



Safety Data Sheet

According to UN GHS

Date of Issue: 30/08/2022 Revision Date 30/08/2022 | Version 7.0

Product name

RAILTECT 2300 WB

(SAT 700 RANGE)

SECTION 1: IDENTIFICATION

GHS product identifier : RAILTECT 2300 WB (SAT 700 RANGE)

Other means of identification : Aqueous two pack polyurethane with good solvent resistance for interior and exterior use.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : A tough two pack waterborne polyurethane enamel with a durable finish for rolling stock. Excellent resistance against weathering and marring, easy incorporation of component and good application properties.

Restrictions of use : Do not use in areas / substrates other than specified for in identified uses / TDS.

Supplier's details : Kansai Plascon (Pty) Ltd
P.O. Box 4010
Luipaardsvlei
1743

Emergency phone : +2711 951 4500 (within hours of operation)

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National Contact Person : Misheck Mundondo

SECTION 2: HAZARDOUS IDENTIFICATION

Classification of the substance or mixture : SKIN SENSITIZATION- Category 1
SKIN CORROSION/ IRRITATION - Category 2

SERIOUS EYE DAMAGE/ IRRITATION - Category 2
ACUTE TOXICITY - Category 4
ASPIRATION TOXICITY- Category 1
SPECIFIC TARGET ORGAN TOXICITY SINGLE
EXPOSURE - Category 3
AQUATIC TOXICITY CHRONIC- Category 3

Label elements according to : UN GHS

Hazard pictograms :



Signal word : Warning

Hazard statements : H302 - Harmful if swallowed.
H304 - May be fatal if swallowed and enters airways
H312 - Harmful if in contact with skin.
H315 - Causes skin irritation.
H317- May cause an allergic skin reaction
H319- Causes serious eye irritation.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H336- May cause drowsiness or dizziness
H412- Harmful to aquatic life with long-lasting effects.

Precautionary statements

General : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read carefully and follow all instructions.

Prevention

: P202- Do not handle until all safety precautions have been read and understood.
P233 - Keep container tightly closed.
P261 - Avoid breathing dust/fumes/gas/mist/vapours/spray
P262 - Do not get in eyes, on skin, or on clothing.
P270 - Do not eat, drink, or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection or face protection.



P285- In case of inadequate ventilation wear respiratory protection.

P235 + 410 - Keep cool. Protect from sunlight.

Response

: P314- Get medical advice/attention if you feel unwell.
P391- Collect spillage.
P301+330+331- IF SWALLOWED- Rinse mouth. Do NOT induce vomiting.
P391 - Collect spillage.
P303+361+353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+340: IF INHALED- Remove person to fresh air and keep comfortable for breathing.
P305 + 351 + 338 - IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P333+313- If skin irritation or a rash occurs: Get medical advice/attention.
P337+313- If eye irritation persists get medical advice/attention.
P361+364- Take off immediately all contaminated clothing and wash it before reuse.
P362+364- Take off contaminated clothing and wash it before reuse.
P370+380- In case of fire: Evacuate area.

Storage

: P410 - Protect from sunlight.
P402 + P404 – Store in a dry place. Store in a closed container.
P403+235- Store in a well-ventilated place. Keep cool.

Disposal

: P501 - Dispose of contents/containers in accordance with local regulation

Other hazards which do not result in classification

: None identified.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substance/mixture

: Mixture

Other means of identification

: Aqueous two pack polyurethane with good solvent resistance for interior and exterior use.



CAS number/other identifiers

CAS number : Not applicable.

Ingredient name	CAS number	%	UN GHS Classification
Hydroxy functionalised polyacrylate	Not applicable	<30.0	Skin Sens. 1, H317 Chronic Aquatic Tox. 3, H412
Ethylene glycol monobutyl ether	111-76-2	<5.0	Acute Tox. 4, H302, H332 Skin Irrit. 2, H312, H315, Eye Irrit. 2, H319
Naphtha solvent	64742-95-6	<3.0	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335, H336 Aquatic Chronic 2 H411
1-Butoxy-2-propanol	5131-66-8	<3.0	Eye Irrit. 2, H319 Skin Irrit. 2, H315
Triethanolamine	102-71-6	<2.0	Not classified

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: FIRST AID MEASURES

Description of necessary first aid measures

- Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation persist.
- Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed 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. Get medical attention if adverse if symptoms occur.

Most important symptoms/ effects, acute and delayed

Potential acute health effects

- Eye contact : Causes serious eye irritation.
- Inhalation : Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness.
- Skin contact : Harmful in contact with skin. Causes skin irritation.
- Ingestion : Harmful if swallowed.

