

1. IDENTIFICATION OF SUBSTANCE & COMPANY

PRODUCT NAME:	Denso Steel Putty
RECOMMENDED USE:	Steel Putty used with Denso Repair Wrap
COMPANY:	DENSO (AUSTRALIA) PTY LTD
REGULAR TELEPHONE NUMBER:	+61 3 9356 7600
EMERGENCY TELEPHONE NUMBER:	POISONS INFORMATION LINE: 13 11 26 (Australia) NZ POISONS CENTER: 0800 764 766 (New Zealand)
	+61 3 9356 7616 or +61 402 867 141
FACSIMILE NUMBER:	+61 3 9356 7699
ADDRESS:	77-95 National Boulevard, Campbellfield, VIC 3061, AUSTRALIA PO Box 76167, Manakau City, Auckland, NEW ZEALAND

2. HAZARDS IDENTIFICATION

LABELLING INFORMATION

UN Number: Not regulated

ADG Code: Not regulated for transport

Hazard Statements:



GHS07 Exclamation mark



GHS09 Environment

GHS Signal word: **WARNING**

Hazard Statements:

H315	Category 2. Causes skin irritation.
H317	Category 1. May cause an allergic skin reaction.
H319	Category 2A. Causes serious eye irritation.
H411	Category 2. Toxic to aquatic life with long-lasting effects.

Precautionary Statements

Prevention:

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P321	Specific treatment (Section 4 - First Aid Measures in this safety data sheet).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P332+P313:	If skin irritation occurs: get medical advice/attention
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse

Disposal:

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT CONTAINS:	CAS NUMBER:	CONCENTRATION (W/W) %:
Bisphenol-A (epichlorohydrin) epoxy resin	25068-38-6	10-30
Talc, not containing asbestiform fibers	14807-96-6	30-60
Silica, crystalline Quartz (1) (2)	14808-60-7	0.1-1.0
Ferrosillicon	8049-17-0	10-30
Glass, oxide, chemicals	65997-17-3	10-30
Nepheline sySnite	37244-96-5	1-5

Notes:

(1) substance classified with a health or environmental hazard (2) Substance with a workplace exposure limit

4. FIRST AID MEASURES

GENERAL ADVICE:	Seek medical advice if symptoms persists.
SKIN CONTACT	Flush contaminated skin with plenty of water. Remove contaminated clothing and wash thoroughly before reuse. In the event of any symptoms, avoid further exposure. Seek medical attention if irritation develops or persists after area is washed.
EYE CONTACT	Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids open at all times.
INHALATION	Move exposed person to area free from risk of further exposure. Administer oxygen or artificial respiration as needed. Obtain medical attention.
INGESTION	Wash out mouth with water. Remove dentures, if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposure person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

SYMPTOMS CAUSED BY EXPOSURE:

Acute eye: Irritating to the eyes.

Acute skin: Irritating to the skin – may cause allergic skin reaction.

Acute ingestion: Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract. Symptoms can include: sore throat, abdominal pain, nausea, vomiting and diarrhoea.

MEDICAL ATTENTION AND SPECIAL TREATMENT:

Treat symptomatically.

5. FIREFIGHTING MEASURES

EXTINGUISHING MEDIA	Water spray, foam, carbon dioxide, dry chemical
DO NOT USE	Do not use solid water stream as it may scatter and spread fire.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

Decomposition products may under fire conditions may include the following materials: carbon dioxide, carbon monoxide, sulfur oxides, halogenated compounds, and metal oxides.

PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Fire-fighters should wear appropriate personal protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

OTHER INFORMATION

Do not allow run-off from fire fighting to enter drains or water courses

6. ACCIDENTAL RELEASE

PERSONAL PRECAUTIONS

Normal housekeeping practices. Pick up and contain any spilled material.

ENVIRONMENTAL PRECAUTIONS

Do not allow material to enter water courses.

METHOD OF CLEANING

Pick up and contain any spilled material. Dispose of materials according to the applicable local and national regulations.

7. HANDLING AND STORAGE

HANDLING

Wash thoroughly after handling, before eating, drinking, smoking and using the restroom facilities. Launder contaminated clothing/personal protective equipment before re-use.

STORAGE

Store in a cool, dry, well-ventilated area. Store below 32°C.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

	Component	Exposure limits		
		ACGIH	NIOSH	OSHA-PELs
EXPOSURE LIMITS	Glycidyl ether of bisphenol A resin	ND	ND	ND
	Tri (dimethylaminomethyl) phenol	5 ppm TLV	ND	ND
	Talc	2 mg/m ³	ND	20 mppcf
	Silica, crystalline quartz (respirable)	TLV 0.025 mg/m ³ TWA	0.05 mg/m ³	30 mg/m ³ , 250 mppcf – total dust 10 mg/m ³ TWA (respirable)
BIOLOGICAL LIMIT VALUES	Not allocated			
ENGINEERING CONTROLS	Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limits outlined in this document.			
RESPIRATORY PROTECTION	Not required under anticipated use conditions			
SKIN PROTECTION	Appropriate impervious gloves.			
EYE/FACE PROTECTION	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary. This may include, but is not limited to, safety glasses, goggles and face shields.			

