. A necropsy examination was performed on all test animals.

Dermal LD_{50} Males = > 5000 mg/kg bw (0/5 died)
Dermal LD_{50} Females = > 5000 mg/kg bw (0/5 died)
Dermal LD_{50} Combined = > 5000 mg/kg bw (0/10 died)

All animals survived to study termination. Most animals exhibited piloerection and a hunched posture. Three males exhibited chromodacryorrhoea. One male also exhibited diarrhea and one additional male exhibited ptosis. Quick breathing was observed in 1/5 females. "Brown staining, erythema (focal or maculate), scales and scabs were seen in the treated skin area of the animals during the observation period". Bodyweight was unaffected by test substance administration.

No macroscopic abnormalities were observed at necropsy.

Toxicity is based on the lack of mortality in either sex at 5000 mg/kg. EPA Toxicity Category IV.

This acute dermal study is classified acceptable. It does satisfy the guideline requirement for an acute dermal study (OPPTS 870.1200; OECD 402) in the rat.

COMPLIANCE: Signed and dated GLP, Quality Assurance and Data Confidentiality statements were provided.

RESULTS and DISCUSSION:

Dose (mg/kg bw)	Mortality/Number Tested		
	Males	Females	Combined
5000	0 / 5	0 / 5	0 / 10

A. Mortality - as noted in table.

B. Clinical observations - All animals survived to study termination. Most animals exhibited piloerection and a hunched posture. Three males exhibited chromodacryorrhoea. One male also exhibited diarrhea and one additional male exhibited ptosis. Quick breathing was observed in 1/5 females. "Brown staining, erythema (focal or maculate), scales and scabs were seen in the treated skin area of the animals during the observation period". Bodyweight was unaffected by test substance administration.

C. Gross Necropsy – No macroscopic abnormalities were observed at necropsy

D. Reviewers Conclusions: Agree with the study author that the test substance has a Dermal LD_{50} greater than 5000 mg/kg

E. Deficiencies - None

Reviewer: Tracy Keigwin May 15, 2007
Product Manager (EPA): 23

STUDY TYPE: Primary Eye Irritation - Rabbit; OPPTS 870.2400; OECD 405

TEST MATERIAL (% a.i.): GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules.

CITATION: Janssen, P.J.M. Acute Eye Irritation/Corrosion Study with GF-1274 in the Rabbit. NOTOX B.V., Hambakenwetering 7, 5231 DD's-Hertogenbosch, The Netherlands. NOTOX Project 434036, DAS study no. 050156. October 14, 2005. MRID 46907706. Unpublished.

SPONSOR: The Dow Chemical Company, Midland, MI for Dow Agro Sciences LLC, Indianapolis, IN

EXECUTIVE SUMMARY: In a primary eye irritation study (MRID 46907706), 0.1 mL (approximately 56 mg) of undiluted GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules was instilled into the conjunctival sac of one eye of 3 male New Zealand White (SPF-Quality) albino rabbits (source: Charles River Deutschland, Sulzfeld, Germany; age: at least 6 weeks old; weight: at least 2.0 kg). Note that the test substance was ground to a powder prior to weighing. The lower lid was gently pulled away from the eyeball to form a cup and 0.1 mL of the test substance was instilled. After instillation the eyelids were held together for approximately 1 second to limit test article loss. The other eye was untreated to serve as a control. Animals were observed for mortality/viability twice daily and for signs of toxicity at least once daily. Observations for eye irritation were conducted at 1, 24, 48 and 72 hours and additionally at 7 days post instillation. Bodyweights were taken on the day of treatment and at termination. Following the 24 hour observation, "a solution of 2% fluorescein in water (adjusted to pH 7.0) was instilled into both eyes of each animal to quantitatively determine corneal epithelial damage

No corneal opacity was observed during the study. Iritis was observed in 2/3 animals at the one hour observation only. Positive signs of conjunctivitis were observed in 3/3 animals at the 1 hour observation, resolving within 24 hours in 2/3 animals and within 48 hours in the remaining test animal. EPA Toxicity Category III.

This study is classified as acceptable, and will satisfy the guideline requirement for a primary eye irritation study (OPPTS 870.2400; OECD 405) in the rabbit.

COMPLIANCE: Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

RESULTS AND DISCUSSION:

	Number "positive"/number tested				
	Hours				Days
Observations	1	24	48	72	7
Corneal Opacity	0/3	0/3	0/3	0/3	0/3
Iritis	2/3	0/3	0/3	0/3	0/3
Conjunctivae[a]:					
Redness	3/3	1/3	0/3	0/3	0/3
Chemosis	3/3	0/3	0/3	0/3	0/3
Discharge	0/3	0/3	0/3	0/3	0/3

[a] Score of 2 or more required to be considered a positive.

A. Observations - No corneal opacity was observed during the study. Iritis was observed in 2/3 animals at the one hour observation only. Positive signs of conjunctivitis were observed in 3/3 animals at the 1 hour observation, resolving within 24 hours in 2/3 animals and within 48 hours in the remaining test animal. Please note that the study does record some additional signs of conjunctivitis, however the scores (grade 1) are not considered positive per 870.2400.

