

SAFETY DATA SHEET

WYNN'S RADIATOR FLUSH (R)

Infosafe No.: XAG3D
ISSUED Date : 29/03/2017
ISSUED by: ITW AAMTECH

1. IDENTIFICATION

GHS Product Identifier

WYNN'S RADIATOR FLUSH (R)

Company Name

ITW AAMTECH (ABN 63 004 235 063)

Address

1-9 NINA LINK DANDENONG SOUTH
VIC 3175 AUSTRALIA

Telephone/Fax Number

Tel: 1800 177 989

Fax: +61 2 9725 4698; 1800 308 556

Emergency phone number

1800 638 556; 1800 039 008; 0800 2436 2255

E-mail Address

info@aamtech.com.au

Recommended use of the chemical and restrictions on use

Relevant identified uses: Radiator flushing agent.

Additional Information

Emergency telephone number:

Association / Organisation: Not Available

Emergency telephone numbers: 1800 039 008

Other emergency telephone numbers: 0800 2436 2255

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Eye Damage/Irritation: Category 2A

Skin Corrosion/Irritation: Category 2

Signal Word (s)

WARNING

Hazard Statement (s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary Statement (s)

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

Pictogram (s)

Exclamation mark

**Precautionary statement – Prevention**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

Precautionary statement – Storage

Not Applicable

Precautionary statement – Disposal

Not Applicable

Other Information

Legend:

1. Classified by; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Sodium nitrite	7632-00-0	<1 %w
Sodium Borate, decahydrate	1303-96-4	<1 %w
Sodium molybdate	7631-95-0	<1 %w
Other non-hazardous ingredients	Not Available	<1 %w
Water	7732-18-5	>60 %w

Other Information

Substances:

See section below for composition of Mixtures

4. FIRST-AID MEASURES

Inhalation

If fumes or combustion products are inhaled remove from contaminated area.

Lay patient down. Keep warm and rested.

Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.

Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

Transport to hospital, or doctor.

Ingestion

For advice, contact a Poisons Information Centre or a doctor at once.

Urgent hospital treatment is likely to be needed.

If swallowed do NOT induce vomiting.

If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Observe the patient carefully.

Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.

Transport to hospital or doctor without delay.

Skin

If skin contact occurs:

Immediately remove all contaminated clothing, including footwear.

Flush skin and hair with running water (and soap if available).

Seek medical attention in event of irritation.

Eye contact

If this product comes in contact with the eyes:

Wash out immediately with fresh running water.

Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

Seek medical attention without delay; if pain persists or recurs seek medical attention.

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Indication of immediate medical attention and special treatment needed if necessary

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

There is no restriction on the type of extinguisher which may be used.

Specific Methods

Alert Fire Brigade and tell them location and nature of hazard.

Wear breathing apparatus plus protective gloves in the event of a fire.

Prevent, by any means available, spillage from entering drains or water courses.

Use fire fighting procedures suitable for surrounding area.

Specific Hazards Arising From The Chemical

Fire Incompatibility: None known

Fire/Explosion Hazard:

Non combustible.

Not considered to be a significant fire risk.

Expansion or decomposition on heating may lead to violent rupture of containers.

Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).

Hazchem Code

Not Applicable

Decomposition Temperature

Not Available

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

See section 8

Clean-up Methods - Small Spillages

Clean up all spills immediately.

Avoid breathing vapours and contact with skin and eyes.

Control personal contact with the substance, by using protective equipment.

Contain and absorb spill with sand, earth, inert material or vermiculite.

Clean-up Methods - Large Spillages

Minor hazard.

Clear area of personnel.

Alert Fire Brigade and tell them location and nature of hazard.

Control personal contact with the substance, by using protective equipment as required.

Environmental Precautions

See section 12

Other Information

Personal Protective Equipment advice is contained in Section 8 of the SDS.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Safe handling:

Limit all unnecessary personal contact.

Wear protective clothing when risk of exposure occurs.

