

SDS Reference CA4596
Version No. 2
Revision Date 26/06/2013
Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name RELY T-25B

SECTION 1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND COMPANY / UNDERTAKING

Product Identifier RELY T-25B
CAS No. Not applicable EC No. Not applicable Index No. Not applicable

Synonym (s) None

REACH Registration Number Not applicable

Relevant identified uses and uses advised against
Industrial and Professional:
Puncture-proofing pneumatic tyres for low speed applications.
Consumer:
Not applicable.
Avoid any use:
Restricted to industrial and professional use.

Details of the supplier
Carpenter Ltd
Dinting Lodge Industrial Estate
Glossop Telephone +44 (0) 1457 861141
Derbyshire, SK13 6LE

e-mail address david.nield@carpenter.com

Emergency Telephone number +44 (0) 1457 861141

SECTION 2. HAZARDS IDENTIFICATION

Classification (EC 1272/2008)
3.4 — Sensitisation — Skin, Hazard Category 1
3.5 — Germ cell mutagenicity, Hazard Category 2
3.6 — Carcinogenicity, Hazard Category 1B
3.7 — Reproductive toxicity, Hazard Category 2
4.1 — Hazardous to the aquatic environment — Chronic Hazard Category 1

Classification (1999/45/EC)
CARC. CAT.2 R45
HARMFUL R43, 63, 66, 68
DANGEROUS FOR THE ENVIRONMENT R50/53

Label Elements:



Signal Word

DANGER

Hazard Statements
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

SDS Reference CA4596
 Version No. 2
 Revision Date 26/06/2013
 Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name	RELY T-25B
---------------------	-------------------

SECTION 2. HAZARDS IDENTIFICATION

Precautionary Statements

P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe fumes and vapours.
P273	Avoid release to the environment.
P281	Use personal protective equipment as required.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P501	Dispose of contents/container in accordance with national regulation.

Supplemental information Not applicable.

Other hazards Not classified for PBT and vPvB, based on the assessment carried out according to Annex XIII of REACH regulation.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No	EC No	REACH Reg No		Classification	Conc'n %
Residues (petroleum), catalytic reformer fractionator residue distillation	64741-67-9	265-069-3	01-2119488737-18	Dgr	GHS08 H332 3.1/4	60-70
					H350 3.6/1B	
					H361 3.7/2	
					H373 3.9/2	
					GHS09 H410 4.1/1	
					T R45 Carc. Cat. 2	
					Xn R20, 48/21, 63, 66	
N R50/53						
*m-Phenylenediamine	108-45-2	203-584-7	Not yet available	Wng	GHS07 H302 3.1/4	<10
					H312 3.1/4	
					H317 3.4/1	
					H332 3.1/4	
					GHS08 H341 3.5/2	
Xn R20/21/22, 43, 68						
Dibutyl tin carboxylate	77-58-7	201-039-8	Not yet available	Dgr	GHS07 H360F 3.7/1B	<0.3
					GHS08 H360D 3.7/1B	
					H372 3.9/1	
					H341 3.5/2	
					H302 3.1/4	
					H315 3.2/2	
					H400 4.1/1	
					H410 4.1/1	
					T R60	
					R61	
					R48/25	
Xn R68 Muta Cat 3						
R22						
Xi R38						
N R50/53						

Other components are either not classified or are below the concentration limit for classification

Further information *CONTAINS A SUBSTANCE WITH AN OCCUPATIONAL EXPOSURE LIMIT.
 Key to abbreviations, hazard statements and risk phrases in Section 16

SDS Reference CA4596
Version No. 2
Revision Date 26/06/2013
Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name RELY T-25B

SECTION 4. FIRST AID MEASURES

Description of first aid measures	Take measures to avoid further contamination or contact and move contaminated patient(s) out of the dangerous area.
Inhalation	If inhaled, provide fresh air, warmth and rest and SEEK MEDICAL ADVICE.
Skin contact	Clean areas of skin affected with soap and plenty of water and SEEK MEDICAL ADVICE.
Eye contact	In case of contact with eyes, rinse immediately with plenty of water until irritation subsides. If necessary, seek medical advice.
Ingestion	If product is swallowed, do NOT induce vomiting. Drink plenty of water and if necessary seek medical advice. Show the product label or this safety data sheet.
Most important symptoms and effects, both acute and delayed	Pre-existing sensitisation may be activated at low levels of exposure. Skin sensitisation may develop in any individuals exposed to the product.
Indication of any immediate medical attention and special treatment needed	Obtain immediate medical assistance in case of large-scale exposure.

