

Safety Data Sheet

according to WHS Regulations

Printing date 11.10.2019

Revision: 11.10.2019

1 Identification

Product Name: SAFETY DEVICES

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Safety devices.

Details of Manufacturer or Importer:

Isuzu Australia Limited
66 Foundation Road
Truganina, VIC 3029

Phone Number: 1800 035 640

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

2 Hazard(s) Identification

Hazardous Nature:

Not 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).



flame over circle

Oxidising Solids 1

H271 May cause fire or explosion; strong oxidiser.



Acute Toxicity (Oral) 4

H302 Harmful if swallowed.

Skin Corrosion/Irritation 2

H315 Causes skin irritation.

Serious Eye Damage/Irritation 2A

H319 Causes serious eye irritation.

Signal Word Danger

Hazard Statements

H271 May cause fire or explosion; strong oxidiser.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary Statements

P210 Keep away from heat. - No smoking.

P220 Keep/Store away from clothing/combustible materials.

P221 Take any precaution to avoid mixing with combustibles.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P283 Wear fire/flame resistant/retardant clothing.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

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

P321 Specific treatment (see on this label).

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

(Contd. on page 2)

Safety Data Sheet

according to WHS Regulations

Printing date 11.10.2019

Revision: 11.10.2019

Product Name: SAFETY DEVICES

(Contd. of page 1)

P306+P360	IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use to extinguish: CO ₂ , powder or water spray.
P371+P380+P375	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

Additional Information

This device is considered as a manufactured article and so is exempt from GHS classification. The classifications listed above refer to the contents of this device. Users will not be exposed to the contents during normal use, but hazardous materials may be released when the device is activated or if subjected to fire, mechanical shocks, or misuse.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:		
CAS: 506-93-4	Guanidinium nitrate ⚠ Oxidising Solids 3, H272; ⚠ Acute Toxicity (Oral) 4, H302; Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H335	10 - 20%
CAS: 10042-76-9	Strontium nitrate ⚠ Oxidising Solids 2, H272	10 - 20%
CAS: 7782-42-5	Graphite	10 - 20%
CAS: 4418-61-5	5-Aminotetrazole ⚠ Acute Toxicity (Oral) 4, H302; Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H335	<5%
CAS: 7440-42-8	Boron ⚠ Acute Toxicity (Oral) 2, H300	<5%
CAS: 7757-79-1	Nitric acid, potassium salt ⚠ Oxidising Solids 2, H272	<5%
CAS: 1313-27-5	Molybdenum trioxide ⚠ Carcinogenicity 2, H351; ⚠ Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H335	<1%
CAS: 7440-67-7	Zirconium powder (pyrophoric) ⚠ Pyrophoric Liquids 1, H250; Pyrophoric Solids 1, H250; Water-react. 1, H260	<0.1%
CAS: 7440-33-7	Tungsten	<0.1%
CAS: 7778-74-7	Potassium perchlorate ⚠ Oxidising Liquids 1, H271; Oxidising Solids 1, H271; ⚠ Acute Toxicity (Oral) 4, H302	<0.1%

Additional information:

The device is sealed and designed to withstand temperatures and pressures encountered during normal use. Thus, the ingredients have no hazard potential except if the device is activated, violated or dismantled. If exposed to a fire, mechanical shocks, or electric stress by misuse, the device may be breached and the hazardous materials may be released. Therefore the device should not be punctured, incinerated or exposed to temperatures above the temperature range of the device.

(Contd. on page 3)

Safety Data Sheet

according to WHS Regulations

Printing date 11.10.2019

Revision: 11.10.2019

Product Name: SAFETY DEVICES

(Contd. of page 2)

4 First Aid Measures

Inhalation:

If the contents of an opened device are inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact with the contents of an opened device, immediately remove contaminated clothing and wash affected areas with water and soap for at least 15 minutes. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact with the contents of an opened device, hold eyelids open and rinse with water for at least 15 minutes. Seek immediate medical attention.