Over-exposure signs/symptoms

- Eye contact : Adverse symptoms may include pain or irritation, watering or redness.
- Inhalation : Adverse symptoms may include nausea or vomiting, Headache, drowsiness/fatigue, dizziness/vertigo.
- Skin contact : Adverse symptoms may include irritation or redness.
- Ingestion : May cause damage to organs through prolonged or repeated exposure.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments : No specific treatment.
- Protection of first aiders : No action shall be taken involving any personal risk or without Suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media : Do not use water jet.



Specific hazards arising from from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

: Decomposition products may include the following materials
carbon dioxide
carbon monoxide
nitrogen oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk-through spilled material. Put on appropriate personal protective equipment.

For emergency responders

: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up





Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool, and well ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Do not reuse container.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits



Ingredient name	Exposure limits
Naphtha solvent	ACGIH: TLV: 100 mg/m ³ TLV: 20 ppm

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters, or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be always worn when handling chemical products if a risk assessment indicates this is





necessary.

- Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary e.g., in case of insufficient ventilation. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : Liquid
- Colour : Coloured
- Odour (Threshold) : No data available
- Melting point : Not applicable
- Boiling point : No data available
- Flammability (gas, liquid, solid) : No data available
- Lower and upper explosive (flammable) limits : No data available
- Flash point : Not applicable
- Auto-ignition Temperature : No data available
- Decomposition Temperature : No data available



pH	: 7.5
Viscosity	: 75 - 80 KU
Solubility	: soluble in water
Partition coefficient, n-octanol/water	: No data available
Evaporation rate	: No data available
Vapour pressure	: No data available
Relative density	: 1.2 (typical)
Vapour density	: No data available
Particle characteristics	: No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions:	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No data available
Incompatible materials	: No data available
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure	: Inhalation, skin, and eye contact.
<u>Potential acute health effects</u> Eye contact	: Strong irritant with danger of severe eye injury



Inhalation : Irritant to mucous membrane. Sensitization.
Skin contact : Irritant to skin. Sensitization.
Ingestion : Harmful if ingested.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact : Adverse symptoms may include pain or irritation, watering or redness.
Inhalation : Nausea, headache, drowsiness/fatigue, dizziness/vertigo.
Skin contact : Adverse symptoms may include irritation or redness.
Ingestion : No data available. May damage to organs through prolonged or repeated exposure.

Potential Chronic health effects

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Acute toxicity estimates

No data available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
No data available.

Persistence and degradability
No data available.

Bio accumulative potential
No data available.

Mobility in soil
Soil/ water partition coefficient (KOC) : No data available.

Mobility : No data available.



PBT/vPvB data : P: No data available.
B: No data available.
T: No data available.

Other adverse effects : No known significant effects or critical hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions, and any by-products should always comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

	Transportation - road - SANS 10228:2012	Transportation- Maritime - IMO/ IMDG	Transportation- Air – IATA
UN number	Not classified	Not classified	Not classified
UN proper shipping name	Not applicable	Not applicable)	Not applicable
Transport hazard class(es)	Not applicable	Not applicable	Not applicable
	Transportation - road - SANS 10228:2012	Transportation- Maritime - IMO/ IMDG	Transportation- Air – IATA
Packing group	Not applicable	Not applicable	Not applicable
Marine pollutant	No	No	No



Additional information	No data available	Emergency schedules (EmS) F-E, S-E No data available	Passenger and Cargo Aircraft Ltd QTY: No data available
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	No data available	No data available	No data available

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product

: Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances. Relevant information regarding restrictions: None known. EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP] and EU directives 67/548/EEC or EC 1999/45/EC Other National regulations: None. Standards used for PPE recommendations in Section 8: NIOSH-National Institute for Occupational Health and Safety (USA) EN 166 European standard which concerns the area of eye protection. EN 374-3 European standards for permeation and penetration. EN 141/EN 143 European standards for gas mixtures to remove specified gases and vapours or combined filters for removing solids, and/or liquid particles and specified gases and vapours.

SECTION 16: OTHER INFORMATION

History

Date of review : 30/08/2022

Date of review	Version	Amendments
30/08/2022	7.0	GHS Purple Book version 9 alignment
26/04/2017	6.0	GHS compliant SDS
14/08/2015	5.0	-

Date of previous issue : 26/04/2017

Key to abbreviations : ATE = Acute Toxicity Estimate
BCP Bioconcentration Factor
GHS = Globally Harmonized System of Classification and



WATER BASED POLYURETHANE
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Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OHSA = Occupational Health and Safety Act, 1993 (South Africa)

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

UN = United Nations

References : Supplier Safety Data Sheets.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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