SECTION 5. FIRE FIGHTING MEASURES

General hazard	THE PRODUCT IS A COMBUSTIBLE LIQUID.
Extinguishing media	To suit local surroundings (e.g. water spray, carbon dioxide, foam, chemical powder)
Extinguishing media not to be used	None reported.
Special hazards arising from the substance or mixture	Decomposition products released in a fire, (e.g. oxides of carbon, nitrogen and sulfur, ammonia), should be considered toxic if inhaled.
Advice for fire-fighters	Wear self-contained breathing apparatus and a chemical resistant suit. Cool endangered containers with water (to prevent container explosion). Avoid run-off water entering the drains (e.g. use barriers).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Remove all sources of ignition - NO SMOKING! Adhere to personal protective measures and wear personal protective equipment. Stop the spillage or leak if the operation does not pose risks. If not, evacuate area. Ventilate area well after a release.
Environmental precautions	Do not allow to get into waste water or waterways; if this occurs, inform the relevant water authority at once.
Methods and materials for containment and cleaning up	Take up with absorbent material, e.g. sand, sawdust, into tightly closable containers. Label container and dispose of as prescribed. Dispose of wastes safely.
Reference to other sections	Section 8 – personal protective measures. Section 13 – disposal of waste.

SDS Reference CA4596
 Version No. 2
 Revision Date 26/06/2013
 Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name	RELY T-25B
--------------	------------

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling	Handle in accordance with good hygiene and safety practice. Remove all sources of ignition - NO SMOKING! Take precautionary measures against static discharges, use bonding and/or grounding procedures. Use only in well ventilated areas.
Conditions for safe storage, including any incompatibilities	Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool and dry. Keep away from strong oxidising agents.
Specific end use(s)	Industrial and Professional: Ensure safe systems of work or equivalent arrangements are in place to manage risks. Refer to the Rely operators' manual.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters	Monitoring of the workplace should be considered in accordance with Community Exposure Limits or other data as indicated below.		
	TLV (8 hour TWA):	- ppm	0.1 mg/m ³ ACGIH 2009 data for m-phenylenediamine
	Long-term		0.12 mg/m ³ DNEL systemic, dermal data for m-phenylenediamine
			0.024 mg/m ³ DNEL systemic, inhalation data for m-phenylenediamine
	Acute		0.49 mg/m ³ DNEL local, dermal data for m-phenylenediamine
	Aqua (freshwater)		0.001 mg/l PNEC data for m-phenylenediamine
	Aqua (marine water):		0.0001 mg/l PNEC data for m-phenylenediamine
	Aqua (intermittent releases)		0.046 mg/l PNEC data for m-phenylenediamine
	STP		1 mg/l PNEC data for m-phenylenediamine
	Sediment (freshwater)		0.0041 mg/kg PNEC data for m-phenylenediamine
	Sediment (marine)		0.0041 mg/kg PNEC data for m-phenylenediamine
	Soil		0.0002 mg/kg soil dw PNEC data for m-phenylenediamine
	Sk: Capable of causing skin sensitisation.		
Engineering controls	Ensure adequate ventilation of working area.		

SDS Reference CA4596
Version No. 2
Revision Date 26/06/2013
Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name RELY T-25B

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection	Observe normal standards for handling carcinogenic substances. Do not breathe vapour. Avoid eye and skin contact. Wash thoroughly after handling (shower if necessary). Store working clothes separately. Do not eat, drink or smoke in the working area. In view of possible sensitisation effects, it is recommended that personnel with a medical history of sensitisation do not handle this product. Wear personal protective equipment appropriate to the task (see below).
Eye protection	Safety goggles.
Skin protection	PVA gloves. Protective overalls.
Respiratory protection	Respirator or self-contained breathing apparatus (if ventilation is insufficient).
Other personal protection	Access to washing facilities.
Environmental exposure controls	Do not allow to get into waste water or waterways.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical form	Viscous liquid
Colour	Dark brown
Odour	Petroleum
Odour threshold	Not available
Molecular weight	Not applicable
Molecular formula	Not applicable
pH	Not applicable
Melting pt / range	Not available
Boiling pt / range	>150°C
Flash point	>156°C (PMCC)
Relative Evaporation Rate (n-Butyl Acetate = 1)	Not available
General Flammability	COMBUSTIBLE
Flammability/explosive limits	Lower Flammability Limit: 0.6 % (v/v), Upper Flammability Limit: 8.0 % (v/v) (data for residues (petroleum))
Vapour pressure	Not available
Vapour Density	Not available
Relative Density	1.01-1.05
Solubility	Immiscible with water Miscible with organic solvents.
Partition coefficient (log P or log K n-octanol / water)	Not available.

