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**NATIONAL INDUSTRIAL CHEMICALS NOTIFICATION AND ASSESSMENT SCHEME
(NICNAS)**

FULL PUBLIC REPORT

Bontron X-11

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**Director
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FULL PUBLIC REPORT**Bontron X-11****1. APPLICANT AND NOTIFICATION DETAILS**

APPLICANT(S)

Ricoh Australia Pty Ltd of 8 Rodborough Road Frenchs Forest NSW 2086.

NOTIFICATION CATEGORY

Limited-small volume: Chemical other than polymer, (1 tonne or less per year).

EXEMPT INFORMATION (SECTION 75 OF THE ACT)

Data items and details claimed exempt from publication: chemical name, other name, CAS number, molecular formula, molecular weight and spectral data.

VARIATION OF DATA REQUIREMENTS (SECTION 24 OF THE ACT)

No variation to the schedule of data requirements is claimed.

PREVIOUS NOTIFICATION IN AUSTRALIA BY APPLICANT(S)

CEC484.

NOTIFICATION IN OTHER COUNTRIES

None.

2. IDENTITY OF CHEMICAL

MARKETING NAME(S)

Bontron X-11

3. COMPOSITION

DEGREE OF PURITY

79.4 (75.5-79.9)%

HAZARDOUS IMPURITIES/RESIDUAL MONOMERS

None.

NON HAZARDOUS IMPURITIES/RESIDUAL MONOMERS (> 1% by weight)

<i>Chemical Name</i>	3,5-bis-tert-butylsalicylic acid		
<i>CAS No.</i>	19715-19-6	<i>Weight %</i>	20.4

ADDITIVES/ADJUVANTS

None.

4. INTRODUCTION AND USE INFORMATION

MODE OF INTRODUCTION OF NOTIFIED CHEMICAL (100%) OVER NEXT 5 YEARS

The notified chemical will be imported.

MAXIMUM INTRODUCTION VOLUME OF NOTIFIED CHEMICAL (100%) OVER NEXT 5 YEARS

<i>Year</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Tonnes</i>	0.05	0.06	0.07	0.07	0.07

USE **Non-Confidential**

The notified chemical is to be used as a component (1.5%) of toner used in photocopiers.

5. PROCESS AND RELEASE INFORMATION

5.1. Distribution, Transport and Storage

PORT OF ENTRY
Sydney

IDENTITY OF MANUFACTURER/RECIPIENTS **Non-Confidential**
Ricoh Australia Pty Ltd of 8 Rodbrough Road Frenchs Forest NEW SOUTH WALES

TRANSPORTATION AND PACKAGING

The notified chemical will be imported into Australia by sea in ready-to-use toner cartridges. These will be packed in cardboard boxes and will be transported throughout Australia by road.

5.2. Operation Description

The notified chemical is a component of a photocopier toner imported in ready-to-use cartridges containing 220 g of toner or 3.3 g of the notified chemical.

5.3. Occupational exposure

Number and Category of Workers

<i>Category of Worker</i>	<i>Number</i>	<i>Exposure Duration</i>	<i>Exposure Frequency</i>
Transport & storage	4-6	2-3 hours/day	10-15 days/year
Customer service engineers	100	5-20 min/day	200 days/year

Exposure Details

The toner containing the notified chemical will be contained in sealed cartridges. No reformulation or repackaging will take place in Australia. Hence, no exposure to the toner, or the notified chemical is expected during transportation and storage.

Occupational exposure to the notified chemical in Australia will primarily concern copier service personnel. Duties of the service personnel will include changing the toner cartridges. The used cartridge is removed from the machine and replaced with the new cartridge without direct contact with the toner contained in the cartridge. The toner in the new cartridge remains sealed until the sealing tape is removed just prior to installation. Inhalation and dermal exposure to the toner powder may occur during toner replacement, particularly in the event of a container leak or spill. Other service operations such as cleaning the inside of the machine and servicing the machine may also involve contact with toner particles remaining in the interior of the machine or disturbance of toner dust leading to inhalation exposure. Service personnel are stated to wear cotton gloves when direct contact with toner is possible.

Exposure may occur upon handling printed matter. However, very little toner is used per sheet of paper and it would not be separately available for exposure or dermal uptake as it is fused and fixed to the printed surface. These considerations indicate there would be no human exposure to the notified chemical during the handling of printed materials.

5.4. Release

RELEASE OF CHEMICAL FROM USE

Release of the toner containing the notified chemical to the environment is not expected under normal use as the cartridge is designed to prevent leakage. However, if leakage does occur, the toner will be

contained and presumably disposed of in landfill. Environmental exposure will result from the disposal of printed paper and discarded cartridges as well as the possibility of accidental leakage of the cartridges during use. Toner residues contained in the empty cartridges are expected to be about 18% of the import volume (up to 13 kg per annum) and to remain within these containers, although release could occur from deterioration of the cartridge. The total import volume of the notified chemical will ultimately be disposed of in either landfill or be incinerated or recycled with paper.

5.5. Disposal

The total import volume of the notified chemical will ultimately be disposed of in either landfill or be incinerated or recycled with paper.

5.6. Public exposure

It is expected that during transport, storage, and use by customer service engineers, exposure of the general public will be minimal, except in the event of an accidental spill of toner. Generation of dust clouds should be avoided and spills should be collected by vacuum cleaner and transferred to sealable waste containers. Ignition sources should be removed. Waste toner should be disposed of to landfill in accordance with Federal, State or local laws.

Public exposure to the notified chemical would occur when handling photocopied media. Consequently, any exposure is likely to be dermal.

6. PHYSICAL AND CHEMICAL PROPERTIES

Appearance at 20°C and 101.3 kPa Grey powder

Melting Point/ Boiling Point

METHOD	EC Directive 92/69/EEC A.1 Melting/Freezing Temperature.
Remarks	As the test material was decomposed at >464K in air or >454K in nitrogen, no value for melting point or boiling point could be determined.
TEST FACILITY	Safepharm Laboratories Limited (2000a).

Density 1 260 kg/m³

METHOD	Beckmann method
Remarks	The test facility for density determination was not reported.

Vapour Pressure <5.1x10⁻⁸ kPa at 25°C

METHOD	EC Directive 92/69/EEC A.4 Vapour Pressure.
Remarks	The notifier indicates that no statistical analysis was possible because vapour pressure balance readings were too low and variable for a line of best fit to have any meaning. Instead it was considered more appropriate that a regression slope be imposed on a chosen data point to provide an estimate of vapour pressure. The low value determined indicates that the notified chemical is classified as being very slightly volatile.
TEST FACILITY	Safepharm Laboratories Limited (1999a).

Water Solubility <7.87x10⁻⁵ g/L at 20°C

METHOD	EC Directive 92/69/EEC A.6 Water Solubility.
Remarks	The notified chemical (100 mg) was added to water (1 L) and the resulting suspension was shaken for 24 h at 30°C. The suspension was filtered and the solubility of the notified chemical was determined by AAS. The notified chemical is classified as being slightly soluble.
TEST FACILITY	Safepharm Laboratories Limited (2000a)

Hydrolysis as a Function of pH Not determined

Remarks	Hydrolysis as a function of pH was not determined for this notification due to the notified chemical's low water solubility.
Partition Coefficient (n-octanol/water)	log Pow > 3.9 (based on measured solvents) log Pow = 6.1 (estimated by KNOWIN)
Remarks	The notifier indicates that the notified chemical was found to be unstable as a white insoluble precipitate formed in the n-octanol phase during preliminary tests. Therefore, the partition coefficient was estimated by means of the atom/fragment contribution method using KNOWIN Version 1.63 software. The high estimated log Pow is consistent with the low water solubility, indicating a very high affinity for the organic component of soils and sediments.
TEST FACILITY	Safepharm Laboratories Limited (2000a).
Adsorption/Desorption	Not determined
Remarks	The notifier indicates that based on the notified chemical's low water solubility and relatively high log P value adsorption to organic matter is expected to be high. Given its negative charge, the notified chemical is likely to under go ion exchange with components in the soil.
Dissociation Constant	Not determined
Remarks	The notified chemical is expected to remain fully dissociated in water.
Particle Size	The mean particle size is 6.80 µm
Remarks	The test facility for particle size was not reported.
Flash Point	Not determined.
Remarks	Pyrophoric properties of the notified chemical were not determined due to expected negative results based on the chemical structure and known physical and chemical properties.
Flammability Limits	Not highly flammable.
METHOD	EC Directive 92/69/EEC A.10 Flammability (Solids).
Remarks	GLP & QA. The moisture content was determined to be 4.6%.
TEST FACILITY	Safepharm Laboratories Limited (1999b).
Autoignition Temperature	Not determined.
Remarks	Pyrophoric properties of the notified chemical were not determined due to expected negative results based on the chemical structure and known physical and chemical properties.
Explosive Properties	Not determined.
Remarks	Explosive properties of the notified chemical were not determined due to expected negative results based on the chemical structure and known physical and chemical properties,
Reactivity	
Remarks	The MSDS advised to avoid strong oxidizing agents, strong acids and strong bases.

7. TOXICOLOGICAL INVESTIGATIONS

<i>Endpoint and Result</i>	<i>Assessment Conclusion</i>
Rat, acute oral LD50 between 200 and 2 000 mg/kg bw	harmful
Rabbit, skin irritation	non-irritating
Rabbit, eye irritation	slightly irritating
Guinea pig, skin sensitisation - adjuvant test	no evidence of sensitisation.
Genotoxicity - bacterial reverse mutation	non mutagenic

7.1. Acute toxicity – oral

TEST SUBSTANCE	Bontron X-11
METHOD	OECD TG 423 Acute Oral Toxicity – Acute Toxic Class Method.
Species/Strain	Rat/Sprague-Dawley CD
Vehicle	Arachis oil BP
Remarks - Method	GLP & QA.

RESULTS

<i>Group</i>	<i>Number and Sex of Animals</i>	<i>Dose mg/kg bw</i>	<i>Mortality</i>
1	3 females	2 000	3/3
2	3 females	200	0/3
3	3 males	200	0/3

LD50	Between 200 and 2 000 mg/kg bw
Signs of Toxicity	After treated with 2 000 mg/kg, the females had ataxia, hunched posture, lethargy, decreased respiratory rate and laboured respiration with isolated incidences of pallor of the extremities, prostration, noisy respiration and splayed gait.

Effects in Organs	After treatment with 200 mg/kg, the females had laboured respiration and/or hunched posture. One female had red/brown staining around the snout area. All females recovered within 1-2 days after treatment. No clinical signs of toxicity were observed in males at 200 mg/kg. At dose level of 2 000 mg/kg, animals had abnormally red lungs, dark livers, dark kidneys, black-coloured substance in stomach, pale gastric mucosa and sloughing of the non-glandular epithelium of the stomach.
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Remarks - Results	No abnormalities were observed in animals treated at 200 mg/kg. Harmful (Xn) with R22 (Harmful if swallowed) should be assigned.
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CONCLUSION	The notified chemical is harmful via the oral route.
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TEST FACILITY	Safepharm Laboratories Limited (2000b)
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7.2. Irritation – skin

TEST SUBSTANCE	Bontron X-11
METHOD	OECD TG 404 Acute Dermal Irritation/Corrosion. EC Directive 92/69/EEC B.4 Acute Toxicity (Skin Irritation).
Species/Strain	Rabbit/New Zealand White
Number of Animals	3
Vehicle	Water.
Observation Period	72 hours
Type of Dressing	Semi-occlusive.
Remarks - Method	GLP & QA.