B. Reviewers Conclusions: Test substance is Category III for primary eye irritation.

C. Deficiencies - None

Reviewer: Tracy Keigwin May 15, 2007
Product Manager (EPA): 23

STUDY TYPE: Primary Dermal Irritation - New Zealand White rabbit; OPPTS 870.2500; OECD 404

TEST MATERIAL (% a.i.): GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules.

CITATION: Janssen, P.J.M. Primary Skin Irritation/Corrosion Study with GF-1274 in the Rabbit. NOTOX B.V., Hambakenwetering 7, 5231 DD's-Hertogenbosch, The Netherlands. NOTOX Project 434003, DAS study no. 050154. September 29, 2005. MRID 46907707. Unpublished.

SPONSOR: The Dow Chemical Company, Midland, MI for Dow Agro Sciences LLC, Indianapolis, IN

EXECUTIVE SUMMARY: In a primary dermal irritation study (MRID 46907707), 3 male New Zealand White (SPF-Quality) albino rabbits (source: Charles River Deutschland, Sulzfeld, Germany; age: at least 6 weeks old; weight: at least 2.0 kg) were dermally exposed to 0.5g (moistened with 0.5 mL of water) of GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules. Note that the test substance was ground in a mortar and pestle prior to weighing. Twenty four hours prior to test substance application an area of fur approximately 150 square centimetres was clipped from the dorsal area of test animals. An application of 0.5g of the test substance (moistened with 0.5 mL of water) was placed on the skin of one flank, "using a metalline patch of 2 x 3 cm. The patch was mounted on Micropore tape, which was wrapped around the abdomen and secured with Coban elastic bandage". After 4 hours all binding materials were removed and the test sites washed with tap water to remove any remaining test substance. Animals were observed for mortality/viability twice daily and for signs of toxicity at least once daily. Observations for dermal irritation were conducted at 1, 24, 48 and 72 hours after patch removal. Bodyweights were taken on the day of treatment and at termination.

No erythema or edema was observed during the study. EPA Toxicity Category IV. PDI = 0.0.

This study is classified as acceptable. It does satisfy the guideline requirement for a primary dermal irritation study (OPPTS 870.2500; OECD 404) in the rabbit.

COMPLIANCE: Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

RESULTS and DISCUSSION:

		Hours			
		1	24	48	72
685-M	Erythema	0	0	0	0
	Edema	0	0	0	0
676-M	Erythema	0	0	0	0
	Edema	0	0	0	0
6684-M	Erythema	0	0	0	0
	Edema	0	0	0	0

A. Observations – No erythema or edema were observed during the study. EPA Toxicity Category IV.

B. Results - PDII – 0.0

C. Reviewers Conclusions – Test substance is Category IV for dermal irritation.

D. Deficiencies - None

Reviewer: Tracy Keigwin May 15, 2007
Product Manager (EPA): 23

STUDY TYPE: Dermal Sensitization - Mouse; OPPTS 870.2600

TEST MATERIAL (% a.i.): GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules

CITATION: van Huygevoort, A.H.M.B. Assessment of Contact Hypersensitivity to GF-1274 in the Mouse (Local Lymph Node Assay). NOTOX B.V., Hambakenwetering 7, 5231 DD's-Hertogenbosch, The Netherlands. NOTOX Project 433979, DAS study no. 050159. October 17, 2005. MRID 46907708. Unpublished.

SPONSOR: The Dow Chemical Company, Midland, MI for Dow Agro Sciences LLC, Indianapolis, IN

EXECUTIVE SUMMARY: In a dermal sensitization study (MRID 46907708) with GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules, 20 female CBA strain SPF-Quality mice were tested for a dermal sensitization response using the Local Lymph Node Assay (source: Charles River France, L'Arbresle Cedex, France; age: approximately 11-12 weeks; weight (on study day 1): 21-27g). Test animals received applications of GF-1274 at 10%, 25%, or 50% (the 50% concentration was tested twice, the second time against another vehicle control) (5 animals per group). Vehicle control and positive control data were taken from a different study which was conducted at the same time as this study. The vehicle used in this study and the study from which the vehicle data was taken was Pluronic L92 surfactant. Two different positive control studies are referenced in the study - A positive control study with 25% HCA and an additional study which used 1% formaldehyde, 10% formaldehyde and 25% formaldehyde.

The test substance produced a stimulation index of <3 in all groups of test animals. Therefore, it is not considered a sensitizer (defined as producing a positive response).

In this study, GF-1274 is not a dermal sensitizer.

This study is classified as acceptable. It does satisfy the guideline requirement for a dermal sensitization study (OPPTS 870.2600) in the Mouse.