SDS Reference CA4596
 Version No. 2
 Revision Date 26/06/2013
 Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name	RELY T-25B
---------------------	-------------------

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Auto-ignition temperature	250°C (data for residues (petroleum))
Decomposition temperature	Not available
Viscosity	200-500cps @ 25°C
Explosive properties	Not applicable, based on structure.
Oxidising properties	Not applicable, based on structure.
Other information	T.A.V.: 12.83-14.83 mg KOH/g

SECTION 10. STABILITY & REACTIVITY

Reactivity	Generally inert at normal temperatures
Chemical stability	Stable under normal conditions of handling and storage.
Possibility of hazardous reactions	None reported.
Conditions to avoid	Temperatures above 50°C.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	None reported.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects	No data are available for the product, but residues (petroleum), catalytic reformer fractionator has moderate potential to evoke photoirritation..			
Acute toxicity - oral	LD ₅₀ rat (oral)	280 mg/kg	RTECS SS7700000	Data for m-phenylenediamine
	LD ₅₀ rat (oral)	>5000 mg/kg/bw	OECD Guideline 401	Data for residues (petroleum), catalytic reformer fractionator
Acute toxicity - inhalation	LC ₅₀ rat (inhalation)	3.2 mg/l/4H	OECD Guideline 403	Data for m-phenylenediamine
	LC ₅₀ rat (inhalation)	4100 mg/m ³ /4H		Data for residues (petroleum), catalytic reformer fractionator
Acute toxicity - dermal	LD ₅₀ rabbit (skin)	>2000 mg/kg/bw	EU Method B.3	Data for residues (petroleum), catalytic reformer fractionator
Skin corrosion/irritation	Repeated exposure may cause skin dryness or cracking.			
Serious eye damage/irritation	May cause eye irritation.			
	Eye, rabbit	0.01 gm MILD	OECD Guideline 405	Data for m-phenylenediamine
Respiratory sensitisation	No data available.			
Skin sensitisation	Product classified for skin sensitisation due to presence of m-phenylenediamine.			

SDS Reference CA4596
 Version No. 2
 Revision Date 26/06/2013
 Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name	RELY T-25B
--------------	------------

SECTION 11. TOXICOLOGICAL INFORMATION

CMR effects	<p>Carcinogenicity: classification of product as a carcinogen in accordance with European Regulations.</p> <p>Mutagenicity: data available for m-phenylamine and residues (petroleum), catalytic reformer fractionator but insufficient for classification.</p> <p>Reproductive toxicity: data available for m-phenylamine and residues (petroleum), catalytic reformer fractionator but insufficient for classification.</p>
Single dose toxicity	No data available.
Repeated dose toxicity	<p>Lowest published toxic dose, rat, oral: 900 mg/kg/2 week- intermittent (data for m-phenylenediamine, RTECS SS7700000).</p> <p>NOAEL for systemic toxicity = 1.06 mg/kg bw/d (both sexes); NOAEL for local effects (skin irritation) = 106 mg/kg bw/d (males); NOAEL for local effects (skin irritation) = 53 mg/kg bw/d (males) (Data for residues (petroleum), catalytic reformer fractionator)</p>
Aspiration hazard	None reported.
Adverse health effects and symptoms	<p>Skin sensitisation.</p> <p>May have serious long-term effects.</p>
Other information	None reported.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity	The product is insoluble in water and will spread on the water surface. There are no data available for the product and limited data available for the ingredients.		
Fish, acute	LC ₅₀ <i>Oncorhynchus mykiss</i>	512 mg/l/96H	Data for m-phenylenediamine
	LL ₅₀ <i>Oncorhynchus mykiss</i>	79 mg/l/96H	OECD Test Guideline 203
Fish, chronic	NOEL <i>Oncorhynchus mykiss</i>	0.1 mg/l/28d	QSAR
Invertebrates	EL ₅₀ <i>Daphnia magna</i>	0.22 mg/l/48H	OECD Test Guideline 202
Algae	EC ₅₀ <i>Pseudokirchnerella subcapitata</i>	0.32 mg/l/72H	OECD Test Guideline 201
Soil organisms	Data not available.		
Micro-organisms	LL ₅₀ <i>Tetrahymena pyriformis</i>	>1000 mg/l/72H	NOEL
Other organisms	Data not available.		
Persistence and degradability	<p>No data available for product.</p> <p>m-Phenylenediamine biodegrades in water: Half-life, water, 31-672 hours</p>		
Bioaccumulative potential	No data available for product.		
Mobility in soil	<p>No data available for product.</p> <p>Half-life Soil: 168 - 672 hours (data for m-phenylenediamine)</p>		
Results of PBT and vPvB assessment	Not classified, based on the assessment carried out according to Annex XIII of REACH regulation.		
Other adverse effects	None reported.		

