SAFETY DATA SHEET

Revision date: 20-Nov-2023



Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

| Product identifier | |
|---|---|
| Product Name | MGDA 3NA 40% |
| Product Code(s) | 00000054583 |
| Other means of identification | |
| UN number | 3267 |
| Recommended use of the chemical | and restrictions on use |
| Recommended use | Laundry detergents, automatic dishwashing detergents. |
| Uses advised against | No information available |
| Supplier 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.

2. HAZARDS IDENTIFICATION

GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

| Corrosive to metals | Category 1 |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation | Category 1 Sub-category C |
| Serious eye damage/eye irritation | Category 1 |

SIGNAL WORD Danger

Label elements

Corrosion



Hazard statements H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage

Precautionary Statements - Prevention

Keep only in original container Do not breathe fume, gas, mist, vapours, spray Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves / protective clothing / eye protection / 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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse Immediately call a POISON CENTER or doctor/physician IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician IF SWALLOWED: Rinse mouth. DO NOT induce vomiting Absorb spillage to prevent material damage **Precautionary Statements - Storage** Store locked up Store in corrosive resistant container with a resistant inner liner **Precautionary Statements - Disposal** Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification General Hazards

Poisons Schedule (SUSMP)

3. COMPOSITION/INFORMATION ON INGREDIENTS

5

Mixture

| Chemical name | CAS No. | Weight-% |
|--|-------------|----------|
| Alanine, N,N-bis(carboxymethyl)-, trisodium salt | 164462-16-2 | 40-41 |
| Sodium hydroxide | 1310-73-2 | 0.3-<1 |
| Water | 7732-18-5 | to 100 |

4. FIRST AID MEASURES

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. Show this safety data sheet to the doctor in attendance. | |
|----------------|--|--|
| Inhalation | Remove to fresh air. 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 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. | | | |
|---|--|--|--|--|
| Ingestion | Rinse mouth thoroughly with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. | | | |
| Most important symptoms and effe | ects, both acute and delayed | | | |
| Symptoms | Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning. | | | |
| Indication of any immediate medic | al attention and special treatment needed | | | |
| Note to physicians | Treat symptomatically. Can cause corneal burns. | | | |
| 5. FIRE FIGHTING MEASU | RES | | | |
| Suitable Extinguishing Media | | | | |
| Suitable Extinguishing Media | Water spray. Dry powder. Foam. | | | |
| | | | | |
| Unsuitable extinguishing media | able extinguishing media Carbon dioxide (CO2). | | | |
| Specific hazards arising from the c | hemical | | | |
| Specific hazards arising from the chemical | Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Non-combustible. | | | |
| Special protective actions for fire-fighters | | | | |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. | | | |
| Hazchem code | 2X | | | |
| 6. ACCIDENTAL RELEASE | EMEASURES | | | |
| Personal precautions, protective e | quipment and emergency procedures | | | |
| Personal precautions | Do not breathe vapor or mist. Avoid contact with skin, eyes, and clothing. Do not touch or walk through spilled material. Evacuate personnel to safe areas. Use personal protective equipment as required. Wash thoroughly after handling. | | | |
| For emergency responders | Use personal protection recommended in Section 8. | | | |
| Environmental precautions | | | | |
| Environmental precautions | Local authorities should be advised if significant spillages cannot be contained. | | | |
| Methods and material for containm | ent 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. | | | |

7. HANDLING AND STORAGE

Precautions for safe handling

| Advice on safe handling | Do not breathe vapor or mist. Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. 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 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. Store away from foodstuffs. Store locked up. Keep/store only in original container. Keep container closed when not in use. | | |
| Incompatible materials | Metals. | | |
| Poisons Schedule (SUSMP) | 5 | | |

8. EXPOSURE CONTROLS/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):

Sodium hydroxide: Peak Limitation = 2 mg/m³

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

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

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
 Ensure that eyewash stations and safety showers are close to the workstation location. 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

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

determine the minimum PPE requirements.

physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties Physical state Liquid

| Appearance | | |
|---------------------------------|--------------------------|------------------|
| Color | Slightly Yellow | |
| Odor | Characteristic | |
| Odor threshold | No information available | |
| _ | | |
| Property | Values | Remarks • Method |
| рН | 11.5-12 | None known |
| pH (as aqueous solution) | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | 100°C | 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 | Not applicable | |
| limits | | |
| Lower flammability or explosive | Not applicable | |
| limits | | |
| Vapor pressure | 23.4 hPa | None known |
| Vapor density | No data available | None known |
| Relative density | 1.33 g/cm³ @20℃ | 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 | ≈25 mPa.s @23℃ | None known |
| | | |