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Putty	EXPLOSION LIMITS	Not available
COLOUR (S)	Grey/black	VAPOUR PRESSURE	Not available
ODOUR	Not available	RELATIVE DENSITY	Not available
ODOUR THRESHOLD	Not available	SPECIFIC GRAVITY	Not available
MELTING POINT	Not available	SOLUBILITY (@25°C)	Not available
BOILING POINT	Not available	PARTITION COEFFICIENT: n-octanol/water	Not available
pH	Not available	AUTO-IGNITION TEMPERATURE	Not available

FLASH POINT	>94°C (closed cup)	DECOMPOSITION TEMPERATURE	Not available
EVAPORATION RATE	< 1 (Butyl acetate=1)	VISCOSITY	Not available
FLAMMABILITY	Extremely flammable in the presence of open flames, sparks and static discharge.	% VOLATILE	<0.1%

10. STABILITY AND REACTIVITY

REACTIVITY	No dangerous reactions known.
CHEMICAL STABILITY	Stable under standard use and storage conditions.
CONDITIONS TO AVOID	No specific data
MATERIALS TO AVOID	No specific data
HAZARDOUS DECOMPOSITION PRODUCTS	In fire: aldehydes, acids and oxides of carbon, nitrogen and sulfur.
HAZARDOUS POLYMERISATION	Will not occur

11. TOXICOLOGICAL INFORMATION

Ingredient	Results	Species	Exposure
TOXICOLOGY INFORMATION Bisphenol-A-(epichlorhydrin) epoxy resin CAS25068-38-6	Eyes – mild irritant	Rabbit	100 mg
	Skin – moderate irritant	Rabbit	24 h, 500 microliters
	Skin – severe irritant	Rabbit	24 h, 2 mg

POSSIBLE ROUTES OF EXPOSURE Likely routes of exposure – skin and eye contact.

GERM CELL MUTAGENICITY No known significant effects or critical hazards.

CARCINOGENICITY No known significant effects or critical hazards.

REPRODUCTIVE TOXICITY No data available.

STOT-SINGLE EXPOSURE No data available.

STOT-REPEATED EXPOSURE No data available.

SYMPTOMS/EFFECTS BOTH ACUTE AND DELAYED Acute eye irritation: adverse symptoms may include pain or irritation, watering redness

Acute skin irritation: adverse symptoms may include irritation, redness

12. ECOLOGICAL INFORMATION

ECO-TOXICITY No data available for the product itself.

Components:

CAS 25068-38-6:

Toxicity to fish – 96 h

LC50: 3.1 mg/L

Test Type: Fathead minnow

Toxicity to daphnia and other aquatic invertebrates – 48 h

LC50: >1.3 mg/L

Test Type: Similar material

CAS 14808-60-7, CAS 14807-96-6: not toxic to aquatic life

PERSISTENCE AND

DEGRADABILITY

Components:

CAS 25068-38-6: biodegradability after 28 days: 12%

CAS 14808-60-7, CAS 14807-96-6: persistent/not biodegradable

MOBILITY	No data available
BIO-ACCUMULATIVE POTENTIAL	Component CAS 25068-38-6 Low Pow: 2.64 to 3.78 BCF: 31 Potential: Low
ENVIRONMENTAL PROTECTION	No data available

13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional and local authority requirements.

14. TRANSPORT INFORMATION

UN No:	Not regulated
PROPER SHIPPING NAME:	Not regulated
CLASS:	Not regulated
HAZCHEM CODE:	Not allocated
PACKING GROUP:	Not regulated
MARINE POLLUTANT	Yes

15. REGULATORY INFORMATION

AICS (AUSTRALIA) SCHEDULE	On Australian inventory or in compliance with inventory
NZIoC (NEW ZEALAND) SCHEDULE	On New Zealand inventory or in compliance with inventory
HSNO NZ CLASSIFICATION	HSR002662 Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2020. 6.3A Skin irritation, Category 2 6.4A Eye irritation, Category 2 6.5B Skin Sensitisation, Category 1

Note: Actual label may not be as above if product was supplied some time previously or labelling is in transition period.

16. OTHER INFORMATION

Date reviewed: 17 January 2024

Supersedes: 08 June 2023

Acronyms

ADG	Australian Dangerous Goods	NTP	National Toxicology Program
ACGIH	American Conference of Governmental Industrial Hygienists	NZIoC	New Zealand Inventory of Chemicals
AICS	Australian Inventory of Chemical Substances	STOT	Specific target organ toxicity
CAS	Chemical Abstract Service	TWA	Time-weighted average
GHS	Globally harmonised system	TLV	Threshold limit value
IARC	International Agency for Research on Cancer		

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- End of Safety Data Sheet -