COMPLIANCE: Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

I. PROCEDURE

Test animals received one application of GF-1274 [10% in Pluronic L92 surfactant, 25% in Pluronic L92 surfactant, and 50% in Pluronic L92 surfactant (conducted twice). The vehicle and positive control animals were taken from different studies. The vehicle used in both the referenced study and the GF-1274 study was Pluronic L92 surfactant. The two positive control studies that were referenced used 25% HCA and an additional study used 1% formaldehyde, 10% formaldehyde and 25% formaldehyde. Test animals were treated with their appropriate concentrations on the dorsal surface of each ear (25 µl/ear), for 3 consecutive days. On study day 6 all test animals received an intravenous injection via the tail vein with 0.25 ml of sterile phosphate buffered saline (PBS) containing 20µCi of ^{3}H thymidine. After 5 hours the test animals were sacrificed and the auricular lymph nodes excised and pairs from each animal processed. "A single cell suspension of lymph node cells from one mouse was prepared by gentle separation through stainless steel gauze. The cells were washed two times in PBS and precipitated in 5% trichloroacetic acid (TCA) during the night. The precipitates were resuspended in 1 mL of TCA and transferred to 10 mL of Ultima Gold Cocktail. Radioactive measurements were performed using a Packard scintillation counter." Observations for mortality and viability were conducted twice daily, and signs of toxicity at least once daily. Bodyweights were recorded on day 1 (prior to dosing) and day 6. Observations for irritation were recorded on day 3 (3-4 hours after treatment).

II. RESULTS and DISCUSSION:

Sample Description Test or Control Group	Animal #	Individual Animal DPM [a]	Group Mean DPM ± (SEM)	Stimulation Index (SI)*
Vehicle Control 1% L92 in MUW (Project 436984)	1	571	321±81	
	2	85		
	3	229		
	4	348		
	5	372		
10% Test Substance	26	65	239±79	0.7±0.9
	27	85		
	28	214		
	29	361		
	30	472		
25% Test Substance	31	169	374±119	1.2±0.9
	32	567		
	33	189		
	34	746		
	35	197		
50% Test Substance	36	862	536±150	1.7±0.8
	37	198		
	38	879		
	39	206		
	40	534		
Positive control 25% HCA Project 436984	21	2004	1017±401	3.2±1.0
	22	382		
	23	454		
	24	1991		
	25	255		

ADDITIONAL GROUPS

Vehicle Control 1% L92 in MUW (Project 442891)	1	264	216±75	1.0
	2	52		
	3	25		
	4	368		
	5	371		
50% Test Substance	1	232	551±184	2.6±1.1
	2	197		
	3	1140		
	4	369		
	5	816		

*** SI = Group mean DPM ÷ Vehicle control mean DPM**

A. Reactions - The test substance produced a stimulation index of <3 in all groups of test animals, and is not therefore considered a sensitizer (defined as producing a positive response). Slight body weight loss was noted in some animals, but was not considered to be toxicologically significant. One animal in the 100% concentration group and one animal in the positive control group exhibited weight loss between the day 1 and day 6 observations. All other animals exhibited bodyweight gain during the study.

B. Positive control – The positive control substance (25% HCA in one study and the 25% formaldehyde concentration) produced a stimulation index of ≥ 3, and is therefore considered a sensitizer.

C. Reviewers Conclusions: TRB agrees with the study author that this product is not a dermal sensitizer.

D. Deficiencies –None.

ACUTE TOX ONE-LINERS
1. DP BARCODE: 332129
2. PC CODE: 108702
3. CURRENT DATE: 15/MAY/2007
4. TEST MATERIAL: GF-1274, Batch 422556-08-9, Purity: 8.1% w/w Cloquintocet-mexyl, 7.8% w/w XDE-742, Light brown granules

Study/Species/Lab Study # /Date	MRID	Results	Tox. Cat.	Core Grade
Acute oral toxicity/rat NOTOX B.V. DAS Study Number 050143 October 14, 2005	46907703	LD_{50} > 5000 mg/kg	IV	A
Acute oral toxicity Study Profile Template	46907709			
Acute dermal toxicity/rat NOTOX B.V. DAS Study Number 050146 October 14, 2005	46907704	LD_{50} > 5000 mg/kg	IV	A
Acute dermal toxicity Study Profile Template	46907710			
Acute inhalation toxicity Waiver	46907705	Waiver Unacceptable	-	U
Primary eye irritation/rabbit NOTOX B.V. DAS Study Number 050156 October 14, 2005	46907706	Iritis clearing within 24 hours, positive signs of conjunctivitis clearing within 48 hours.	III	A
Acute eye irritation Study Profile Template	46907711			
Primary dermal irritation/rabbit NOTOX B.V. DAS Study Number 050154 September 29, 2005	46907707	PDI = 0.0	IV	A

Acute dermal irritation Study Profile Template	46907712			
Dermal sensitization/guinea pig NOTOX B.V. DAS Study Number 050159 October 17, 2005	46907708	S.I. <3 Not a sensitizer	-	A
Acute oral toxicity Study Profile Template	46907713			

Core Grade Key: A =Acceptable, S = Supplementary, U = Unacceptable, W = Waived