

Safety Data Sheet

according to WHS Regulations

Print date: 19.01.2024

Revision date: 19.01.2024

1 Identification

Product Name: ALKAFORCE

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Aqueous caustic solution

Details of Manufacturer or Importer:

DASCO Pty Ltd
24-26 Helen Street
Heidelberg Heights VIC 3081

Phone Number: (03) 9459 7004

Emergency telephone number: National Poisons Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



Corrosion

Skin Corrosion/Irritation 1A H314 Causes severe skin burns and eye damage.

Eye Damage 1 H318 Causes serious eye damage.



STOT SE 3 H335 May cause respiratory irritation.

Signal Word Danger

Hazard Statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary Statements

P260 Do not breathe dusts or mists.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection / face protection.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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/doctor.

P321 Specific treatment (see on this label).

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

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P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

| | | |
|----------------|---|--------|
| CAS: 1310-73-2 | Sodium hydroxide | 10-30% |
| | ⚠ Skin Corrosion/Irritation 1A, H314; ⚠ STOT SE 3, H335 | |
| CAS: 1310-58-3 | Potassium hydroxide | <10% |
| | ⚠ Skin Corrosion/Irritation 1A, H314; ⚠ Acute Toxicity (Oral) 4, H302 | |

4 First Aid Measures

Inhalation: If inhaled, remove to fresh air. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek immediate medical attention.

Eye Contact:

In case of eye contact, rinse with water for several minutes, including under eyelids. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek immediate medical attention.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give 1-2 glasses of water to drink in small sips. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:
Inhalation: May cause respiratory irritation. May cause coughing, wheezing, sore throat and shortness of breath. May cause chemical pneumonitis and pulmonary oedema.

Skin Contact: Causes severe skin burns and redness.

Eye Contact: Causes serious eye damage, redness and blurred vision. May cause permanent eye damage.

Ingestion: May cause irritation or burns to the mouth, throat and gastrointestinal system. May cause perforation of the stomach or intestines. May cause swelling of the larynx and subsequent suffocation. May cause vomiting, diarrhoea, ulceration and bleeding. May cause shock and collapse. May be fatal if swallowed.

5 Fire Fighting Measures

Suitable Extinguishing Media: Water fog or fine spray.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, oxides of silicon and oxides of sodium.

Product is not flammable.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Minimise run-off from fire fighting entering drains or water courses.

HAZCHEM Code: 2X

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots.

Evacuate all non-essential personnel from affected area. Do not breathe vapours or mists. Ensure adequate ventilation. Do not touch or walk through spilt product. Product is slippery if spilt.

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Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

7 Handling and Storage

Precautions for Safe Handling:

Reacts violently with acids.

May be corrosive to metals and wood.

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours and mists.

Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep in original container, tightly closed when not in use. Protect from direct sunlight and excessive moisture. Keep away from acids, oxidising agents, ammonium compounds, wood, organic halides, nitro compounds and active metals.

8 Exposure Controls and Personal Protection

Exposure Standards:**CAS: 1310-73-2 Sodium hydroxide**

| | |
|-----|--------------------------------------|
| WES | Peak limitation: 2 mg/m ³ |
|-----|--------------------------------------|

CAS: 1310-58-3 Potassium hydroxide

| | |
|-----|--------------------------------------|
| WES | Peak limitation: 2 mg/m ³ |
|-----|--------------------------------------|

Engineering Controls:

Ensure adequate ventilation of the working area, keeping airborne concentrations below occupational exposure standards.

Respiratory Protection:

Use an approved combination particulate and vapour respirator (Filter type A/P) under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Rubber or plastic gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Safety glasses with top and side shields or goggles. See Australian/New Zealand Standards AS/NZS 1336 and 1337 for more information.