Use in a well-ventilated area.

When handling DO NOT eat, drink or smoke.

Other information:

Store in original containers.

Keep containers securely sealed.

Store in a cool, dry, well ventilated area.

DO NOT allow to freeze.

Conditions for safe storage, including any incompatibilities

Suitable container:

Lined metal can, lined metal pail/ can.

Plastic pail.

Polyliner drum.

Packing as recommended by manufacturer.

Storage incompatibility:

Segregate from

amp;44n

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

INGREDIENT DATA

Source: Australia Exposure Standards

Ingredient: sodium borate, decahydrate

Material name: Borates, tetra, sodium salts (decahydrate)

TWA: 5 mg/m³

STEL: Not Available

Peak: Not Available

Notes: Not Available

Source: Australia Exposure Standards

Ingredient: sodium borate, decahydrate

Material name: Borates, tetra, sodium salts (pentahydrate)

TWA: 1 mg/m³

STEL: Not Available

Peak: Not Available

Notes: Not Available

Source: Australia Exposure Standards

Ingredient: sodium borate, decahydrate

Material name: Borates, tetra, sodium salts (anhydrous)

TWA: 1 mg/m³

STEL: Not Available

Peak: Not Available

Notes: Not Available

EMERGENCY LIMITS

Ingredient: sodium nitrite

Material name: Sodium nitrite

TEEL-1: 6.4 mg/m³

TEEL-2: 71 mg/m³

TEEL-3: 240 mg/m³

Ingredient: sodium borate, decahydrate

Material name: Sodium borate decahydrate (Borax)

TEEL-1: 6 mg/m³

TEEL-2: 190 mg/m³

TEEL-3: 1,100 mg/m³

Ingredient: sodium borate, decahydrate

Material name: Sodium borate; (Disodium tetraborate)

TEEL-1: 6 mg/m³

TEEL-2: 88 mg/m³

TEEL-3: 530 mg/m³

Ingredient: sodium molybdate

Material name: Sodium molybdate dihydrate; (Disodium molybdate dihydrate)

TEEL-1: 3.8 mg/m³

TEEL-2: 34 mg/m³

TEEL-3: 210 mg/m³

Ingredient: sodium molybdate

Material name: Molybdic acid, disodium salt; (Disodium molybdate)

TEEL-1: 3.2 mg/m³

TEEL-2: 17 mg/m³

TEEL-3: 100 mg/m³

Ingredient: sodium nitrite

Original IDLH: Not Available

Revised IDLH: Not Available

Ingredient: sodium borate, decahydrate

Original IDLH: Not Available

Revised IDLH: Not Available

Ingredient: sodium molybdate

Original IDLH: N.E. mg/m³ / N.E. ppm

Revised IDLH: 1,000 mg/m³

Ingredient: other non-hazardous ingredients

Original IDLH: Not Available

Revised IDLH: Not Available

Ingredient: water

Original IDLH: Not Available

Revised IDLH: Not Available

Appropriate Engineering Controls

None under normal operating conditions.

Provide adequate ventilation in warehouse or closed storage areas.

Eye Protection

No special equipment for minor exposure i.e. when handling small quantities.

OTHERWISE:

Safety glasses with side shields.

Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Hand Protection

No special equipment needed when handling small quantities.

OTHERWISE: Wear chemical protective gloves, e.g. PVC.

Thermal Hazards

Not Available

Body Protection

Other protection:

No special equipment needed when handling small quantities

Overalls.

Eyewash unit.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Liquid

Appearance

Clear blue-green alkaline liquid; mixes with water.

