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9317SP

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

WYNN'S RADIATOR FLUSH

SYNONYMS

"Product Code: 65332"

PRODUCT USE

Radiator flushing agent.

SUPPLIER

Company: ITW AAMTech

Address:

100 Hassall Street

Wetherill Park NSW, 2164 Australia

Telephone: +61 2 9828 0900

Emergency Tel: 1800 039 008 (24 hours)

Emergency Tel:+61 3 9573 3112 (24 hours)

Fax: +61 2 9725 4698

Company: Wynn' s New Zealand

Address:

Unit 2, 38 Trugood Drive

East Tamaki Auckland, 2013 New Zealand

Telephone: +64 9272 1940

Emergency Tel:+800 2436 2255 (24hours) Emergency Tel:+613 9573 3112 (24hours)

Fax: +64 9272 1949

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

RISK

•None under normal operating conditions.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| NAME | CAS RN | % |
|----------------------------------|-----------|-----|
| sodium nitrite | 7632-00-0 | <1 |
| sodium borate, decahydrate | 1303-96-4 | <1 |
| sodium molybdate | 7631-95-0 | <1 |
| other non- hazardous ingredients | | <1 |
| water | 7732-18-5 | >60 |

Section 4 - FIRST AID MEASURES

SWALLOWED

- 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.

EYE

- 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.

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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.

INHALED

- 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.

NOTES TO PHYSICIAN

■ Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

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

FIRE FIGHTING

- 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.

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).

FIRE INCOMPATIBILITY

■ None known.

HAZCHEM

None

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- · 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.

MAJOR SPILLS

- 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.
- Prevent spillage from entering drains or water ways.

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

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.

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• When handling DO NOT eat, drink or smoke.

SUITABLE CONTAINER

- Lined metal can, lined metal pail/ can.
- Plastic pail.
- · Polyliner drum.
- Packing as recommended by manufacturer.

STORAGE INCOMPATIBILITY

■ Segregate from strong acids.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well ventilated area.
- DO NOT allow to freeze.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| Source | Material | TWA mg/m³ |
|------------------------------|---|-----------|
| Australia Exposure Standards | Wynn' s Radiator Flush (Borates, tetra, sodium salts (decahydrate)) | 5 |
| Australia Exposure Standards | Wynn's Radiator Flush (Borates, tetra, sodium salts (anhydrous)) | 1 |

The following materials had no OELs on our records

• sodium nitrite: CAS:7632- 00- 0 • water: CAS:7732- 18- 5

MATERIAL DATA

SODIUM BORATE, DECAHYDRATE:

SODIUM MOLYBDATE:

SODIUM NITRITE:

■ Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations.

SODIUM BORATE. DECAHYDRATE:

SODIUM MOLYBDATE:

SODIUM NITRITE:

■ It is the goal of the ACGIH (and other Agencies) to recommend TLVs (or their equivalent) for all substances for which there is evidence of health effects at airborne concentrations encountered in the workplace.

At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience).

NOTE: The ACGIH occupational exposure standard for Particles Not Otherwise Specified (P.N.O.S) does NOT apply.

WYNN'S RADIATOR FLUSH:

■ None assigned. Refer to individual constituents.

SODIUM BORATE, DECAHYDRATE:

■ For inorganic borates and tetraborates:

No data are currently available to establish a causal link between inhalation exposures to sodium tetraborates and chronic respiratory and/or systemic effects.

An occupationally important toxic effect of the sodium tetraborates is their acute irritant effect when in contact with skin and the mucous membranes of the eyes, nose and other sites of the respiratory tract.

SODIUM MOLYBDATE:

■ An increased incidence of non-specific symptoms including headache, weakness, fatigue, anorexia and joint and muscle weakness has been reported to occur in mining and metallurgy workers exposed to 60-600 mg (as Mo). Some investigators have attributed gout and elevated uric acid concentration found in some Armenians to result from exposures to Armenian soils rich in molybdenum, whilst exposure has been implicated as a cause of bone disease amongst Indians.

WATER:

■ No exposure limits set by NOHSC or ACGIH.

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION

EYE

- No special equipment for minor exposure i.e. when handling small quantities.
- OTHERWISE:
- · Safety glasses with side shields.

HANDS/FEET

■ No special equipment needed when handling small quantities.

OTHERWISE: Wear chemical protective gloves.

OTHER

- No special equipment needed when handling small quantities.
- Overalls.
- Eyewash unit.