RESULTS Draize scores for erythema/eschar and oedema were zero for all animals during 72 hour observation period.

Remarks - Results None.

CONCLUSION The notified chemical is non-irritating to skin.

TEST FACILITY Safepharm Laboratories Limited (2000c)

7.3. Irritation - eye

TEST SUBSTANCE Bontron X-11

METHOD OECD TG 405 Acute Eye Irritation/Corrosion.
EC Directive 92/69/EEC B.5 Acute Toxicity (Eye Irritation).
Species/Strain Rabbit/New Zealand White
Number of Animals 3
Observation Period 72 hours
Remarks - Method GLP & QA.

RESULTS

<i>Lesion</i>	<i>Mean Score* Animal No.</i>			<i>Maximum Value</i>	<i>Maximum Duration of Any Effect</i>	<i>Maximum Value at End of Observation Period</i>
	1	2	3			
<i>Conjunctiva: redness</i>	0	0	0	1	1 hour	0
<i>Conjunctiva: chemosis</i>	0	0	0	1	1 hour	0
<i>Conjunctiva: discharge</i>	0	0	0	1	1 hour	0
<i>Corneal opacity</i>	0	0	0	0	-	0
<i>Iridial inflammation</i>	0	0	0	0	-	0

*Calculated on the basis of the scores at 24, 48, and 72 hours for EACH animal.

Remarks - Results Black/grey coloured staining of the fur around the treated eyes were noted in all 3 animals up to 72 hours.

CONCLUSION The notified chemical is slightly irritating to the eye.

TEST FACILITY Safepharm Laboratories Limited (2000d)

7.4. Skin sensitisation

TEST SUBSTANCE Bontron X-11

METHOD OECD TG 406 Skin Sensitisation – maximisation test.
EC Directive 96/54/EC B.6 Skin Sensitisation - maximisation test.
Species/Strain Guinea pig/Dunkin-Hartley
PRELIMINARY STUDY Maximum Non-irritating Concentration:
intradermal: <0.5%
topical: 5%

MAIN STUDY
Number of Animals Test Group: 10 Control Group: 5
induction phase Induction Concentration:
intradermal injection 0.5%
topical application 50%

Signs of Irritation	After intradermal injections, discrete or patchy erythema was observed at the induction sites in test animals.				
	After topical induction, precluding evaluation of erythema and very slight oedema were observed in test animals. Black/brown coloured staining was also observed at the topical induction sites. The staining did not affect the evaluation of skin responses.				
CHALLENGE PHASE 1 st challenge	topical application: 25%				
Remarks - Method	topical application: 10%				
	GLP & QA.				
RESULTS					
<i>Animal</i>	<i>Challenge Concentration</i>	<i>Number of Animals Showing Skin Reactions after:</i>			
		<i>1st challenge</i>		<i>2nd challenge</i>	
		<i>24 h</i>	<i>48 h</i>	<i>24 h</i>	<i>48 h</i>
<i>Test Group</i>	25%	0/10	0/10		
	10%	0/10	0/10		
<i>Control Group</i>	25%	0/5	0/5		
	10%	0/5	0/5		
Remarks - Results	Three test animals had black/brown coloured staining at the topical induction sites. The staining did not affect the evaluation of skin responses. One challenge site was physically damaged by the removal of adhered patches after challenge.				
CONCLUSION	There was no evidence of reactions indicative of skin sensitisation to the notified chemical under the conditions of the test.				
TEST FACILITY	SafePharm Laboratories Limited (2000e)				

7.5. Genotoxicity - bacteria

TEST SUBSTANCE	Bontron X-11
METHOD	OECD TG 471 Bacterial Reverse Mutation Test. Plate incorporation procedure
Species/Strain	<i>S. typhimurium</i> : TA1535, TA1537, TA98, TA100. <i>E. coli</i> : WP2 uvrA.
Metabolic Activation System	S9-mix
Concentration Range in Main Test	a) With metabolic activation: 0-5 000 µg/plate. b) Without metabolic activation: 0-5 000 µg/plate.
Vehicle	Acetone.
Remarks - Method	GLP & QA.

