

10/04/2017 reference H3828

Global Proficiency Ltd for AsureQuality Ltd,  
Ruakura Research Centre, Hamilton East,  
P O Box 20474 Hamilton.

Chemetall NZ Ltd, 664 Rosebank Rd, Avondale, Auckland  
1026. P O Box 15783 New Lynn, Auckland, NZ. Phone 09 820  
3888, fax -3979. Attention Trevor Davies trevor.davies@chemetall.com

To whom it may concern,

### Ardrox 9PR50C

- Product description: penetrant remover/pre-cleaner & light duty solvent
- Product use: with Ardrox Red & Fluorescent Dye Colouring Systems used to detect cracks & porosity in all kinds of metal components

**Passed AsureQuality assessment for food/beverage/dairy factory food areas including contact surfaces H3828 with conditions.** This assessment was prepared by Global Proficiency Ltd using HACCP principles to determine equivalence with food standards listed below. See <http://assessedproducts.asurequality.com/>. This supports food Risk Management Programmes & other endorsements that may apply to this product include MPI regulated farm dairy approval, MPI dairy factory endorsement, MPI regulated non-dairy animal product approvals, EPA HSNO-OSH-environment approval (& previously AQIS).

### Conditions:

- Used per instructions, legislation, & GMP for food areas & contact surfaces areas with residues removed.
- Usage /carry-over to food should be removed per the nature of this use (flammable / low toxicity).
- The assessment is subject to notification of change and expires on 10/04/2022).
- The full report is attached for supplier review and verification. The assessment is activated by countersigning.

Prepared by Global Proficiency for AsureQuality Ltd... *R J Hutchinson*

Supplier:..... Date:.....

### Scope and purpose of the assessment:

- Asurequality assessment is a non-regulated, voluntary, and evidential certification by the supplier demonstrating equivalence with food safety standards, and also that product instructions address hazards for staff & equipment. The assessment is independently confirmed, without prejudice or guarantee, using information submitted by the supplier or from other sources. Confidentiality of the product formulation is maintained using coded material identifiers in the report, and appendices containing confidential information are provided only to the supplier.
- Scope: NZ checks (FSANZ, US FDA 21 CFR/ NSF, Food Chemicals Codex, EPA NZ, EU, French culinary listings or related data for equivalent safety). NZ background (Animal Products Act, Risk Management Programmes. Detergent & Sanitiser Manufacturer's Code of Practice, Detergent & Sanitiser Standards and Analytical Methods. Quality Manual - Assessment Procedures

### Summary of assessment with risks highlighted:

- Prior registrations (AsureQuality assessment new. NSF unfound Regulatory - all ingredients on Australian AICS. Approvals USA Air Force AMS 2644 class 2, & conforms to ASME Boiler & Pressure Vessel Code section V/6).
- Food safety (is according to raw material similar to food safety listings/ residues within limits w/o purity & nil residue remaining).
- QA (not found or required).
- QC specs (Chemistry is as above. Micro is per anhydrous formulation).
- Instructions –
  - Chemetall label (Ardrox 9PR50C penetrant remover/pre-cleaner no residue by wiping risk harmful may cause lung damage if swallowed. Repeat exposure may cause skin dryness or cracking).
  - Chemetall Product Profile (Ardrox 9PR50C penetrant remover/pre-cleaner & light duty solvent, rapid drying to no residue & w/o aromatic or chlorinated hydrocarbon solvent & has relatively low toxicity. Low odour, suits cleaning electrical switchgear circuit boards & degreasing of delicate machinery parts where water cannot be used. Approvals USA Air Force AMS 2644 class 2, & conforms to ASME Boiler & Pressure Vessel Code section V/6. For pre-cleaning operations it use spray or cloth. After pre-cleaning, penetrant application & contact time excess is removed by lint free cloth including with 9PR to remove all excess & then use a thin layer of developer. As an electrical cleaner by cloth or spray, working down and completely dried e.g. by compressed air. List of metals, rubber & plastic compatibility. Flash point 7C).
  - MSDS (Hazardous per NOHSC Australia. Hazardous substance. Dangerous Good. R36/38 may cause irritation to skin & eyes, R65 may cause lung damage if swallowed. R67 vapours may cause drowsiness & dizziness. Safety phrase list. Composition Hydrocarbon >60%. Exposure controls list includes 100 ppm for total hydrocarbon. Properties list. Toxicology - acute as above + chronic dermatitis & lung damage / death. Ecology - no information available. Transport list complete. Regulatory - all ingredients on Australian AICS).
- Unwanted effects (OSH covered by SDS of finished product + RM data + AICS & NZIoC clearances of RMs).
- Efficacy (is by claim & cracks/ porosity inspection are outside of scope).