Transparent

Other information

Appearance

10. STABILITY AND REACTIVITY

Reactivity

| Reactivity | Non-reactive under normal conditions of use, storage and transport. | | |
|---|---|--|--|
| Chemical stability | | | |
| Stability | Stable under normal conditions. | | |
| Explosion data Sensitivity to mechanical impac | t None. | | |
| Sensitivity to static discharge | None. | | |
| Possibility of hazardous reactions | | | |
| Possibility of hazardous reactions | None under normal processing. | | |
| Conditions to avoid | | | |
| Conditions to avoid | Heat. | | |
| Incompatible materials | | | |
| Incompatible materials | Metals. | | |
| Hazardous decomposition products | 5 | | |
| Hazardous decomposition products Carbon oxides. | | | |

11. TOXICOLOGICAL INFORMATION

Acute toxicity

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 | Causes serious eye damage. |
| Skin contact | Contact causes severe skin irritation and possible burns. |
| Ingestion | Can burn mouth, throat, and stomach. |
| Symptoms | Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning. |

<u>Numerical measures of toxicity</u> - Product Information Refer to component information below.

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------|-----------|-----------------------|-----------------|
| Sodium hydroxide | - | = 1350 mg/kg (Rabbit) | - |

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin corrosion/irritation | Causes burns. |
|-----------------------------------|----------------------------|
| Serious eye damage/eye irritation | Causes serious eye damage. |
| Respiratory or skin sensitization | Not classified. |
| Germ cell mutagenicity | Not classified. |
| Carcinogenicity | Not classified. |
| Reproductive toxicity | Not classified. |
| STOT - single exposure | Not classified. |
| STOT - repeated exposure | Not classified. |
| Aspiration hazard | Not classified. |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Keep out of waterways.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|--|----------------------|---|-------------------------------|-----------|
| Alanine, N,N-bis(carboxymethyl)-, trisodium salt | - | LC50: >110mg/L (96h, Danio rerio) | - | - |
| Sodium hydroxide | - | LC50: =45.4mg/L (96h, Oncorhynchus mykiss) | - | - |

Persistence and degradability

Persistence and degradability No information available.

| Bioaccumulative potential | |
|---------------------------|---------------------------|
| Bioaccumulation | No information available. |
| <u>Mobility</u> | |

Mobility in soil

No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| Waste from residues/unused | Dispose of in accordance with local regulations. Dispose of waste in accordance with |
|----------------------------|--|
| products | environmental legislation. |

| Contaminated packaging |
|------------------------|
|------------------------|

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

<u>ADG</u>

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

| UN number | 3267 |
|----------------------|---|
| Proper shipping name | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS ALANINE, |
| | N,N-BIS(CARBOXYMETHYL)-, TRISODIUM SALT AQUEOUS SOLUTION) |
| Hazard class | 8 |
| Packing group | |
| Hazchem code | 2X |

<u>IATA</u>

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

| UN number UN proper shipping name | 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS ALANINE, N.N-BIS(CARBOXYMETHYL)-, TRISODIUM SALT AQUEOUS SOLUTION) |
|--------------------------------------|--|
| Transport hazard class(es) | 8 |
| Packing group | III |

IMDG

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

| 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS ALANINE, N,N-BIS(CARBOXYMETHYL)-, TRISODIUM SALT AQUEOUS SOLUTION) |
|--|
| 8 |
| |
| F-A |
| S-B |
| No |
| |

15. REGULATORY INFORMATION

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

National regulations

<u>Australia</u>

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP) Poisons Schedule (SUSMP) 5

International Inventories AIIC

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

Legend: AllC- Australian Inventory of Industrial Chemicals

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

16. OTHER INFORMATION

Supplier Safety Data Sheet 07/2022

Reason(s) For Issue: First Issue Primary SDS

Issuing Date: 20-Nov-2023

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

| Legend Sec | tion 8: EXPOSURE CONTROLS/PERSONAL | PROTECTION | |
|------------|------------------------------------|------------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |
| С | Carcinogen | | - |

Key literature references and sources for data used to compile the SDS

EPA (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) Japan GHS Classification 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) 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 RTECS (Registry of Toxic Effects of Chemical Substances) 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