RESULTS

<i>Metabolic Activation</i>	<i>Test Substance Concentration (µg/plate) Resulting in:</i>			
	<i>Cytotoxicity in Preliminary Test</i>	<i>Cytotoxicity in Main Test</i>	<i>Precipitation</i>	<i>Genotoxic Effect</i>
<i>Absent</i>	≥5 000	≥1 500		
Test 1		5 000	5 000	None.
Test 2		5 000	5 000	None.
<i>Present</i>	≥5 000			
Test 1		5 000	5 000	None.
Test 2		5 000	5 000	None.

Remarks - Results	A black precipitate was observed at 5 000 µg/plate, this did not prevent the scoring of revertant colonies.
CONCLUSION	The notified chemical was not mutagenic to bacteria under the conditions of the test.
TEST FACILITY	Safepharm Laboratories Limited (2000f)

8. ENVIRONMENT

8.1. Environmental fate

8.1.1. Ready biodegradability

METHOD	OECD TG 301 B Ready Biodegradability: CO ₂ Evolution Test.
Inoculum	Activated sewage sludge
Exposure Period	28 days
Remarks - Method	The biodegradation of the notified chemical was determined by the measurement of carbon dioxide evolved after the medium was inoculated with a mixed population of aquatic micro-organisms and stored in the dark at 21°C for 28 days. Sodium benzoate was used as the standard material.

RESULTS

<i>Test substance</i>		<i>Sodium benzoate</i>	
<i>Day</i>	<i>% degradation</i>	<i>Day</i>	<i>% degradation</i>
14	7	14	71
28	13	28	90

Remarks - Results	The results indicated that 13% of the chemical had degraded, while 90% of the standard degraded in 28 days.
CONCLUSION	The results indicate that the notified chemical is not ready biodegradable.
TEST FACILITY	Safepharm Laboratories Limited (1999c)

8.2. Ecotoxicological investigations

8.2.1. Acute/chronic toxicity to aquatic invertebrates

METHOD	EC Directive 92/69/EEC C.2 Acute Toxicity for Daphnia – 48 h Static Test
Species	<i>Daphnia magna</i>
Exposure Period	48 hours

RESULTS

<i>Concentration mg/L</i>		<i>Number of D. magna</i>	<i>Number Immobilised</i>	
<i>Nominal</i>	<i>Actual</i>		<i>24 h</i>	<i>48 h</i>
0	ND	10	0	0
0.1	0.074	10	0	0

LC50	> 0.1 mg/L at 48 hours (based on nominal concentrations)
NOEC (or LOEC)	> 0.1 mg/L at 48 hours (based on nominal concentrations)
Remarks - Results	The tests were performed using a saturated aqueous solution of the notified chemical prepared by the column elution method described in

OECD TG 105. The notifier indicates that this method was utilised to limit the content of the water soluble impurity, 3,5-di-tert-butyl salicylic acid. The immobilisation tests with *Daphnia* were conducted using 10 daphnids per flask with observations performed at 24 and 48 hours. The tests were conducted using the WAF at a measured test substance concentration of 0.074 mg/L. After 48 h, no immobilised daphnids were observed in any of the test vessels. The 48-hour EC₅₀ for the notified chemical to *Daphnia magna* is greater than 0.074 mg/L based on measured concentrations.

CONCLUSION	The ecotoxicity data indicates the notified chemical is unlikely to be toxic to daphnia up to the limit of its solubility.
TEST FACILITY	Safepharm Laboratories Limited (2000g).