Odour

Not Available

Decomposition Temperature

Not Available

Solubility in Water

Miscible

pH

11.0 (as supplied)

9.6 (3%) as a solution (1%)

Vapour Pressure

Not Available

Vapour Density (Air=1)

Not Available

Evaporation Rate

Not Available

Odour Threshold

Not Available

Viscosity

Not Available

Volatile Component

Not Available

Partition Coefficient: n-octanol/water

Not Available

Surface tension

Not Available

Flash Point

Not Applicable

Flammability

Not Applicable

Auto-Ignition Temperature

Not Applicable

Explosion Limit - Upper

Not Applicable

Explosion Limit - Lower

Not Applicable

Explosion Properties

Not Available

Molecular Weight

Not Applicable

Oxidising Properties

Not Available

Initial boiling point and boiling range

100 °C

Relative density

1.00 (Water = 1)

Melting/Freezing Point

Not Available

Other Information

Taste: Not Available

Gas group: Not Available

VOC g/L: Not Available

10. STABILITY AND REACTIVITY

Reactivity

See section 7

Chemical Stability

Product is considered stable and hazardous polymerisation will not occur.

Conditions to Avoid

See section 7

Incompatible materials

See section 7

Hazardous Decomposition Products

See section 5

Possibility of hazardous reactions

See section 7

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Wynn's Radiator Flush (R)

TOXICITY: Not Available

IRRITATION: Not Available

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS.
Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

Wynn's Radiator Flush (R)

Oral (unspecified) LDLo: >5000 mg/kg (estimated)[Wynns]

SODIUM NITRITE

The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Tumorigenic - Carcinogenic by RTECS criteria.

SODIUM BORATE, DECAHYDRATE

Oral (rat) LD50: 4500-5000 mg/kg Eyes (rabbit) (-) Mild [Orica BORAX-Europe] Reproductive effector in rats Mutagenic towards bacteria

WATER

No significant acute toxicological data identified in literature search.

SODIUM BORATE, DECAHYDRATE & SODIUM MOLYBDATE

Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia.

Acute Toxicity: Data Not Available to make classification

Ingestion

Ingestion may result in nausea, abdominal irritation, pain and vomiting.

Inhalation

Not normally a hazard due to non-volatile nature of product.

Skin

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Eye

The liquid may produce eye discomfort causing smarting, pain and redness.

Skin corrosion/irritation

Data available to make classification

Serious eye damage/irritation

Data available to make classification

Mutagenicity

Data Not Available to make classification

Respiratory sensitisation

Data Not Available to make classification

Skin Sensitisation

Data Not Available to make classification

Carcinogenicity

Data Not Available to make classification

Reproductive Toxicity

Data Not Available to make classification

STOT-single exposure

Data Not Available to make classification

STOT-repeated exposure

Data Not Available to make classification

Aspiration Hazard

Data Not Available to make classification

Chronic Effects

Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Wynn's Radiator Flush (R)
ENDPOINT: Not Available
TEST DURATION (HR): Not Available
SPECIES: Not Available
VALUE: Not Available
SOURCE: Not Available

Sodium nitrite
ENDPOINT: LC50
TEST DURATION (HR): 96
SPECIES: Fish
VALUE: 0.048mg/L
SOURCE: 4

ENDPOINT: EC50
TEST DURATION (HR): 48
SPECIES: Crustacea
VALUE: ca.12.5100mg/L
SOURCE: 1

ENDPOINT: EC50
TEST DURATION (HR): 72
SPECIES: Algae or other aquatic plants
VALUE: >100mg/L
SOURCE: 2

ENDPOINT: NOEC
TEST DURATION (HR): 2
SPECIES: Fish
VALUE: 0.02mg/L
SOURCE: 4

Sodium borate, decahydrate
ENDPOINT: LC50
TEST DURATION (HR): 96
SPECIES: Fish
VALUE: 74mg/L
SOURCE: 2

ENDPOINT: EC50
TEST DURATION (HR): 96
SPECIES: Algae or other aquatic plants
VALUE: 15.4mg/L
SOURCE: 4

ENDPOINT: NOEC
TEST DURATION (HR): 768
SPECIES: Fish
VALUE: 0.009mg/L
SOURCE: 2

Sodium molybdate
ENDPOINT: LC50
TEST DURATION (HR): 96
SPECIES: Fish
VALUE: >79.8mg/L

SOURCE: 4

ENDPOINT: EC50
TEST DURATION (HR): 48
SPECIES: Crustacea
VALUE: 3618mg/L
SOURCE: 4

ENDPOINT: EC50
TEST DURATION (HR): 72
SPECIES: Algae or other aquatic plants
VALUE: 289.2mg/L
SOURCE: 2

ENDPOINT: BCF
TEST DURATION (HR): 168
SPECIES: Algae or other aquatic plants
VALUE: 0.025mg/L
SOURCE: 4

ENDPOINT: NOEC
TEST DURATION (HR): 672
SPECIES: Crustacea
VALUE: 0.67mg/L
SOURCE: 2

Water
ENDPOINT: Not Available
TEST DURATION (HR): Not Available
SPECIES: Not Available
VALUE: Not Available
SOURCE: Not Available

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient: sodium nitrite
Persistence: Water/Soil: LOW
Persistence: Air: LOW

Ingredient: sodium molybdate
Persistence: Water/Soil: HIGH
Persistence: Air: HIGH

Ingredient: water
Persistence: Water/Soil: LOW
Persistence: Air: LOW

Mobility

Ingredient: sodium nitrite
Mobility: LOW (KOC = 23.74)

Ingredient: sodium molybdate
Mobility: LOW (KOC = 48.64)

Ingredient: water

Mobility: LOW (KOC = 14.3)

Bioaccumulative Potential

Ingredient: sodium nitrite

Bioaccumulation: LOW (LogKOW = 0.0564)

Ingredient: sodium molybdate

Bioaccumulation: LOW (LogKOW = 2.229)

Ingredient: water

Bioaccumulation: LOW (LogKOW = -1.38)

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Product / Packaging disposal:

Recycle wherever possible or consult manufacturer for recycling options.

Consult State Land Waste Management Authority for disposal.

Treat and neutralise with dilute acid at an effluent treatment plant.

Recycle containers, otherwise dispose of in an authorised landfill.

14. TRANSPORT INFORMATION

U.N. Number

None Allocated

UN proper shipping name

None Allocated

Transport hazard class(es)

None Allocated

Hazchem Code

Not Applicable

Other Information

Labels Required:

Marine Pollutant: NO

HAZCHEM: Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code:

Not Applicable

15. REGULATORY INFORMATION

Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture:

SODIUM NITRITE(7632-00-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

SODIUM BORATE, DECAHYDRATE(1303-96-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

SODIUM MOLYBDATE(7631-95-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

National Inventory: Australia - AICS

Status: Y

National Inventory: Canada - DSL

Status: Y

National Inventory: Canada - NDSL

Status: N (sodium borate, decahydrate; sodium molybdate; water; sodium nitrite)

National Inventory: China - IECSC

Status: Y

National Inventory: Europe - EINEC / ELINCS / NLP

Status: Y

National Inventory: Japan - ENCS

Status: N (sodium molybdate)

National Inventory: Korea - KECI

Status: Y

National Inventory: New Zealand - NZIoC

Status: Y

National Inventory: Philippines - PICCS

Status: Y

National Inventory: USA - TSCA

Status: Y

Legend:

Y = All ingredients are on the inventory

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

Poisons Schedule

S5

16. OTHER INFORMATION

User Codes

User Title Label	User Codes
Task #	24325
Transcription Sign Off	24325 AF 20122017

Other Information

Version No: 8.1.1.1

Safety Data Sheet according to WHS and ADG requirements

S.GHS.AUS.EN

Ingredients with multiple cas numbers:

Name: sodium borate, decahydrate

CAS No: 1303-96-4, 1344-90-7, 12447-40-4, 61028-24-8

Name: sodium molybdate

CAS No: 7631-95-0, 10102-40-6

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This SDS has been transcribed into Infosafe GHS format from an original, issued by the manufacturer on the date shown. Any disclaimer by the manufacturer may not be included in the transcription.

END OF SDS

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