SDS Reference CA4596
Version No. 2
Revision Date 26/06/2013
Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name RELY T-25B

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods Dispose of waste in accordance with national (i.e. Hazardous Waste Regulations) and local authority regulations.
Do not allow product to get into waste water or waterways.
Return empty containers to supplier or treat in the same way as the product.

SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)

UN number 3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS 60-70% AROMATIC HYDROCARBONS C10-C25)
Transport hazard class(es) 9
Packing group III
Environmental hazards This product is classified as an environmental hazard.
Special precautions for user None reported.
Emergency action code 3Z
Hazard Identification Number 90

Marine transport (IMDG)

UN number 3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS 60-70% AROMATIC HYDROCARBONS C10-C25)
Transport hazard class(es) 9
Packing group III
Environmental hazards This product is not classified as a marine pollutant.
Special precautions for user None reported.

Air transport (ICAO/IATA)

UN number 3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS 60-70% AROMATIC HYDROCARBONS C10-C25)
Transport hazard class(es) 9
Packing group III
Environmental hazards This product is classified as an environmental hazard.
Special precautions for user None reported.

SDS Reference CA4596
 Version No. 2
 Revision Date 26/06/2013
 Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name RELY T-25B

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for product Classification, Labelling and Packaging Regulation (EC) 1272/2008 Chemicals (Hazard Information and Packaging) for Supply Regulations 2009 (CHIP 4)

Chemical Safety Assessment A Chemical Safety Assessment has not been carried out.

SECTION 16. OTHER INFORMATION

Date of revision 26/06/2013

Reason for revision New formulations

Sections revised All sections revised

Key to abbreviations and acronyms

1999/45/EC	EU Dangerous Preparations Directive
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
ADR	European agreement governing the international carriage of dangerous goods by road
CAS No	Chemical Abstracts Service Registry Number
CHIP 4	Chemicals (Hazard Information and Packaging) for Supply Regulations 2009
CLP	Classification, Labelling and Packaging Regulation (EC) 1272/2008
CMR	Carcinogen, Mutagen, Reprotoxin
DGEAC	Dangerous Goods Emergency Action Code List 2009
EC No	European Inventory of Chemical Substances number
ECHA	European Chemicals Agency
EH40 (2005)	HSE's list of Workplace Exposure Limits, as updated and amended
GHS	Globally Harmonised System for classification and labelling chemicals
GHS06	Pictogram – Skull and crossbones
GHS07	Pictogram – Exclamation mark
GHS08	Pictogram – Health hazard
GHS09	Pictogram – Environment
HSE	Health and Safety Executive (UK)
kPa	kilopascal
LC ₅₀	Concentration of a material in air that kills 50% of the test subjects
LD ₅₀	Amount of a solid or liquid material that kills 50% of test subjects
LTEL	Long Term Exposure Limit
mg/m ³	milligrams per cubic metre
NOAEL	No Observed Adverse Effect Limit
OEL	Occupational Exposure Limit
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation and Authorisation of Chemicals Regulation (EC) 1907/2006
RTECS	Registry of Toxic Effects of Chemical Substances
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value

SDS Reference CA4596
 Version No. 2
 Revision Date 26/06/2013
 Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name	RELY T-25B
---------------------	-------------------

SECTION 16. OTHER INFORMATION

TWA Time Weighted Average
 vPvB very Persistent, very Bioaccumulative

Sources of data Suppliers' Safety Data Sheets, ADR, DGEAC, RTECS, ACGIH, ECHA, EH40.

Methods used to evaluate information used for classification CLP Annex I, Annex VI.

Key to Hazard Statements in Section 3

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360F	May damage fertility
H360D	May damage the unborn child
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs
H373	May cause damage to organs.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Key to Risk Phrases in Section 3

R20	Harmful by inhalation.
R20/21/22	Toxic by inhalation, in contact with skin and if swallowed.
R22	Harmful if swallowed
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R36	Irritating to eyes
R38	Irritating to skin
R43	May cause sensitisation by skin contact.
R45	May cause cancer
R48/21	Harmful: danger of serious damage to health by prolonged exposure in contact with skin.
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R60	May impair fertility
R61	May cause harm to the unborn child
R63	Possible risk of harm to the unborn child.
R66	Repeated exposure may cause skin dryness or cracking.
R68	Possible risk of irreversible effects.

SDS Reference CA4596
Version No. 2
Revision Date 26/06/2013
Origination Date 21/12/2010

Safety Data Sheet



CLASSIFIED IN ACCORDANCE WITH CLP/GHS

Product Name	RELY T-25B
--------------	------------

SECTION 16. OTHER INFORMATION

This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirements. It should not be construed as guaranteeing specific properties.

Data sheet prepared by Environmental Science Limited.

CA4596

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