

MATERIAL SAFETY DATA SHEET

INDY RADIATOR FLUSH

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	INDY Radiator Flush
Description	Cooling System Flush
Validation Date	December 2015
Manufacturer	GUD Holdings (Pty) Ltd via Indy Oil SA 3 The Avenue East Isipingo KwaZulu-Natal South Africa 4110
Emergency Contact Number	+ 27 31 910 3111 + 27 60 572 8088

2. COMPOSITION

Component	EINECS Number	CAS registry number	% content	Classification
Sodium citrate	200-675-3	68-04-2	5 – 15	None applicable
Water	231-791-2	7732-18-5	85 - 95	None applicable

3. HAZARDS IDENTIFICATION

Human Health Hazards

May cause eye irritation. May cause skin irritation. Prolonged or repeated contact may dry skin and cause irritation.

The product is harmful if swallowed. Ingestion may lead to stomach distress, nausea and vomiting.

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Safety Hazards

The product is non-flammable. Care should be exercised upon storage and handling. Store in a cool, well-ventilated area.

Environmental Hazards

The product contains a substance that is harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

General Information

If the product is sprayed into the eye it may cause irritation and conjunctivitis. Ingestion may lead to irritation of the mouth, throat and digestive tract. Aspiration into the respiratory system may occur directly or following ingestion.

Prolonged exposure to vapour may cause headache, dizziness, nausea and irritation to the eyes, upper respiratory tract, mouth and digestive tract. Obtain medical attention if discomfort continues. Remove affected person from source of contamination.

The following recommendations apply to sources of exposure:

Inhalation

Remove to fresh air, and keep affected person at rest. Obtain medical attention if irritation to respiratory tract is severe and adversely affects breathing. Obtain medical attention immediately.

Skin Contact

Remove contaminated clothing, and wash skin with soap and water. Clothing must be laundered before reuse. If irritation persists, obtain medical attention.

Eye Contact

Flush eyes with clean water. Do not rub or agitate the affected area.

5. FIRE FIGHTING MEASURES

Hazardous combustion products may include oxides of carbon and sodium

Extinguishing Media:

Foam or dry chemical powder. Carbon dioxide, sand or earth can be used for small fires. Keep containers exposed to the fire cool by spraying with water. The danger zone should be cleared immediately.

Protective Equipment

Proper protective equipment including breathing apparatus must be worn when approaching a fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid inhalation of vapour and aerosol spray. Avoid contact with eyes, and prolonged skin contact. Ensure adequate ventilation is provided. In the event of a spill, beware of slippery surfaces.

Environmental precautions

Do not allow environmental contamination to occur. Avoid disposal (accidental or incidental) of product into drains, sewers, rivers and other water sources, and onto the ground. Use

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appropriate spill containment measures to avoid environmental contamination. Inform local authorities if this cannot be prevented. Use sand, earth or other appropriate absorbent material to contain spills. The product should not be dumped, but collected and delivered according to agreement with local authorities.

Spill clean-up / containment

Stop product leak if possible to do so without risk. Extinguish all ignition sources, and ensure adequate ventilation. The product in its liquid form can be contained by creating a barrier using sand, earth or other appropriate containment material. Collect with absorbent, non-combustible material into suitable containers. Do not allow drains. Dispose of material according to agreement with local authorities. Inform authorities immediately if the liquid enters surface water sources.



7. HANDLING AND STORAGE

USAGE PRECAUTIONS

Ensure good personal hygiene when handling product. Wash hands, clothing and other contaminated areas with water and soap before leaving the work site to minimize spread of contamination. Do not eat, drink or smoke when using the product. Avoid forming sprays / aerosol mists. Ensure adequate ventilation is provided when product is being used. Ensure personal protective equipment is used where necessary. Avoid use near excessive temperatures or sources of heat and ignition.

STORAGE CONDITIONS

Store the product in its original container, and ensure that the container is tightly closed and kept upright. Store in a cool, dry, and well-ventilated area. Ensure that the relevant spill containment apparatus is available.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

PROTECTIVE EQUIPMENT

The following personal protective equipment is applicable:



ENGINEERING MEASURES

Provide adequate ventilation. Observe occupational exposure limits and minimize risk of inhalation of vapour.

RESPIRATORY EQUIPMENT

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No specific respiratory equipment is recommended when used in well-ventilated area.

HAND PROTECTION

The use of chemical-resistant, nitrile gloves is recommended.

EYE PROTECTION

The use of tightly-fitted safety goggles / glasses is recommended when splashing is probable.

OTHER PROTECTION

Wear appropriate clothing to prevent repeated or prolonged skin contact.

HYGIENE MEASURES

Wash contaminated clothing promptly and before reuse. Wash skin with soap and water upon contamination.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance	Clear liquid
Odour	Mildly acidic
pH	6.00 – 8.50
Solubility	Soluble in water
Vapour density (air = 1)	Heavier than air
Density at 20°C	1120 kg.m ⁻³ (typical)

10. STABILITY AND REACTIVITY

Stability	The product is stable.
Materials to avoid	Strong oxidising agents.
Conditions to avoid	Extremes of temperatures.
Hazardous Decomposition Products	None under normal conditions known

11. TOXICOLOGICAL INFORMATION

HEALTH WARNINGS

The product can be hazardous when inhaled or ingested in excessive quantities. May cause internal injury.

ROUTES OF ENTRY

Inhalation. Ingestion. Eye contact.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

The product contains a substance that is harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment. The product is dangerous to the environment if discharged into water courses.

BIOACCUMULATION

No available data on bioaccumulation.

DEGRADABILITY

No available data on degradability.

13. DISPOSAL CONSIDERATIONS

Waste relating to the product is considered hazardous, and should be disposed off according to regulations as stipulated by local authorities.

14. TRANSPORTATION INFORMATION

The product is not regulated and no special transportation requirements exist.

15. REGULATORY INFORMATION

The product is not regulated and no special regulatory requirements exist.

16. OTHER INFORMATION

Validated by	: GUD Holdings (Pty) Ltd
Validation date	: December 2015
Revision number	: 01

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RISK PHRASES IN FULL

None applicable

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