Ingestion:

If the contents of an opened device are swallowed, do not induce vomiting. Rinse mouth with water and give at least two glasses of water or milk. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: Contents of an opened device may cause irritation to the nose, throat and respiratory system.

Skin Contact: Contents of an opened device cause skin irritation.

Eye Contact: Contents of an opened device cause serious eye irritation.

Ingestion: Contents of an opened device are harmful if swallowed and may cause irritation to the mouth, throat and gastrointestinal tract.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, nitrogen, potassium, silicon and strontium and other toxic gases.

Product is not flammable but components may burn in a fire. May intensify fire or explosion; oxidiser.

Device may rupture or explode in a fire, releasing hazardous contents.

Devices close to fire should be removed if safe to do so.

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 and protective equipment. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking. Do not touch or walk through spilt product.

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:

The material contained within the device is released only in the case of mechanical, electrical or thermal abuse. In the event of device rupture and leakage allow the device to cool and the vapour to dissipate. Stop leak if safe to do so and absorb spill with sand, lime, rock salt or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Clean the spill area with water.

(Contd. on page 4)

Safety Data Sheet

according to WHS Regulations

Printing date 11.10.2019

Revision: 11.10.2019

Product Name: SAFETY DEVICES

(Contd. of page 3)

7 Handling and Storage

Precautions for Safe Handling:

Do not disassemble, crush, deform, expose to high temperatures or incinerate. Do not weld, solder or in any way modify devices. Do not damage or remove the external casing.

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

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. Contaminated work clothing must not be allowed out of the workplace. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Storage preferably in cool, dry and well ventilated area. Protect from direct sunlight, impact, static electricity, heat, sparks, open flames and other sources of ignition. Keep away from strong acids, strong bases and combustible materials.

8 Exposure Controls and Personal Protection

Exposure Standards:**CAS: 7782-42-5 Graphite**WES TWA: 3 mg/m³**CAS: 1313-27-5 Molybdenum trioxide**WES TWA: 5 mg/m³
as Mo**CAS: 7440-67-7 Zirconium powder (pyrophoric)**WES STEL: 10 mg/m³
TWA: 5 mg/m³
as Zr**CAS: 7440-33-7 Tungsten**WES STEL: 10 mg/m³
TWA: 5 mg/m³
as W

Engineering Controls: Natural ventilation should be adequate under normal use conditions.

Respiratory Protection:

Respiratory protection is not required under normal use conditions.

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. In the case of abuse and leakage of liquid or emission of fumes) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

In case of spill wear protective rubber, neoprene or nitrile 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.

(Contd. on page 5)

Safety Data Sheet

according to WHS Regulations

Printing date 11.10.2019

Revision: 11.10.2019

Product Name: SAFETY DEVICES

(Contd. of page 4)

Eye and Face Protection:

In case of spill wear eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Solid. Sealed steel unit.
Colour:	No information available
Odour:	Odourless
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	No information available
Flammability:	May intensify fire or explosion; oxidiser.
Auto-ignition Temperature:	180 °C
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Density:	No information available
Relative Density:	No information available
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Insoluble or poorly soluble.
Partition Coefficient (n-octanol/water):	No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: May intensify fire or explosion; oxidiser.

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

Conditions to Avoid: Impact, static electricity, heat, sparks, open flames and other sources of ignition.

Incompatible Materials: Strong acids, strong bases and combustible materials.

Hazardous Decomposition Products:

Oxides of carbon, nitrogen, potassium, silicon and strontium and other toxic gases.

