



Section 1: Identification of the Material and Supplier

Product Name: Invade

Other Names: Mixture of sodium hydroxide, alkaline salts and surfactants.

Proper shipping name (ADG Code): UN 3262
Corrosive solid, basic, inorganic, n.o.s.
(sodium hydroxide, disodium trioxosilicate)

Recommended use: As a heavy duty grease remover.
Use as directed on the product label.

Supplier: Hunters Products (TAS) Pty. Ltd.,
A.C.N. 004 601 263

HEAD OFFICE

60 Gleadow Street,
INVERMAY TAS 7248
Tel: 03 6331 4755
Fax: 03 6334 1065

HOBART OFFICE

105 Albert Road,
MOONAH TAS 7009
Tel: 03 6228 7955
Fax: 03 6228 7988

BURNIE OFFICE

22 Pearl Street,
WIVENHOE TAS 7320
Tel: 03 6431 9627
Fax: 03 6432 2083

Emergency Phone Numbers:

Transport/Fire Emergency: 000 (Emergency services)
Medical Emergency: 131126 (Poisons Information Centre)

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia.
Dangerous goods.

Risk Phrases: R: 35 Causes severe burns.

Safety Phrases: S: 1/2 Keep locked up and out of the reach of children.
S: 13 Keep away from food, drink and animal feeding stuffs.
S: 22 Avoid breathing dust.
S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S: 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S: 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Section 3: Composition/Information on Ingredients

Ingredients:

Sodium carbonate anhydrous	[497-19-8]	30 - 60 %
Sodium hydroxide	[1310-73-2]	10 - 30 %
Sodium metasilicate	[6834-92-0]	10 - 30 %
Other alkaline salts		10 - 30 %
Mixed surfactants		< 10 %
Other ingredients deemed not to be hazardous		< 10 %

Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131126) or a doctor.

Swallowed: If swallowed, do NOT induce vomiting.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eyes: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Inhaled: Remove from exposure, rest and keep warm. Seek medical advice.

First Aid facilities:

Mandatory: Eye wash. Hand wash basin.

Recommended: Emergency shower if handling industrial quantities.

Advice to Doctor:

Product is a highly alkaline mixture containing a moderate proportion of sodium hydroxide, and a low proportion of mixed surfactants. Causes severe burns to living tissues. If swallowed, may cause holes in the stomach and intestines; gastric lavage may be contraindicated. Contact Poisons Information Centre.

Aggravated medical conditions:

No specific data found.

Section 5: Fire Fighting Measures

HAZCHEM Code: 2 X

Evacuate: No.

Extinguishant: Water fog or fine water spray.

Risk of violent reaction or explosion: No.

Products of combustion: Oxides of carbon, oxides of sulphur.

Protective Equipment: Full protective clothing including breathing apparatus and protective gloves.

Section 6: Accidental Release Measures

Emergency Procedures:

Contain.

For large spills:

Contain spillages with sand or earth. Transfer both liquid and solids to suitable container(s). Treat residues as for small spills.

For small spills:

If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise, mix with inert absorbent and transfer to suitable closed container. Wash site of spillage thoroughly with water and detergent.

Section 7: Handling and Storage

Precautions for safe handling:

Avoid contact with skin and eyes. Avoid breathing dust or aerosols. Keep away from acids.

Conditions for safe storage:

Store in a cool, dry, well ventilated place, out of reach of children. Large quantities should be stored in a dangerous goods store. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from acids, ammonium compounds, active metals, wood and wood products. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:

Acids, acidic salts, active metals (such as aluminium, tin, zinc), ammonium compounds, wood and paper products.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA: Sodium hydroxide 2 mg/m³

ES-STEL: None assigned.

ES-PEAK: Sodium hydroxide 2 mg/m³

Notations: None.

[Peak] indicates a ceiling concentration which should not be exceeded, even momentarily.

Biological Limit Values: No data found.

Engineering Controls:

Do not use aluminium, tin, zinc, galvanised iron, wood or wood products as materials of construction.
Ensure adequate ventilation (same as outdoors) when using.
If handling industrial quantities, or if dust/aerosol risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible and at least below the TLV.

Personal Protective Equipment:

Avoid contact with skin and eyes. Avoid breathing dust or aerosols. Personal protection to be selected from those recommended below, as appropriate to mode of use, quantity handled and degree of hazard:-

Normal Use:

Eye/face protection
Gloves, rubber or plastic.

Industrial Quantities:

Face shield or safety glasses
Gloves, rubber or plastic
Plastic apron, sleeves and boots
Impervious overalls.

Section 9: Physical and Chemical Properties

Appearance: White granular powder.
Odour: Almost odourless.
pH: About 14 very alkaline.
Vapour Pressure: No data.
Vapour Density: Not applicable.
Boiling Point: No data.
Melting Point: No data.
Volatiles: None.
Volatile Organic Compounds (VOC): None.
Evaporation Rate: Not applicable.
Solubilities: Soluble in water, generating heat.
Specific Gravity/Density: No data.
Flash Point: None.
Flammable Limits: None.
Dust Explosion: Will not happen.
Auto-ignition Temperature: No data.

Other Information:

Hygroscopic, will absorb moisture from the air.
Will absorb carbon dioxide from the air.
Highly alkaline mixture. Will react violently with acids, generating carbon dioxide, a simple asphyxiant. Reaction with ammonium compounds may generate ammonia, a toxic gas. Contact with aluminium, tin, zinc or galvanised iron may generate hydrogen, a flammable gas. Will attack wood and paper products. May attack glass on prolonged contact. Spillages will be slippery when wet.

