

SAFETY DATA SHEET

JosBlue™ Descaler

SECTION 01 - IDENTIFICATION

Product identifier	JosBlue Descaler
Other means of identification	Descaling Liquid
Recommended use of chemical	Acidic liquid detergent specifically formulated to remove scale build-up and to clean heat exchangers
Supplier name	Ixom Operations Pty Limited trading as LogiChem
Supplier address	Lot 33 Bulong Road Parkeston-Kalgoorlie, Australia PO Box 878 Kalgoorlie WA 6433 Australia
Supplier phone	1800 033 111 / Int. +61 (0) 3 9663 2130
24 Hour emergency phone	1800 033 111

SECTION 02 - HAZARD(S) IDENTIFICATION

Classification	Serious Eye Damage/Irritation - Category 1 Skin Corrosion/Irritation - Category 1A Acute Toxicity (Dermal) - Category 5 Acute Toxicity (Oral) - Category 4
Signal word	Danger
Hazard statements	H290 - May be corrosive to metals H302 - Harmful if swallowed H313 - May be harmful in contact with skin H314 - Causes severe skin burns and eye damage H318 - Causes serious eye damage
Precautionary statements	<p>Prevention</p> <p>P234 - Keep only in original container P260 - Do not breathe dust/fume/gas/mist/vapours/spray P264 - Wash hands thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection</p> <p>Response</p> <p>P301 / P330 / P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P303 / P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower P304 / P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P305 / P351 / P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a POISON CENTER or doctor/physician P321 - Specific treatment (see First Aid Measures on Safety Data Sheet) P363 - Wash contaminated clothing before reuse P390 - Absorb spillage to prevent material damage</p> <p>Storage</p> <p>P405 - Store locked up. P406 - Store in corrosive resistant container with a resistant inner liner</p> <p>Disposal</p> <p>P501 Dispose of contents/container in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.</p>



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SECTION 03 – COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Components</u>	<u>Cas No:</u>	<u>Proportion</u>
Phosphoric Acid	7664-38-2	60.0%
Proprietary Blend of non-ionic surfactants & chelating agents		20.0%
Blue Dye		<0.5%
Water	7732-18-5	Balance %

SECTION 04 – FIRST AID MEASURES

Description of necessary first aid measures	<p>Eye – Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance</p> <p>Ingestion - Immediately rinse mouth with water. Give water to drink. Do NOT induce vomiting. If vomiting occurs give further water. Seek immediate medical assistance.</p> <p>Inhalation – Remove victim from exposure – avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. <u>Seek medical advice if effects persist.</u> Poison Information Centre in each State capital city can provide additional assistance for scheduled poisons.</p> <p>Skin - Immediately wash contaminated skin with plenty of water. Remove contaminated clothing and wash before re-use. If swelling, redness, blistering or irritation occurs seek medical advice.</p>
Medical attention / special treatment	Treat symptomatically and as for exposure to corrosive, acidic substances.
Symptoms caused by exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. May cause cyanosis (blue-grey colouring of skin and lips caused by lack of oxygen). Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

SECTION 05 – FIRE FIGHTING MEASURES

Suitable extinguishing media	In case of fire, use Carbon dioxide, dry chemical powder, or appropriate foam.
Specific hazards arising from the chemical	Non-combustible liquid. Incompatible with strong oxidizing agents, strong reducing agents, strong alkali, active powdered metals, Fluorine, sulfur trioxide, phosphorus pentoxide, metals, and sources of ignition. This product will release hydrogen on contact with metals, which may cause explosion in the air. Reacts with water to generate heat and form phosphoric acid. The reaction is not violent. Emits toxic fumes under fire conditions. It will produce the virulent gas of oxidation phosphorus at a high temperature. It is corrosive. Hazardous decomposition products may include Phosphine, oxides of phosphorus, and hydrogen gas.
Special protective equipment & precautions for fire fighters	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit. Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

SECTION 06 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Personnel involved in the clean up should wear full protective clothing as listed in section 8. Avoid accidents, clean up immediately. Evacuate all unnecessary personnel. Increase ventilation. Avoid walking through spilled product as it is slippery when spilt. Stop leak if safe to do so. Use clean, non-sparking tools and equipment. Shut off all possible sources if ignition.
Environmental precautions	Do NOT let product reach drains or waterways. If product does enter a waterway,

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Methods and materials for containment and cleaning up.	advise the Environmental Protection Authority or your local Waste Management. Neutralize spilled product with lime or soda. Soak up using absorbent material such as sand or soil. When saturated, collect material and transfer to a suitable, labelled, dry chemical-waste containers and dispose of promptly as hazardous waste. Ventilate area and wash spill site after material pickup is complete.
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SECTION 07 – HANDLING AND STORAGE

Precautions for safe handling	Prevent possible eye and skin contact by wearing protective clothing and equipment. Storage tanks must be vented and banded. Store drums separate from alkalis. Provide adequate drainage. When diluting, use agitation and add phosphoric acid slowly to water and not water to phosphoric acid. Heat is evolved when adding phosphoric acid to water.
Conditions for Safe Storage (Including Any Incompatibles)	This material is a Schedule Poison (S6) and must be stored, maintained and used in accordance with the relevant regulations. Store in a cool place and out of direct sunlight. Store away from oxidizing agents and foodstuffs. Keep containers closed at all times – check regularly for leaks. Store away from alkali, H vesicant, tinder, active metal powder.

