SAFETY DATA SHEET

Revision date: 03-Oct-2024



Revision Number 7

| Section 1: Identification | | |
|---|--|--|
| | | |
| Product identifier | | |
| Product Name | DiamondBrite | |
| Product Code(s) | 00000005611 | |
| Other means of identification | | |
| Recommended use of the chemica | l and restrictions on use | |
| Recommended use | Heavy duty alkaline degreaser used for the wetting, emulsification and removal of soils. | |
| Uses advised against | No information available. | |
| Details of manufacturer or importe | <u>r</u> | |
| <u>Supplier</u> IXOM Operations Pty Ltd ABN: 51 600 546 512 Level 8, 1 Nicholson Street Melbourne 3000 Australia | | |
| Telephone Number: +61 3 9906 3000 | | |
| Emergency telephone number | | |
| Emergency telephone number | 1 800 033 111 (ALL HOURS) | |
| Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet. | | |
| Section 2: Hazard identific | ation | |
| Classified as a hazardous substance | in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). | |

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

| GHS Classification | |
|-----------------------------------|------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 1 |



DANGER

Hazard statements H315 - Causes skin irritation H318 - Causes serious eye damage

Precautionary Statements - Prevention
Wash hands thoroughly after handling.
Wash eyes thoroughly after handling.
Wear protective gloves/clothing and eye/face protection.
Precautionary Statements - Response
Specific treatment (see First aid on this SDS).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
Precautionary Statements - Storage
No storage statements.
Precautionary Statements - Disposal
No disposal statements.

Other hazards which do not result in classification

Section 3: Composition and information on ingredients

| Chemical name | CAS No. | Weight-% |
|------------------------------------|----------|----------|
| 2-Butoxyethanol (Butyl cellosolve) | 111-76-2 | <10 |
| Surfactants | - | <10 |
| Sequesterants | - | <10 |
| Other component(s) | - | to 100 |

Description of first aid measures

| General advice | For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. |
|----------------|--|
| Inhalation | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. (Call a physician if symptoms occur). |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water. Get medical attention immediately if symptoms occur. |
| Ingestion | Clean mouth with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur. |

Most important symptoms and effects, both acute and delayed

| Symptoms | Irritation/Corrosion. May cause redness and tearing of the eyes. Can cause corneal burns. |
|----------|---|
| | Erythema (skin redness). |

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. Can cause corneal burns.

Section 5: Firefighting measures

Suitable Extinguishing Media

Suitable extinguishing media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the Non-combustible. chemical

Special protective actions for fire-fighters

Special protective equipment and
precautions for fire-fightersFirefighters should wear self-contained breathing apparatus and full firefighting turnout gear.
Use personal protection equipment.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

| Personal precautions | Avoid contact with skin, eyes and inhalation of vapors. Stop leak if you can do it without risk. Evacuate personnel to safe areas. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly after handling. | | |
|--|--|--|--|
| For emergency responders | Use personal protection recommended in Section 8. | | |
| Environmental precautions | | | |
| Environmental precautions | See Section 12 for additional Ecological Information. | | |
| Methods and material for containment and cleaning up | | | |
| Methods for containment | Prevent further leakage or spillage if safe to do so. | | |
| Methods for cleaning up | Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. | | |

Section 7: Handling and storage

Precautions for safe handling

| Advice on safe handling | Avoid contact with skin and eyes. Avoid breathing vapors or mists. Use personal protection equipment. Wash thoroughly after handling. Keep out of reach of children. |
|--------------------------------|--|
| General hygiene considerations | Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product. |

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible materials

Acids.

Section 8: Exposure controls and personal protection

Control parameters

Exposure Limits

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

| Chemical name | Australia | New Zealand | ACGIH TLV |
|------------------------------------|-----------------------------|----------------------------|-------------|
| 2-Butoxyethanol (Butyl cellosolve) | TWA: 20 ppm | TWA: 25 ppm | TWA: 20 ppm |
| 111-76-2 | TWA: 96.9 mg/m ³ | TWA: 121 mg/m ³ | |
| | STEL: 50 ppm | Sk* | |
| | STEL: 242 mg/m ³ | | |

| Chemical name | European Union | United Kingdom | Germany DFG |
|------------------------------------|-----------------------------|-----------------------------|----------------------------|
| 2-Butoxyethanol (Butyl cellosolve) | TWA: 20 ppm | TWA: 25 ppm | TWA: 10 ppm |
| 111-76-2 | TWA: 98 mg/m ³ | TWA: 123 mg/m ³ | TWA: 49 mg/m ³ |
| | STEL: 50 ppm | STEL: 50 ppm | Peak: 20 ppm |
| | STEL: 246 mg/m ³ | STEL: 246 mg/m ³ | Peak: 98 mg/m ³ |
| | * | Sk* | Sk* |

| Chemical name | Australia | ACGIH | European Union |
|------------------------------------|-----------|---------------------|----------------|
| 2-Butoxyethanol (Butyl cellosolve) | - | 200 mg/g creatinine | - |
| 111-76-2 | | | |