11 Toxicological Information

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****CAS: 506-93-4 Guanidinium nitrate**

Oral	LD ₅₀	1,028 mg/kg (mouse)
------	------------------	---------------------

CAS: 10042-76-9 Strontium nitrate

Oral	LD ₅₀	2,750 mg/kg (rat)
------	------------------	-------------------

CAS: 1302-78-9 Bentonite

	LD ₅₀	35 mg/kg (rat) (Intravenous)
--	------------------	------------------------------

CAS: 7440-42-8 Boron

Oral	LD ₅₀	650 mg/kg (rat)
------	------------------	-----------------

(Contd. on page 6)

Safety Data Sheet

according to WHS Regulations

Printing date 11.10.2019

Revision: 11.10.2019

Product Name: SAFETY DEVICES

(Contd. of page 5)

CAS: 7757-79-1 Nitric acid, potassium salt		
Oral	LD ₅₀	3,750 mg/kg (rat)
Dermal	LD ₅₀	>5,000 mg/kg (rat)
CAS: 1313-27-5 Molybdenum trioxide		
Oral	LD ₅₀	125 mg/kg (rat)
CAS: 7440-33-7 Tungsten		
Oral	LD ₅₀	>2,000 mg/kg (rat)
Dermal	LD ₅₀	>2,000 mg/kg (rabbit)

Acute Health Effects**Inhalation:** Contents of an opened device may cause irritation to the nose, throat and respiratory system.**Skin:** Contents of an opened device cause skin irritation.**Eye:** Contents of an opened device cause serious eye irritation.**Ingestion:**

Contents of an opened device are harmful if swallowed and may cause irritation to the mouth, throat and gastrointestinal tract.

Skin Corrosion / Irritation: Causes skin irritation.**Serious Eye Damage / Irritation:** Causes serious eye irritation.**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:** Molybdenum trioxide is classified by IARC as Group 2B - Possibly carcinogenic to humans.**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

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

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:** No information available**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:** No information available**12 Ecological Information****Ecotoxicity:****Aquatic toxicity:****CAS: 7757-79-1 Nitric acid, potassium salt**EC₅₀/48 h 490 mg/l (daphnia)LC₅₀/96 h 1,378 mg/l (guppy)**Persistence and Degradability:** No further relevant information available.**Bioaccumulative Potential:** No further relevant information available.**Mobility in Soil:** No further relevant information available.**Other adverse effects:** No further relevant information available.

(Contd. on page 7)

Safety Data Sheet

according to WHS Regulations

Printing date 11.10.2019

Revision: 11.10.2019

Product Name: SAFETY DEVICES

(Contd. of page 6)

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	UN3268
Proper Shipping Name	
ADG, IMDG, IATA	SAFETY DEVICES, electronically initiated
Dangerous Goods Class	
ADG Class:	9 Miscellaneous dangerous substances and articles.
Packing Group:	Not applicable
EMS Number:	F-B,S-X
Hazchem Code:	2Z
Special Provisions:	280, 289
Limited Quantities:	0
Packagings & IBCs - Packing Instruction:	P902, LP902

15 Regulatory Information

Australian Inventory of Chemical Substances: All ingredients are listed.

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Not Scheduled.

16 Other Information

Date of Preparation or Last Revision: 11.10.2019

Prepared by: MSDS.COM.AU Pty Ltd

www.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)
 Pyrophoric Liquids 1: Pyrophoric liquids, Hazard Category 1
 Pyrophoric Solids 1: Pyrophoric solids, Hazard Category 1
 Water-react. 1: Substances and mixtures, which in contact with water, emit flammable gases. Hazard Category 1
 Oxidising Liquids 1: Oxidising liquids, Hazard Category 1
 Oxidising Solids 1: Oxidising solids, Hazard Category 1
 Oxidising Solids 2: Oxidising solids, Hazard Category 2
 Oxidising Solids 3: Oxidising solids, Hazard Category 3
 Acute Toxicity (Oral) 2: Acute toxicity – Category 2
 Acute Toxicity (Oral) 4: Acute toxicity – Category 4
 Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2

(Contd. on page 8)

Safety Data Sheet

according to WHS Regulations

Printing date 11.10.2019

Revision: 11.10.2019

Product Name: SAFETY DEVICES

(Contd. of page 7)

Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation – Category 2A

Carcinogenicity 2: Carcinogenicity – Category 2

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 - February 2016”

The information contained in this safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. Isuzu Australia Limited makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. MSDS.COM.AU Pty Ltd is not in a position to warrant the accuracy of the data herein. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.