Section 10: Stability and Reactivity

- Chemical Stability:** Stable under normal conditions.
- Conditions to Avoid:** Incompatible materials, moisture.
- Incompatible Materials:** Acids, acidic salts, active metals (such as aluminium, tin and zinc), ammonium compounds, wood and wood products, glass.
- Hazardous Decomposition Products:** Oxides of sulphur.
- Hazardous Reactions:** Will react violently with acids, generating carbon dioxide.
Contact with active metals may generate hydrogen.
Reaction with ammonium compounds may generate ammonia.

Section 11: Toxicological Information

Health Effects:

No data available for the mixture. Information presented relates to individual ingredients.

- Acute:**
- Swallowed:** Can cause burns to the mouth and throat, nausea, vomiting, abdominal pains and diarrhoea (occasionally bloody), fall in blood pressure, heart failure, coma and death. May cause swelling of the larynx with subsequent suffocation.
If not immediately fatal, may cause holes in the stomach and intestines with subsequent scarring and stricture. The sites of such internal scarring have been associated with the later development of stomach cancer. Internal damage may not be known until days after ingestion, but may still be fatal.
- Skin:** May cause severe, deep burns. Mists, aerosols and dusts may cause small burns. May cause redness, pain and serious skin burns.
- Eyes:** Corrosive to eyes. Causes redness, pain and blurred vision. Contact with the eyes may rapidly cause severe tissue damage, deep burns and permanent impairment or total loss of sight.

Inhaled: Dusts will be irritating to the respiratory system, and may cause damage to the upper respiratory tract and the lungs. Effects may range from mild irritation of the mucous membranes to severe pneumonitis (inflammation and damage to lung tissues), and may include cough, a burning sensation, laboured breathing, sneezing, sore throat and runny nose.
Inhalation of dusts or aerosols may lead to pulmonary oedema (fluid build-up in the lungs), which may become a medical emergency. Onset of symptoms may be delayed by several hours.

Chronic: Repeated skin exposure may lead to irritation and dermatitis.
Chronic exposure to dusts may cause nose bleeds, nasal congestion, erosion of the teeth, chest pain and bronchitis, and may also result in perforation of the nasal septum.

LD₅₀: Sodium carbonate anhydrous 4,090 mg/kg oral, rat.
Sodium hydroxide No data found.
Sodium metasilicate anhydrous 1,153 mg/kg oral, rat.
770 mg/kg oral, mouse.

LC₅₀: Sodium carbonate anhydrous 1,200 mg/m³/2 hours, mouse.

LDLo: Sodium hydroxide 500 mg/kg oral, rabbit.

Section 12: Ecological Information

Ecotoxicity: Harmful to aquatic organisms.

Persistence and degradability: The surfactants used in this product are considered to be readily biodegradable.

Mobility: Readily transported by water.

Environmental Fate: No data.

Bioaccumulative potential: No data.

Other adverse environmental effects: Contains mixed surfactants. Local concentrations may be harmful to aquatic organisms, including fish.
Contains a moderate proportion of phosphate. May contribute to the development of algal blooms in natural waters.

Section 13: Disposal Considerations

The generator of any wastes from this product is responsible for its proper classification, transport and disposal.

Consult appropriate local and State regulations.

Disposal methods and containers:

Avoid disposal to natural waters or the environment.

Avoid using un-lined metal, or glass, containers.

Special precautions for landfill or incineration:

Unsuitable for incineration.

Section 14: Transport Information

UN Number: UN 3262

UN Proper shipping name: Corrosive solid, basic, inorganic, n.o.s.
(sodium hydroxide, disodium trioxosilicate)

Class and subsidiary risk: 8 Corrosive.

Packaging group: II

Special precautions for user: Do not store or transport with dangerous goods of classes 1, 4.3, 5.1, 5.2, 7, 8 (acidic), foodstuff and foodstuff empties.

HAZCHEM Code: 2 X

Material for export: Regulated.
Refer to **IMO/IMDG** and **IATA/ICAO**.

Section 15: Regulatory Information

Poisons (SUSDP): Schedule 6
Sodium hydroxide > 5 %

Dangerous Goods: Yes. UN 3263 8/II 2 X.

Carcinogen:	Australia	IARC	NTP	RTECS
	No.	No.	No.	No.

Agricultural and Veterinary Chemicals Act: Not applicable.

Australian Inventory of Chemical Substances (AICS): Listed.

Other National/International Regulations: No data.

Section 16: Other information

Date of MSDS update: May 2007
Complete review and re-write of all sections.

Abbreviations:

NOHSC - National Occupational Health and Safety Commission.
ACGIH - American Conference of Governmental Industrial Hygienists.
MAK - Maximum workplace concentration - Germany,
(*maximale Arbeitsplatzkonzentration*)
IARC - International Agency for Research on Cancer (France).
NPT - National Toxicology Program (USA).
RTECS - Registry of Toxic Effects of Chemical Substances.

Literature references:

Other Available Sources of Data:

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [2011(2003)] - NOHSC.
Australian Dangerous Goods Code.
Standard for the Uniform Scheduling of Drugs and Poisons - AHMAC.
Exposure Standards for Atmospheric Contaminants in the Occupational Environment [1003]- NOHSC.
List of Designated Hazardous Substances [10005] - NOHSC.
Merck Index - Merck Inc.
Sax's Dangerous Properties of Industrial Materials - Lewis.
Handbook of Toxic and Hazardous Chemicals and Carcinogens - Sittig.
Handbook of Reactive Chemical Hazards - Bretherick.
Hawley's Condensed Chemical Dictionary - Wiley Interscience.
AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.