**Contents Sections 3-11 are omitted in favour of the summary on the first page.**

0 Information is to be evidential (std 0).	1 Materials safety and residues etc
2 Material (other – function)	3 Quality assurance certificate
4 Purity (or Design, formulation, fabrication and finish).	5 Instructions
6 Freedom from apparent side effects	7 Efficacy or hygiene to meet food safety margins
8 Packaging safety.	9 Summary of submitted information etc
10 Standards/References - front page/may be attached	11 Contacts.
12 Confidential information re design, formulation etc.	13 Covering letter & then 14 Raw material confidential information

**Risk Rating (failure/accident)**

	Chemical	Microbiological
Incidence	Low	Low
Susceptibility	Low	Low (moderate after heat step)
Severity	Low	Low
Total	Low	Low (moderate after heat step)

**Organics**

For organic production when food is absent during use and residues are rinsed etc. Reference NZS8410 Organic Production section 10 Storage, transport, preparation and handling. 10.1.2 Where the premises vehicles and equipment are used solely for organic products: (a) Only those substances used in table D1 shall be used for housekeeping purposes in the presence of the product (note that product absence is already a requirement of this assessment). If other materials are used for cleaning, surfaces that could come in contact with organic products shall be flushed with potable water prior to re-entry of organic products, and any airborne substance dispersed. (b) If there are products of more than one organic status (e. g. organic and in conversion to organic), the requirements of 10.1.3 shall be followed as if the higher status organic product were in the presence of products not complying with this standard. 10.1.3 (Note that If not dedicated to organics then the plan must state how there is no non-organics inclusion inc “sealing.. labelling.. documentation”).

**Evaluation:** Note that Standards vs. submission-responses yield compliance status in each of the sections below.

**Nature of information**

**0 Standard: Assurance information is to be evidential/cross-registered/or ex accredited bodies (and approvals may need levels of independence for toxicity and efficacy).**

- Prior registrations (AsureQuality assessment new. NSF unfound Regulatory - all ingredients on Australian AICS. Approvals USA Air Force AMS 2644 class 2, & conforms to ASME Boiler & Pressure Vessel Code section V/6).

**Raw materials:**

**1 Standard:**

**Raw materials are to be identified safe: traceably identified, non-toxic, and pure - depending on the level of contact. Raw materials are to be safe at residue levels with safety factors (simplified here eg per cross-registration of USFDA 21 CFR/ ANZF/ EU etc registrations factored for likely equivalence and recognising high 1.5 L milk consumption would have been required by FDA etc – refers to supplier confidential appendix but with identifiers excluded**

**Response**

(Chemetall NZ Ltd) Ardrex 9PR50C H3828 10-04-2017	Registrations column. Scope: NZ checks (NICNAS AICS. FSANZ, US FDA 21 CFR/ NSF, Food Chemicals Codex, EPA NZ, EU, French culinary listings or related data for equivalent safety). NZ background (Animal Products Act, Risk Management Programmes. Detergent & Sanitiser Manufacturer's Code of Practice, Detergent & Sanitiser Standards and Analytical Methods. Quality Manual - Assessment Procedures	Purity column raw purities to be per FSANZ purity wanted (as ingredient etc.) FCC7 2010-2011 with GMP indicators & FSANZ also (require Pb<2, As<1, Heavy metals <40 mg/kg). Purity column.
HACCP analysis and instructions summary	Chemetall label (Ardrex 9PR50C penetrant remover/pre-cleaner no residue by wiping risk harmful may cause lung damage if swallowed. Repeat exposure may cause skin dryness or cracking). Chemetall Product Profile (Ardrex 9PR50C penetrant remover/pre-cleaner & light duty solvent, rapid drying to no residue & w/o aromatic or chlorinated hydrocarbon solvent & has relatively low toxicity. Low odour, suits cleaning electrical switchgear circuit boards & degreasing of delicate machinery parts where water cannot be used. Approvals USA Air Force AMS 2644 class 2, & conforms to ASME Boiler & Pressure Vessel Code section V/6. For pre-cleaning operations it use spray or cloth. After pre-cleaning, penetrant application & contact time excess is removed by lint free cloth including with 9PR to remove all excess & then use a thin layer of developer. As an electrical cleaner by cloth or spray, working down and completely dried e.g. by compressed air. List of metals, rubber &	MSDS (Hazardous per NOHSC Australia. Hazardous substance. Dangerous Good. R36/38 may cause irritation to skin & eyes, R65 may cause lung damage if swallowed. R67 vapours may cause drowsiness & dizziness. Safety phrase list. Composition Hydrocarbon >60%. Exposure controls list includes 100 ppm for total hydrocarbon. Properties list. Toxicology - acute as above + chronic dermatitis & lung damage / death. Ecology - no information available. Transport list complete. Regulatory - all ingredients on Australian AICS).

	plastic compatibility. Flash point 7C).	
HACCP analysis and other aspects	Prior registrations (AsureQuality assessment new. NSF unfound Regulatory - all ingredients on Australian AICS. Approvals USA Air Force AMS 2644 class 2, & conforms to ASME Boiler & Pressure Vessel Code section V/6). Food safety (is according to raw material similar to food safety listings/ residues within limits w/o purity & nil residue remaining). QA (not found or required). QC specs (Chemistry is as above. Micro is per anhydrous formulation)	Unwanted effects (OSH covered by SDS of finished product + RM data + AICS & NZIoC clearances of RMs). Efficacy (is by claim & cracks/ porosity inspection are outside of scope)
Formulation 100%	See RMs below& AICS & NZIoC clearances	
Raw 1 Solvent	FDA 21 CFR 172.615, 175.105, 175.250, 178.3800 in amount for technical effect. 21 CFR.178.3530 Similar propellant in FDA21CFR174.1655 GRAS with GMP for purpose of aerating agent, gas, propellant used variously. FSANZ Food Code 1.2.1 direct ingredient for process food is petrolatum or petroleum jelly connects to FSANZ Food Code 1. 3. 3 - 1.3.9 permitted lubricants.	Purity wanted (per column header). Purity found (not found or required for no residue)
pH & microbiological growth ranges - safe / anhydrous.	pH growth ranges: B cereus 4.4-9.3, Campylobacter jejuni 4.9-9.0, C botulinum A & B 4.8-8.5 type E 5-8.5, C perfringens 5-8.9, Listeria monocytogenes 4.5-8.0, Salmonella 3.8-9,	Staph aureus 4.3-9.0, vibrio cholerae 6-11, vibrio parahaemolyticus 4.8-9, vibrio vulnificus 5-10, Yersinia enterocolitica 4.4-9.6

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**12 The formulation in confidence follows & is not for public circulation.**

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HACCP analysis and instructions summary	Chemetall label (Ardrox 9PR50C penetrant remover/pre-cleaner no residue by wiping risk harmful may cause lung damage if swallowed. Repeat exposure may cause skin dryness or cracking). Chemetall Product Profile (Ardrox 9PR50C penetrant remover/pre-cleaner & light duty solvent, rapid drying to no residue & w/o aromatic or chlorinated hydrocarbon solvent & has relatively low toxicity. Low odour, suits cleaning electrical switchgear circuit boards & degreasing of delicate machinery parts where water cannot be used. Approvals USA Air Force AMS 2644 class 2, & conforms to ASME Boiler & Pressure Vessel Code section V/6. For pre-cleaning operations it use spray or cloth. After pre-cleaning, penetrant application & contact time excess is removed by lint free cloth including with 9PR to remove all excess & then use a thin layer of developer. As an electrical cleaner by cloth or spray, working down and completely dried e.g. by compressed air. List of metals, rubber & plastic compatibility. Flash point 7C).	MSDS (Hazardous per NOHSC Australia. Hazardous substance. Dangerous Good. R36/38 may cause irritation to skin & eyes, R65 may cause lung damage if swallowed. R67 vapours may cause drowsiness & dizziness. Safety phrase list. Composition Hydrocarbon >60%. Exposure controls list includes 100 ppm for total hydrocarbon. Properties list. Toxicology - acute as above + chronic dermatitis & lung damage / death. Ecology - no information available. Transport list complete. Regulatory - all ingredients on Australian AICS).
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Formulation 100%	See RMs below& AICS & NZIoC clearances	
De-aromatised Hydrocarbon Solvent H64742-66-8, & 90622-56-3 from Exxon Chemicals Raw 1 Solvent	FDA 21 CFR 172.615, 175.105, 175.250, 178.3800 in amount for technical effect. 21 CFR.178.3530 Similar propellant in FDA21CFR174.1655 GRAS with GMP for purpose of aerating agent, gas, propellant used variously. FSANZ Food Code 1.2.1 direct ingredient for process food is petrolatum or petroleum jelly connects to FSANZ Food Code 1. 3. 3 - 1.3.9 permitted lubricants.	Purity wanted (per column header). Purity found (not found or required for no residue)
pH & microbiological growth ranges - safe / anhydrous.	pH growth ranges: B cereus 4.4-9.3, Campylobacter jejuni 4.9-9.0, C botulinum A & B 4.8-8.5 type E 5-8.5, C perfringens 5-8.9, Listeria monocytogenes 4.5-8.0, Salmonella 3.8-9,	Staph aureus 4.3-9.0, vibrio cholerae 6-11, vibrio parahaemolyticus 4.8-9, vibrio vulnificus 5-10, Yersinia enterocolitica 4.4-9.6

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Chemetall NZ Ltd, 664 Rosebank Rd, Avondale, Auckland  
1026. P O Box 15783 New Lynn, Auckland, NZ. Phone 09 820  
3888, fax -3979. Attention Trevor Davies trevor.davies@chemetall.com

Dear Trevor Davies,

Please find attached your assessment report for any questions or suggestions. This page is not part of the report or invoice which should follow.

#### **Ardrox 9PR50C**

- Product description: penetrant remover/pre-cleaner & light duty solvent
- Product use: with Ardrox Red & Fluorescent Dye Colouring Systems used to detect cracks & porosity in all kinds of metal components
- Status: passed new factory assessment. PO - Cost \$250 + GST for 1:40 hours. .

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