



# SAFETY DATA SHEET

**BROWNOUT**

Infosafe No.: X01E4

Version No.: 1.0

ISSUED Date: 21/07/2016

Issued by: SST NEW ZEALAND LIMITED

## 1. IDENTIFICATION

### GHS Product Identifier

BROWNOUT

### Company Name

SST NEW ZEALAND LIMITED

### Address

119 Carbine Road, Mt Wellington, Auckland 1060  
NEW ZEALAND

### Telephone/Fax Number

Telephone: +64 9 2593777

### Emergency phone number

0800 154 666

### E-mail Address

compliance@axieo.com

### Recommended use of the chemical and restrictions on use

A tank mix adjuvant to improve Brownout and rainfastness of Glyphosate herbicides

## 2. HAZARD IDENTIFICATION

### GHS classification of the substance/mixture

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.  
Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.

6.1D (Dermal) - Substance that is acutely toxic

6.1E (Oral) - Substance that is acutely toxic

6.3A Substance that is irritating to the skin

6.5B Substance that is a contact sensitiser

6.8A Substance that is known or presumed to be a human reproductive or developmental toxicant

6.9B (Repeated exposure) - Substance that is harmful to human target organs or systems

8.3A Substance that is corrosive to ocular tissue

9.1A Substance that is very ecotoxic in the aquatic environment

9.2B Substance that is ecotoxic in the soil environment

### Signal Word (s)

DANGER

### Hazard Statement (s)

H303 May be harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H360 May damage fertility or the unborn child .

H373 May cause damage to organs through prolonged or repeated exposure by ingestion.

H410 Very toxic to aquatic life with long lasting effects.

H422 Toxic to the soil environment.

#### **Pictogram (s)**

Corrosion, Health hazard, Exclamation mark, Environment



#### **Precautionary statement – Prevention**

P102 Keep out of reach of children.

P103 Read label before use.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash contaminated skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

#### **Precautionary statement – Response**

##### **GENERAL**

P101 If medical advice is needed, have product container or label at hand.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P310 Immediately call a POISON CENTER or doctor/physician.

P391 Collect spillage.

##### **SKIN**

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P362 Take off contaminated clothing and wash before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

##### **EYE**

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

#### **Precautionary statement – Storage**

P405 Store locked up.

#### **Precautionary statement – Disposal**

P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided. See Section 13 for disposal details.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

---

#### Ingredients

Name	CAS	Proportion
Orange, sweet, extract	8028-48-6	50-80 %
N-Methyl-2-pyrrolidone	872-50-4	1-<15 %
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	1-<10 %
Calcium dodecyl benzene sulphonate	26264-06-2	1-<10 %
Ethoxylated nonylphenol	9016-45-9	1-<10 %
2-Ethylhexanol	104-76-7	1-<5 %
Benzene, 2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-(trifluoromethyl)-	42874-03-3	1-<5 %
Ingredients determined not to be hazardous		Balance

### 4. FIRST-AID MEASURES

---

#### Inhalation

If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

#### Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

#### Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

#### Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.

#### First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

#### Advice to Doctor

Treat symptomatically.

#### Other Information

For advice in an emergency, contact a Poisons Information Centre or a doctor at once. (0800 764 766)

### 5. FIRE-FIGHTING MEASURES

---

#### Suitable Extinguishing Media

Carbon dioxide, dry chemical, foam, water mist or water spray. Alcohol resistant foam is preferred. If not available normal foam can be used.

#### Unsuitable Extinguishing Media

Do not use water jet.

#### Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

#### Specific Hazards Arising From The Chemical

This product will burn if exposed to fire.

#### Decomposition Temperature

Not available

### Precautions in connection with Fire

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

## 6. ACCIDENTAL RELEASE MEASURES

### Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid inhalation of vapours and mists, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene i.e. washing hands prior to eating, drinking, smoking or using toilet facilities.

Avoid exposure. Do not handle until all safety precautions have been read and understood. It is recommended that pregnant or breastfeeding women should not handle this product unless adequate exposure protection can be assured at all times. Female personnel planning pregnancy should be made aware of the potential risks.

### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids. Reference should also be made to all applicable local and national regulations.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational exposure limit values

Substance	Regulations	Exposure Duration	Exposure Limit	Units	Notes
N-Methyl-2-pyrrolidone	NZ OELs List	TWA	25	ppm	
N-Methyl-2-pyrrolidone	NZ OELs List	TWA	103	mg/m3	
N-Methyl-2-pyrrolidone	NZ OELs List	STEL	75	ppm	
N-Methyl-2-pyrrolidone	NZ OELs List	STEL	309	mg/m3	

### Biological Limit Values

Name: N-methyl-2-pyrrolidone

Determinant: 5-Hydroxy-N-methyl-2-pyrrolidone in urine

BEI®: 100mg/l

Sampling time: end of shift.

Source: American Conference of Industrial Hygienists (ACGIH)

### Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant

regulations for further information concerning ventilation requirements.

Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1:2009 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

#### **Respiratory Protection**

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

In case of formation of vapours/aerosols:

Short term: filter apparatus, Filter A-P2

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

#### **Eye Protection**

Safety glasses with full face shield should be used. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

#### **Hand Protection**

Wear gloves of impervious material such as nitrile rubber or neoprene. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

#### **Body Protection**

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

#### **Other Information**

Skin Protection: a protective ointment is recommended

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

---

#### **Form**

Liquid

#### **Appearance**

Clear, yellow-brown liquid

#### **Colour**

Yellow-brown

#### **Odour**

Sweet

#### **Decomposition Temperature**

Not available

#### **Melting Point**

Not available

#### **Boiling Point**

215°C

#### **Solubility in Water**

Not available

#### **Solubility in Organic Solvents**

Miscible (in all proportions) with: ethanol

#### **pH**

Acidic

#### **Vapour Pressure**

Not available

#### **Vapour Density (Air=1)**

0.905g/ml

#### **Evaporation Rate**

Not available

**Odour Threshold**

Not available

**Viscosity**

Refer to Section 9: Kinematic Viscosity and Dynamic Viscosity

**Volatile Component**

Not available

**Partition Coefficient: n-octanol/water**

Not available

**Density**

0.905g/ml

**Flash Point**

>100°C (Closed Cup)

**Flammability**

Non Flammable

**Auto-Ignition Temperature**

Not available

**Flammable Limits - Lower**

0.7% by volume

**Flammable Limits - Upper**

6.1% by volume

**Explosion Properties**

Not available

**Oxidising Properties**

Not available

**Kinematic Viscosity**

Not available

**Dynamic Viscosity**

Not available

## 10. STABILITY AND REACTIVITY

---

**Reactivity**

Refer to Section 10: Possibility of hazardous reactions

**Chemical Stability**

Stable under normal conditions of storage and handling.

**Conditions to Avoid**

Heat, open flames and other sources of ignition.

**Incompatible materials**

Strong oxidising agents.

**Hazardous Decomposition Products**

Thermal decomposition may result in the release of toxic and/or irritating fumes including: carbon dioxide and carbon monoxide.

**Possibility of hazardous reactions**

Reacts with incompatible materials.

**Hazardous Polymerization**

Not available

## 11. TOXICOLOGICAL INFORMATION

---

**Toxicology Information**

Available toxicity data is given below.

**Ingestion**

May be harmful if swallowed. Ingestion of this product may cause irritation to the mouth, throat, oesophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

**Inhalation**

Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.

**Skin**

Harmful in contact with skin. Product can be absorbed through skin with resultant harmful systemic effects. Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis. May cause an allergic skin reaction.

**Eye**

Causes serious eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, permanent damage and blindness.

**Respiratory sensitisation**

Not expected to be a respiratory sensitiser.

**Skin Sensitisation**

May cause an allergic skin reaction.

**Germ cell mutagenicity**

Not considered to be a mutagenic hazard.

**Carcinogenicity**

Not considered to be a carcinogenic hazard.

**Reproductive Toxicity**

May damage fertility or the unborn child. Classified as a Known or presumed human reproductive or developmental toxicant.

**STOT-single exposure**

Not expected to cause toxicity to a specific target organ.

**STOT-repeated exposure**

May cause damage to organs through prolonged exposure if swallowed.

**Aspiration Hazard**

Not expected to be an aspiration hazard.

**Other Information**

Prolonged exposure to high doses may cause kidney and liver damage.

---

## 12. ECOLOGICAL INFORMATION

---

**Ecotoxicity**

Very toxic to aquatic life with long lasting effects. Toxic to the soil environment.

**Persistence and degradability**

Not available

**Mobility**

Not available

**Bioaccumulative Potential**

Not available

**Other Adverse Effects**

Not available

**Environmental Protection**

Do not discharge this material into waterways, drains and sewers.

---

## 13. DISPOSAL CONSIDERATIONS

---

**Disposal considerations**

Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be

disposed of in accordance with all applicable local and national regulations.

#### Product Disposal:

Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. In this specific case the product is a combustible substance and therefore can be sent to an approved high temperature incineration plant for disposal. Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed. Do not dispose into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected. In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.

#### Container Disposal:

The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service. Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous. In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

## 14. TRANSPORT INFORMATION

---

### Transport Information

This material is classified as Dangerous Goods Class 9 Miscellaneous Dangerous Goods must not be loaded in the same freight container or on the same vehicle with:

Class 1: Explosives

Class 9 dangerous goods that contain organic matter must not be loaded in the same bulk container or tankwagon with dangerous goods of Division 5.1 unless the Class 9 and Division 5.1 dangerous goods are in separate compartments of a bulk container or tankwagon. Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices. Segregation devices may be used to segregate dangerous goods of Class 9 when the nature of those dangerous goods requires them to be segregated from dangerous goods of Class 3, 4, 5, 6 or 8 or from food items.

### Special Precautions for User

Not available

### U.N. Number

3082

### UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (Contains Orange, sweet, extract)

### Transport hazard class(es)

9

### Packing Group

III

### Hazchem Code

•3Z

### UN Number (Air Transport, ICAO)

3082

### IATA/ICAO Proper Shipping Name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (Contains Orange, sweet, extract)

### IATA/ICAO Hazard Class

9

### IATA/ICAO Packing Group

III

### IATA/ICAO Symbol

Miscellaneous Dangerous Goods

### IMDG UN No

3082



**IMDG Proper Shipping Name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (Contains Orange, sweet, extract)(Orange, sweet, extract) MARINE POLLUTANT

**IMDG Hazard Class**

9

**IMDG Pack. Group**

III

**IMDG Marine pollutant**

Yes

**IMDG EMS**

F-A,S-F

**Transport in Bulk**

Not available

## 15. REGULATORY INFORMATION

---

**Regulatory information**

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand. Group Standard: Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006.

**HSNO Approval Number**

HSR002503

## 16. OTHER INFORMATION

---

**Date of preparation or last revision of SDS**

SDS Created: July 2016

**References**

Workplace Exposure Standards and Biological Exposure Indices.

Transport of Dangerous goods on land NZS 5433.

Preparation of Safety Data Sheets - Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06).

Assigning a hazardous substance to a group standard.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

## END OF SDS

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

The compilation of SDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.