2-Butoxyethanol: 8hr TWA = 96.9 mg/m³ (20 ppm), 15 min STEL = 242 mg/m³ (50 ppm), Sk

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

'Sk' (skin) Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

These Workplace 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 workplace 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

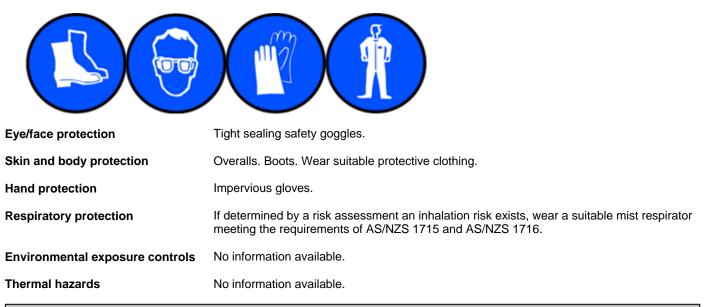
Engineering controls Eyewash stations. Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.



Section 9: Physical and chemical properties

Information on basic physical and chemical properties

| Physical state Appearance Color Odor Odor threshold | Liquid Clear Pink / Purple Unpleasant No information available | |
|---|--|------------------|
| Property | Values | Remarks • Method |
| pH | ca. 12.7 | None known |
| pH (as aqueous solution) | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flash point | Not applicable | None known |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | Not applicable | |
| Lower flammability or explosive limits | Not applicable | |
| Vapor pressure | No data available | None known |
| Vapor density | No data available | None known |
| Relative density | 1.03 @20°C | None known |
| Water solubility | Miscible in water | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| | | |

| Section 10: Stability and re | eactivity |
|--|--|
| Reactivity | |
| Reactivity | No information available. |
| Chemical stability | |
| Stability | Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. |
| Explosion data Sensitivity to mechanical impac Sensitivity to static discharge | t None. None. |
| Possibility of hazardous reactions | - |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | |
| Conditions to avoid | None known based on information supplied. |
| Incompatible materials | |
| Incompatible materials | Acids. |
| Hazardous decomposition products | <u>8_</u> |

Hazardous decomposition products Carbon oxides.

Section 11: Toxicological information

Information on likely routes of exposure

| Product Information | No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are: | |
|---------------------|---|--|
| Inhalation | May cause irritation. | |
| Eye contact | Severely irritating to eyes. Causes serious eye damage. | |
| Skin contact | Causes skin irritation. Can be absorbed through the skin with resultant adverse effects. | |
| Ingestion | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. | |
| Symptoms | Irritation/Corrosion. May cause redness and tearing of the eyes. Can cause corneal burns. Erythema (skin redness). | |

Acute toxicity .

Numerical measures of toxicity - Product Information No information available

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 | |
|---------------------------------------|--|---------------------------------|-------------------------|--|
| 2-Butoxyethanol (Butyl cellosolve) | = 470 mg/kg (Rat) | = 435 mg/kg (Rabbit) | = 450 ppm (Rat) 4 h | |
| | | | = 486 ppm (Rat) 4 h | |
| See section 16 for terms and abbrevia | tions | | | |
| | | | | |
| Delayed and immediate effects as w | ell as chronic effects from sh | ort and long-term exposure | _ | |
| | | | | |
| Skin corrosion/irritation | Causes skin irritation. Classific | ation is based on mixture calcu | lation methods based on | |
| | component data. | | | |
| | | | | |
| Serious eye damage/eye irritation | Causes serious eye damage. Classification is based on mixture calculation methods based | | | |
| ····· | on component data. | | | |
| | | | | |
| | | | | |
| Respiratory or skin sensitization | No information available. | | | |
| | | | | |
| Germ cell mutagenicity | No information available. | | | |
| | | | | |
| | | | | |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. | | | |
| | | | | |

| Chemical name | Australia | European Union | IARC |
|---|-----------|----------------|---------|
| 2-Butoxyethanol (Butyl cellosolve) - 111-76-2 | - | - | Group 3 |

IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans

| Reproductive toxicity | No information available. |
|--------------------------|--|
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |
| Chronic effects: | Long term exposure to 2-butoxyethanol can cause blood changes, including anaemia, in rats. Both 2-butoxyethanol and its metabolite, butoxyacetic acid, can cause breakdown of red blood cells, however, in vitro and in vivo tests have shown that human red blood cells are comparatively insensitive to this effect. Animal studies have shown that exposure to 2-butoxy ethanol during pregnancy produced no teratogenic effects in the offspring. In the rat, foetotoxic effects were only observed at concentrations that also produced maternal toxicity (ie 200 ppm). Also, 2-butoxy ethanol did not produce testicular atrophy in male rats. Not genotoxic in a range of in vitro studies. |

