SAFETY DATA SHEET





1. Identification of the material and supplier

Names

Product name : Harpic Powerplus Toilet Bowl Cleaner

SDS no. : D0147565 v8.2

Formulation # : 0289335 v2.0 (Spring Power)

0289334 v2.0 (Citrus Force)

Supplier : AUSTRALIA

Reckitt Benckiser (Australia) Pty Limited

ABN: 17 003 274 655

680 George Street, Sydney NSW 2000

Tel: +61 (0)2 9857 2000

NEW ZEALAND

Reckitt Benckiser (New Zealand) Limited

2 Fred Thomas Drive, Takapuna, Auckland, New Zealand 0622

Tel: +64 9 484 1400

Poison Information contact: : Australia - 13 11 26

New Zealand - 0800 764 766 or 0800 POISON

Material uses : Toilet bowl cleaner

Product use : Consumer

Sizes : 450 mL angled-neck HDPE Bottle

Section 2. Hazard(s) identification

Classification of the substance or mixture SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

GHS label elements

Hazard pictograms



Signal word : WARNING

Hazard statements : Causes serious eye irritation.

Causes skin irritation.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed,

have product container or label at hand.

Prevention: Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after

handling.

Response: IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing.

Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists:

Get medical attention.

Storage : Not applicable.

Disposal : Not applicable.

D0147565 v8.0

Section 2. Hazard(s) identification

Supplemental label elements

: Not applicable.

Other hazards which do not : None known.

result in classification

Section 3. Composition and ingredient information

: Mixture Substance/mixture

Ingredient name	% (w/w)	CAS number
Formic acid	≤5	64-18-6

Other Non-hazardous ingredients to 100%

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

> pain or irritation watering

redness

Inhalation : No specific data.

Date of issue : 14/12/2016 Page: 2/10

Section 4. First aid measures

Skin contact Adverse symptoms may include the following:

> irritation redness

: No specific data. Ingestion

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments

No specific treatment.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon dioxide

carbon monoxide

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Date of issue : 14/12/2016 Page: 3/10

Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls and personal protection

Control parameters

Australia

Occupational exposure limits

Ingredient name	Exposure limits
Formic acid	Safe Work Australia (Australia, 1/2014). STEL: 19 mg/m³ 15 minutes. STEL: 10 ppm 15 minutes. TWA: 9.4 mg/m³ 8 hours. TWA: 5 ppm 8 hours.

New Zealand

Ingredient name	Exposure limits	
formic acid	NZ OSH (New Zealand, 2/2013). WES-TWA: 5 ppm 8 hours. WES-TWA: 9.4 mg/m³ 8 hours.	
	WES-STEL: 19 mg/m³ 15 minutes. WES-STEL: 10 ppm 15 minutes.	

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Section 8. Exposure controls and personal protection

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. [Viscous]

Colour : Blue.

Odour : Characteristic.
Odour threshold : Not available.

pH : 2 to 2.3 [Conc. (% w/w): 100%]

Melting point: Not available.Boiling point: Not available.

Flash point : Closed cup: >93.3°C (>199.9°F)

Evaporation rate : Not available.
Flammability (solid, gas) : Not available.
Lower and upper explosive : Not available.

(flammable) limits

Vapour pressure: Not available.Vapour density: Not available.Relative density: 1.01 to 1.03

Solubility : Easily soluble in the following materials: cold water and hot water.

Solubility in water : Not available.

__ D0147565 v8.0

Section 9. Physical and chemical properties

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Dynamic (room temperature): 300 to 600 mPa·s (300 to 600 cP)

Flow time (ISO 2431) : Not available.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Formic acid.	LC50 Inhalation Vapour	Rat	7400 mg/m ³	4 hours
	LD50 Oral	Rat	730 mg/kg	-

Conclusion/Summary

: Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Formic acid.	Eyes - Severe irritant	Rabbit	-	122 milligrams	-
	Skin - Mild irritant	Rabbit	-	610 milligrams	-

Conclusion/Summary

Skin : Based on Calculation method: Causes skin irritation.

Eyes : Based on Calculation method: Causes serious eye irritation.

Respiratory : Based on available data, the classification criteria are not met.

Sensitisation

Not available.

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met.Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Not available.

Conclusion/Summary

Carcinogenicity

: Based on available data, the classification criteria are not met.

Not available.

Section 11. Toxicological information

: Based on available data, the classification criteria are not met. **Conclusion/Summary**

Reproductive toxicity

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity Not available.

: Based on available data, the classification criteria are not met. **Conclusion/Summary**

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes: Not available.

of exposure

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

> pain or irritation watering redness

Inhalation : No specific data.

Skin contact Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate : Not available.

effects

: Not available. Potential delayed effects

Long term exposure

Potential immediate Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

General : No known significant effects or critical hazards. Carcinogenicity : No known significant effects or critical hazards. Mutagenicity : No known significant effects or critical hazards.

Date of issue : 14/12/2016 Page: 7/10 D0147565 v8.0

Section 11. Toxicological information

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
	21470.6 mg/kg 217.6 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Formic acid.	Acute EC50 151200 μg/l Fresh water	Daphnia - Daphnia magna - Larvae	48 hours
	Acute LC50 80000 to 90000 µg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Formic acid	-2.3	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADG	Not regulated.	-	-	-		-
IMDG	Not regulated.	Formic acid solution	-	-		Limited quantity 5 L Emergency schedules (EmS) F-A, S-B
IATA	Not regulated.	Formic acid solution	-	-		See DG List.

PG*: Packing group

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Schedule 5 (Formic acid) CAUTION

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

Australia inventory (AICS) : All components are listed or exempted.

New Zealand Inventory of

Chemicals (NZIoC)

: Not determined.

HSNO Group Standard : Cleaning Products

HSNO Approval Number : HSR002530

Approved Handler

Requirement

: No.

Tracking Requirement : No.

Section 16. Any other relevant information

Key to abbreviations : ADG = Australian Dangerous Goods

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOHSC = National Occupational Health and Safety Commission
SUSMP = Standard Uniform Schedule of Medicine and Poisons

UN = United Nations

Date of issue / Date of

revision

: 14/12/2016

Revision comments : AUS GHS SDS

Version : 8.2

Procedure used to derive the classification

Date of issue : 14/12/2016 Page: 9/10

D0147565 v8.0

Section 16. Any other relevant information

Classification	Justification
SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A	Calculation method On basis of test data

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Please read all labels carefully before using product.