9 Physical and Chemical Properties

Appearance:**Form:**

Slightly viscous liquid

Colour:

Clear, tan or brown

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| | |
|---|-----------------------------|
| Odour: | Characteristic |
| Odour Threshold: | No information available |
| pH-Value: | 13 (1% in water) |
| Melting point/freezing point: | No information available |
| Initial Boiling Point/Boiling Range: | >100 °C |
| Flash Point: | No information available |
| Flammability (solid, gas): | Not applicable |
| Auto-ignition Temperature: | No information available |
| Decomposition Temperature: | No information available |
| Explosion Limits: | |
| Lower: | No information available |
| Upper: | No information available |
| Vapour Pressure: | No information available |
| Relative Density at 20 °C: | 1.44 |
| Vapour Density: | No information available |
| Evaporation Rate: | No information available |
| Solubility in Water: | Miscible in all proportions |
| Partition Coefficient (n-octanol/water): | No information available |
| Viscosity: | No information available |

10 Stability and Reactivity

Possibility of Hazardous Reactions:

Hazardous polymerisation will not occur.
 Reacts violently with acids.
 May be corrosive to metals and wood.
 Will generate significant amounts of heat when mixed with water.
 Contact with ammonium compounds may generate toxic ammonia gas.
 Contact with acids may generate carbon dioxide.
 Contact with metals may generate flammable hydrogen gas.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: Direct sunlight and excessive moisture.

Incompatible Materials:

Acids, oxidising agents, ammonium compounds, wood, organic halides, nitro compounds and active metals.

Hazardous Decomposition Products: Oxides of carbon, oxides of silicon and oxides of sodium.

11 Toxicological Information

Toxicity:**LD50/LC50 Values:****CAS: 1310-73-2 Sodium hydroxide**

| | | |
|------|------|---------------------------------------|
| Oral | LD50 | 1,350 mg/kg (Rattus norvegicus (rat)) |
|------|------|---------------------------------------|

CAS: 1310-58-3 Potassium hydroxide

| | | |
|------|------|---|
| Oral | LD50 | 333-388 mg/kg (Rattus norvegicus (rat)) |
|------|------|---|

Acute Health Effects**Inhalation:**

May cause respiratory irritation. May cause coughing, wheezing, sore throat and shortness of breath. May cause chemical pneumonitis and pulmonary oedema.

Skin: Causes severe skin burns and redness.

Eye: Causes serious eye damage, redness and blurred vision. May cause permanent eye damage.

Ingestion:

May cause irritation or burns to the mouth, throat and gastrointestinal system. May cause perforation of the stomach or intestines. May cause swelling of the larynx and subsequent suffocation. May cause vomiting, diarrhoea, ulceration and bleeding. May cause shock and collapse. May be fatal if swallowed.

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Skin Corrosion / Irritation: Causes severe skin burns.**Serious Eye Damage / Irritation:** Causes serious eye damage.**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:**

Based on classification principles, the classification criteria are not met.

This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:** May cause respiratory irritation.**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** Repeated or prolonged skin contact may cause dermatitis.**Existing Conditions Aggravated by Exposure:** No data available.

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

CAS: 1310-73-2 Sodium hydroxide

| | |
|-----------|---|
| EC50/48 h | 40.4 mg/l (Daphnia magna (water flea)) |
| LC50/96 h | 125 mg/l (Gambusia affinis (mosquito fish)) |
| | 45.4 mg/l (Oncorhynchus mykiss (rainbow trout)) |

CAS: 1310-58-3 Potassium hydroxide

| | |
|-----------------|---|
| EC50/15 minutes | 22 mg/l (bacterial) |
| LC50/96 h | 45.4 mg/l (Oncorhynchus mykiss (rainbow trout)) |
| LC50/48 h | 40 mg/l (Daphnia magna (water flea)) |

Persistence and Degradability: No data available on finished product.**Bioaccumulative Potential:** No data available on finished product.**Mobility in Soil:** No data available on finished product.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number

ADG, IMDG, IATA

UN3266

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Proper Shipping Name**ADG, IMDG, IATA**

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)

Dangerous Goods Class**ADG Class:**

8

Packing Group:**ADG, IMDG, IATA**

I

EMS Number:

F-A,S-B

Hazchem Code:

2X

Special Provisions:

274

Excepted quantities (EQ): E0**Limited Quantities:**

0

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All ingredients are listed.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 19.01.2024**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Oral) 4: Acute toxicity – Category 4

Skin Corrosion/Irritation 1A: Skin corrosion/irritation – Category 1A

Eye Damage 1: Serious eye damage/eye irritation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020”.

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