9. RISK ASSESSMENT

9.1. Environment

9.1.1. Environment – exposure assessment

Release of the toner containing the notified chemical to the environment is not expected under normal use as the cartridge is designed to prevent leakage. However, if leakage does occur, the toner will be contained and presumably disposed of in landfill. Environmental exposure will result from the disposal of printed paper and discarded cartridges as well as the possibility of accidental leakage of the cartridges during use. Toner residues contained in the empty cartridges are expected to be about 18% of the import volume and to remain within these containers, although release could occur from deterioration of the cartridge. The total import volume of the notified chemical will ultimately be disposed of in either landfill or be incinerated or recycled with paper.

Some waste paper may be disposed of directly to landfill with the notified chemical strongly bound to the paper. It is anticipated that prolonged residence in an active landfill environment would eventually degrade the notified substance. Incineration of waste paper will destroy the compound with the generation of water vapour and oxides of carbon.

In addition to landfill, some of the toner printed on paper will enter the paper recycling process. During such processes, waste paper is repulped using a variety of alkaline, dispersing and wetting agents, water emulsifiable organic solvents and bleaches. These agents enhance fibre separation, ink detachment from the fibres, pulp brightness and the whiteness of paper. De-inking wastes are expected to go to trade waste sewers. Trade sources estimate the washing process will recover 30-60% of the total amount of toner and therefore at least 30% of the notified chemical in the recycled paper will be disposed of with sludge in landfill. The substance is not expected to bioaccumulate due to its limited release to water (Connell, 1990).

9.1.2. Environment – effects assessment

The results of the ecotoxicological data indicate the notified substance is unlikely to be toxic to daphnia up to the limit of its solubility. Furthermore, there will be limited release to the aquatic compartment.

9.1.3. Environment – risk characterisation

The notified chemical will enter environmental compartments indirectly by disposal of waste paper (for recycling, to landfill or for incineration) and by direct release from discarded printer cartridges at landfill sites. Based on the import volume, method of packaging and low concentration of the notified chemical in toner, release of the notified chemical to the environment is expected to be low but widespread. Waste from the recycling process includes sludge which is dried and disposed of to landfill, and very little of the notified chemical will partition to the supernatant water which is released to the sewer.

Abiotic or slow biotic processes are expected to be largely responsible for the degradation of the

notified chemical as it is not readily biodegradable. As a consequence of its low water solubility, the notified chemical is likely to be immobilised through adsorption onto soil particles and sediments.

Releases to the sewer will be low because very little of the notified chemical is expected to reach water and partition to supernatant water. Furthermore, the substance is not expected to bioaccumulate due to its low water solubility and limited release to water.

9.2. Human health

9.2.1. Human health - effects assessment

Acute toxicity

The acute oral toxicity study for the notified chemical was performed according to the acute oral toxic class method of OECD TG423. All rats died at the dose level of 2 000 mg/kg but survived at 200 mg/kg. Systemic and/or organ toxicity was observed in rats after treatment with the notified chemical.

Irritation and Sensitisation

The notified chemical was not a skin irritant in rabbits or a skin sensitiser in guinea pigs, but was a slight eye irritant in rabbits.

Mutagenicity

The notified chemical was not mutagenic either with or without metabolic activation in an Ames test.

9.2.2. Occupational health and safety – risk characterisation

Waterside, warehouse and transport workers will be only exposed to the notified chemical in the event of an accident or damage to packaging. The occupational health risk to these workers is negligible, considering the small quantities in individual toner cartridges and the low hazard presented by the chemical.

The main exposure will be to service personnel who will be responsible for changing toner cartridges containing 1.5% notified chemical. The design of the toner cartridges is such that exposure to the notified chemical should be minimal, even when changing toner cartridges. Minor dermal or inhalation exposure may occur if a small quantity of toner is spilt while changing cartridges.

Office workers are not expected to come into contact with the notified chemical under normal circumstances. Infrequent dermal exposure of end users to the toner containing the notified chemical may occur during servicing or clearing paper jams, but the high molecular weight of the notified chemical indicates that dermal absorption would be minimal. There may be a low level of toner dust in the immediate vicinity of photocopiers when they are operating. Exposure to the notified chemical is not expected to occur once the toner is bound to paper.