ENGINEERING CONTROLS

■ None under normal operating conditions.

Provide adequate ventilation in warehouse or closed storage areas.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Clear blue-green alkaline liquid; mixes with water.

PHYSICAL PROPERTIES

Liquid.

Mixes with water.

| State | Liquid | Molecular Weight | Not Applicable |
|---------------------------|----------------|----------------------------|----------------|
| Melting Range (℃) | Not Available | Viscosity | Not Available |
| Boiling Range (℃) | 100 | Solubility in water (g/L) | Miscible |
| Flash Point (℃) | Not Applicable | pH (1% solution) | 9.6 (3%) |
| Decomposition Temp (℃) | Not Available | pH (as supplied) | 11.0 |
| Autoignition Temp (℃) | Not Applicable | Vapour Pressure (kPa) | Not Available |
| Upper Explosive Limit (%) | Not Applicable | Specific Gravity (water=1) | 1.00 |
| Lower Explosive Limit (%) | Not Applicable | Relative Vapour Density | Not Available |
| | | (air=1) | |
| Volatile Component (%vol) | Not Available | Evaporation Rate | Not Available |

Section 10 - STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY

■ Product is considered stable and hazardous polymerisation will not occur. For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

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

EYE

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

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.

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INHALED

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

CHRONIC HEALTH EFFECTS

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

TOXICITY AND IRRITATION

No data for this material.

CARCINOGEN

sodium nitrite International Agency for Research on Cancer

(IARC) - Agents Reviewed by the IARC

Monographs

sodium borate, Australia Exposure Standards

decahydrate

sodium borate,

sodium molybdate Australia Exposure Standards

Carcinogen Category

Carcinogen Category

SKIN

sodium nitrite GESAMP/EHS Composite List - GESAMP Hazard

Profiles

GESAMP/EHS Composite List - GESAMP Hazard

decahydrate Profiles

D1: skin irritation/corrosion

D1: skin

irritation/corrosion

Group

1

0

2A

Section 12 - ECOLOGICAL INFORMATION

No data

Ecotoxicity

Ingredient

Persistence: Water/Soil Persistence: Air

Bioaccumulation

Mobility HIGH

sodium nitrite

LOW

No Data Available No Data

sodium molybdate

sodium borate, decahydrate

No Data Available

HIGH

Available No Data Available

LOW

LOW

HIGH

Section 13 - DISPOSAL CONSIDERATIONS

- 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.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM:

None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE S5

REGULATIONS

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Regulations for ingredients

sodium nitrite (CAS: 7632-00-0) is found on the following regulatory lists;

"Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (AQUA/1 to 6 - inorganic chemicals)", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - inorganic chemicals)", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (STOCK - inorganic chemicals)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm - Domestic water supply quality", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (Aquatic habitat)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (STOCK)", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia: - Western Australia Hazardous Substances Prohibited for Specified Uses or Methods of Handling", "Australia Drinking Water Guideline Values For Physical and Chemical Characteristics", "Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 7", "Australia Work Health and Safety Regulations 2011 - Restricted hazardous chemicals", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Council of Chemic

sodium borate, decahydrate (CAS: 1303-96-4,1344-90-7,12447-40-4,61028-24-8) is found on the following regulatory lists;

"Australia Exposure Standards", "Australia Hazardous Substances", "Australia High Volume Industrial Chemical List (HVICL)",
"Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Standard for the Uniform
Scheduling of Medicines and Poisons (SUSMP) - Schedule 4", "Australia Therapeutic Goods Administration (TGA) Substances that may
be used as active ingredients in Listed medicines", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "International Chemical
Secretariat (ChemSec) SIN List (*Substitute It Now!)", "OECD List of High Production Volume (HPV) Chemicals", "United Nations
Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by
Governments"

sodium molybdate (CAS: 7631-95-0,10102-40-6) is found on the following regulatory lists;

"Australia Exposure Standards", "Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "OECD List of High Production Volume (HPV) Chemicals"

water (CAS: 7732-18-5) is found on the following regulatory lists;

"Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR National List of Candidates for Substitution – Norway"

No data for Wynn's Radiator Flush (CW: 45194)

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name CAS sodium borate, decahydrate 1303

sodium borate, decahydrate 1303- 96- 4, 1344- 90- 7, 12447- 40- 4, 61028- 24- 8

sodium molybdate 7631- 95- 0, 10102- 40- 6

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references.

■ The (M)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.

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This is the end of the MSDS.