SECTION 08 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters – exposure standards, biological monitoring	The following exposure standard has been established by Safe Work Australia; Phosphoric Acid CAS: 7664-38-2 TWA = 1mg/m ³ STEL = 3mg/m ³ NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.
Appropriate engineering controls	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal protective equipment (PPE)	Clothing – Chemical-resistant coveralls (AS3765/2210). Eyes – Chemical goggles to prevent splashing in the eyes (AS1336/1337). Footwear – Safety footwear (AS3765/2210). Gloves – Rubber or neoprene impervious gloves (AS2161). Other - RESPIRATOR: Wear an approved full face piece respirator with suitable filter for acid gases and vapours if engineering controls are inadequate (AS1715/1716).

SECTION 09 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Viscous, transparent blue liquid
Odour	Odourless
Odour threshold	Not available
pH	0.7
Melting point/freezing point	Not available
Specific gravity (water = 1)	1.35
Boiling point and boiling range	213.0 °C
Flash point	Not available
Evaporation rate	Not available
Flammability	Not available
Upper/lower flammability or explosive limits	Not available
Vapour pressure (hPa @ 20°C)	Not available
Vapour density	Not available
Relative density	Not available

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Solubility(ies) (water)	Soluble
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Specific heat value	Not available
Particle size	Not available
Volatile organic compounds content	Not available
% volatile	Not available
Saturated vapour concentration	Not available
Release of invisible flammable vapours and gases	Not available

SECTION 10 – STABILITY AND REACTIVITY

Reactivity	Hazardous Polymerization may occur. Reacts with water to generate heat and form phosphoric acid. The reaction is not violent. Reacts with Bases.
Chemical stability	Product is stable under normal conditions of use, storage and temperature. Corrosive Liquid. Hygroscopic: absorbs moisture or water from the air.
Conditions to avoid	Avoid excessive heat, direct sunlight, moist air or water.
Incompatible materials	Incompatible with strong oxidizing agents, strong reducing agents, strong alkali, active powdered metals, Fluorine, sulfur trioxide, phosphorus pentoxide, metals, and sources of ignition.
Hazardous decomposition products	This product will release hydrogen on contact with metals, which may cause explosion in the air. Reacts with water to generate heat and form phosphoric acid. The reaction is not violent. Emits toxic fumes under fire conditions. It will produce the virulent gas of oxidation phosphorus at a high temperature. It is corrosive. Hazardous decomposition products may include Phosphine, oxides of phosphorus, and hydrogen gas.

SECTION 11- TOXICOLOGICAL INFORMATION

Information on routes of exposure	<p>Eyes – Corrosive to eyes, contact can cause corneal burns. Contamination of the eyes can result in permanent injury.</p> <p>Ingestion - Swallowing can result in nausea, vomiting and abdominal pain.</p> <p>Inhalation – Not normally an inhalation risk due to low vapour pressure at ambient temperatures. Inhalation of mists or aerosols may produce respiratory irritation.</p> <p>Skin - Corrosive to skin – may cause skin burns. Repeated or prolonged skin contact may lead to dermatitis; persons with pre-existing skin disorders may be more susceptible to this.</p>
Symptoms related to exposure	Not available
Numerical measures of toxicity	<p>Oral LD50 (rat): 1530mg/kg</p> <p>Dermal LD50 (rabbit): 2740 mg/kg</p> <p>Skin (rabbit): Severe irritant</p> <p>Eyes (rabbit): Severe irritant</p>
Immediate, delayed and chronic health effects from exposure	Not available
Exposure levels	Not available
Interactive effects	Not available
Data limitations	Not available

SECTION 12- ECOLOGICAL INFORMATION

Ecotoxicity	Not available
Persistence and degradability	When released into the soil, this material may leach into groundwater. When released to water, acidity may be readily reduced by natural water hardness minerals. The

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	phosphate, however, may persist indefinitely.
Bioaccumulative potential	Not available
Mobility in soil	Not available
Other adverse effects	Not available

SECTION 13 – DISPOSAL CONSIDERATIONS

Safe handling and disposal methods	Not available
Disposal of any contaminated packaging	All empty packaging should be disposed of in accordance with local, state, and federal regulations or recycled/reconditioned at an approved facility.
Environmental regulations	Dispose of in accordance with all local, state and federal regulations.

SECTION 14 – TRANSPORT INFORMATION

UN number	1805
Proper shipping name	Phosphoric Acid, Solution
Transport hazard class(es)	8 – Corrosive Substances
Subsidiary risk	NA
Packaging group	III
Environmental hazards	Not available
Special precautions during transport	Not available
Hazchem code	2R



SECTION 15 – REGULATORY INFORMATION

AICS name	Phosphoric acid
Poisons Schedule number	6

SECTION 16 – OTHER INFORMATION

SDS creations date	01 December 2000
Most recent revision date	01 February 2018
Revision number	017 THIS ISSUE NUMBER REPLACES ALL ISSUES
Reason for revision	Annual Update
Contact person	Ixom 1800 033 111

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

END OF SDS