Based on the low toxicological hazard presented by the notified chemical and the expected very low exposures, the health risk posed to office workers and service personnel by the notified chemical is very low.

9.2.3. Public health – risk characterisation

The notified chemical will not be sold to the public. Toner cartridges will be changed by customer service engineers. Public exposure will occur by dermal contact with photocopied media, whose toner will contain 1.5% of the notified chemical. Given its low toxicity and manner of exposure, the hazard from public exposure to the notified chemical is considered to be low.

10. CONCLUSIONS – ASSESSMENT LEVEL OF CONCERN FOR THE ENVIRONMENT AND HUMANS

10.1. Hazard classification

Based on the available data the notified chemical is classified as hazardous under the NOHSC *Approved Criteria for Classifying Hazardous Substances*. The classification and labelling details are:

Harmful (Xn) with R22 (Harmful if swallowed).

10.2. Environmental risk assessment

On the basis of the available information, the overall environmental hazard of the notified chemical is expected to be low.

10.3. Human health risk assessment

10.3.1. Occupational health and safety

There is Low Concern to occupational health and safety under the conditions of the occupational settings described.

10.3.2. Public health

There is No Significant Concern to public health when used in the proposed manner.

11. MATERIAL SAFETY DATA SHEET & LABEL

11.1. Material Safety Data Sheet

The MSDS of the notified chemical and products containing the chemical provided by the notifier were in accordance with the NOHSC *National Code of Practice for the Preparation of Material Safety Data Sheets* (NOHSC, 1994a). The MSDS for a product containing the chemical is published here as a matter of public record. The accuracy of the information on the MSDS remains the responsibility of the applicant.

11.2. Label

The label for the products containing the notified chemical provided by the notifier was in accordance with the NOHSC *National Code of Practice for the Labelling of Workplace Substances* (NOHSC, 1994b). The accuracy of the information on the label remains the responsibility of the applicant.

12. RECOMMENDATIONS

REGULATORY CONTROLS

- The NOHSC Chemicals Standards Sub-committee should consider the following health hazard classification for the notified chemical:
 - Harmful (Xn) with R22 (Harmful if swallowed).
- Use the following risk phrases for products/mixtures containing the notified chemical:
 - ≥25%: Harmful (Xn) with R22 (Harmful if swallowed).

CONTROL MEASURES

Occupational Health and Safety

- Employers should implement the following engineering controls to minimise occupational exposure to the notified chemical:
 - Work areas around photocopiers should be well ventilated.
- Employers should implement the following safe work practices to minimise

occupational exposure during handling of the notified chemical:

- Workers using the product should implement good work practices to avoid spills and the generation of dust.

- Employers should ensure that the following personal protective equipment is used by workers to minimise occupational exposure to the notified chemical:
 - Gloves should be worn if direct contact with toner is possible.

Guidance in selection of personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.

- A copy of the MSDS should be easily accessible to employees.
- If products and mixtures containing the notified chemical are classified as hazardous to health in accordance with the NOHSC *Approved Criteria for Classifying Hazardous Substances*, workplace practices and control procedures consistent with provisions of State and Territory hazardous substances legislation must be in operation.

Disposal

- The notified chemical should be disposed of in landfill.

Emergency procedures

- Spills/release of the notified chemical should be contained as described in the MSDS (i.e. sweep onto paper and transfer to a sealable waste container) and the resulting waste disposed of in landfill.

12.1. Secondary notification

The Director of Chemicals Notification and Assessment must be notified in writing within 28 days by the notifier, other importer or manufacturer:

- (1) Under Section 64(2) of the Act:
 - if any of the circumstances listed in the subsection arise.

The Director will then decide whether secondary notification is required.

No additional secondary notification conditions are stipulated.

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