Section 12: Ecological information

Ecotoxicity

| Aquatic | ecotoxi | city |
|---------|---------|------|
| | | , |

Keep out of waterways.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---------------|----------------------|------|-------------------------------|-----------|
|---------------|----------------------|------|-------------------------------|-----------|

| 2-Butoxyethanol (Butyl cellosolve) | - LC50: =1490n Lepomis mac LC50: =2950n Lepomis mac | rochirus) ng/L (96h, | EC50: >1000mg/L (48h, Daphnia magna) | |
|--|--|---|---|--|
| Terrestrial ecotoxicity | There is no data for this product. | | | |
| Persistence and degradability Persistence and degradability | No information available. | | | |
| Bioaccumulative potential Bioaccumulation | There is no data for this product. | | | |
| Component Information | | | | |
| Chem | ical name | Partition coe | efficient | |
| 2-Butoxyethan | ol (Butyl cellosolve) | 0.81 | | |
| Mobility | | | | |
| Mobility | No information available. | | | |
| Other adverse effects | | | | |
| Other adverse effects | No information available. | | | |
| Section 13: Disposal considerations | | | | |
| Waste treatment methods | | | | |
| Waste from residues/unused products | Refer to Waste Management Au contractor. | Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. | | |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. | | | |
| See section 8 for more informat | ion | | | |
| Section 14: Transport information | | | | |
| ADG | Not classified as Dangerous Goo (ADG Code) for transport by Roa | | | |
| IATA_ | Not classified as Dangerous Goo Association (IATA) Dangerous G GOODS. | | | |
| IMDG | Not classified as Dangerous Goo Goods Code (IMDG Code) for tra | | | |
| Transport in bulk according to A No information available | Annex II of MARPOL 73/78 and the I | BC Code | | |

Section 15: Regulatory information

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

National regulations

Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

Poison Schedule Number Not applicable

Australian Industrial Chemicals Introduction Scheme (AICIS)

Contact supplier for inventory compliance status

| | Australian Industrial Chemicals Introduction Scheme (AICIS) | Additional information |
|--|---|---|
| 2-Butoxyethanol (Butyl cellosolve) - 111-76-2 | | Specific information requirement: Obligations to provide information apply. You must tell us within 28 days if the circumstances of your importation or manufacture (introduction) are different to those in our assessment. |

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

National pollutant inventory

Subject to reporting requirement

| Chemical name | National pollutant inventory |
|---|---|
| 2-Butoxyethanol (Butyl cellosolve) - 111-76-2 | 20 MW Threshold category 2b total |
| | 60000 MWH Threshold category 2b total |
| | 1 tonne/h Threshold category 2a total |
| | 25 tonne/yr Threshold category 1a total |
| | 400 tonne/yr Threshold category 2a total |
| | 2000 tonne/yr Threshold category 2b total |

| International Inventories | |
|-----------------------------------|---|
| International Inventories AIIC | All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals or are exempt. |
| NZIOC | All the constituents of this material are listed on the New Zealand Inventory of Chemicals. |
| TSCA | Contact supplier for inventory compliance status. |
| DSL/NDSL | Contact supplier for inventory compliance status. |
| EINECS/ELINCS | Contact supplier for inventory compliance status. |
| ENCS | Contact supplier for inventory compliance status. |
| IECSC | Contact supplier for inventory compliance status. |
| KECL | Contact supplier for inventory compliance status. |
| PICCS | Contact supplier for inventory compliance status. |
| Legend: | |

AIIC- Australian Inventory of Industrial Chemicals

NZIOC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances **IECSC** - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

| Section 16: Other information | | | | |
|---|--|-------------------|--|--|
| Reason(s) For Issue: | 5 Yearly Revised Primar | y SDS | | |
| Prepared By | This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services). | | | |
| Revision date: | 03-Oct-2024 | | | |
| Revision Note: | | | | |
| The symbol (*) in the margin of this S | DS indicates that this line l | has been revised. | | |
| Key or legend to abbreviations and | d acronyms used in the s | afety data sheet | | |
| Legend SVHC: Substances of Very High Concern for Authorization: PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances STOT: Specific Target Organ Toxicity ATE: Acute Toxicity Estimate LC50: 50% Lethal Concentration LD50: 50% Lethal Dose | | | | |
| Legend Section 8: EXPOSURE CO | ONTROLS/PERSONAL PR | ROTECTION | | |
| TWATWA (time-weighCeilingMaximum limit vaCCarcinogen | ted average) lue | STEL * | STEL (Short Term Exposure Limit) Skin designation | |
| Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) Environmental Protection Agency Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) National Institute of Technology and Evaluation (NITE) | | | | |

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) Australian Industrial Chemicals Introduction Scheme (AICIS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) U.S. National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since IXOM Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their IXOM representative or IXOM Operations Pty Ltd at the contact details on page 1.

IXOM Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet