MATERIAL SAFETY DATA SHEET

POLINTEK® Polymer Laminated Composite

SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME :

POLINTEK® Polymer Laminated Composite

OTHER NAME :

Polymer Laminated Composite

RECOMMENDED USE :

Base component of a two component system. Mix with Solidifier component before use. Product designed for railway system and provide excellence physical, chemical and environment properties . Please refer to the relevant POLINTEK® Instructions For Use for further information. For use only by professional operators.

COMPANY NAME :

PT. Darta Mckuadrat Industri

ADDRESS :

Jl. Raya Puspitek No. 147 RT 014/ 004 Kelurahan Setu, Kecamatan Setu Tangerang Selatan, Banten 15314

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SECTION 2 – HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Clear to Dark. Thixotropic liquid. Epoxy odor. WARNING. May cause allergic skin reaction. May cause irritation to eyes or skin. Combustible liquid - Class IIIB. Prevent the product from entering into soil, drains, sewers, ditches or waterways.

POTENTIAL HEALTH EFFECTS

INHALATION

Vapors that may collect in the container headspace during transit or prolonged storage may be harmful if inhaled.

INGESTION

Ingestion is not normally an exposure risk arising from professional applications. Inadvertent ingestion of small amounts of this product through poor hygiene or cross contamination may cause irritation of mucous membranes.

SKIN CONTACT

Prolonged or repeated contact with the skin may cause irritation, blistering or dermatitis.

EYE CONTACT

May cause eye irritation.

ROUTE OF ENTRY

Skin and/or eye contact. Ingestion. Inhalation.

TARGET ORGANS

Eyes. Skin.

MEDICAL SYMPTOMS

Prolonged or repeated contact with the skin or mucous membrane may result in irritant symptoms such as redness, blistering or dermatitis. Onset of symptoms may be delayed. Eye contact may cause: redness and irritation.

MEDICAL CONSIDERATIONS

Skin contact constitutes a pronounced hazard. Persons with a history of skin sensitization problems

should only be employed in processes in which this product is used under appropriate medical supervision.

CARCINOGENICITY

Not available for the mixture, however none of the components in concentrations of 0.1% or greater are listed as carcinogens according to OSHA, NTP, ACGIH or IARC.

SENSITIZATION

There is no data on the product itself. This product contains one or more components that have caused skin sensitization in humans. See Section 11.

TOXIC TO REPRODUCTION

Not available for the mixture, however available information on the individual components does not indicate a reprotoxic hazard.

MUTAGENICITY

Not available for the mixture, however available information on the individual components does not indicate a mutagenic hazard.

DEVELOPMENTAL TOXICITY

Not available for the mixture, however available information on the individual components does not indicate a developmental hazard.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemical identity of ingredients	CAS Number for ingredients
Reaction Product: Bisphenol A	25068-38-6
Phenol Novolac Resin	28064-14-4
Filler : compounding SiO_2 , Al_2O_3, Fe_2O_3, CaO & LOI	-
Masterbatch	-
Fiber Matt	-

*The specific chemical identity/proportion of this component is considered trade secret information in accordance with 29 CFR 1910.1200

SECTION 4 – FIRST AID MEASURES

GENERAL INFORMATION

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

INHALATION

Remove to fresh air. Keep the patient warm and at rest. If breathing has stopped, administer artificial respiration. Give nothing by mouth. If unconscious, place in the recovery position and seek medical advice.

INGESTION

If accidentally swallowed obtain immediate medical attention. Keep at rest. Rinse mouth with plenty of water and drink plenty of water. Do NOT induce vomiting.

SKIN CONTACT

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use a proprietary skin cleaner. Do NOT use solvents or thinners. If irritation or inflammation persists, seek medical attention.

EYE CONTACT

Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 15 minutes,

holding the eyelids apart, and seek medical advice.

SECTION 5 – FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
Use: sand, alcohol resistant foam, carbon dioxide, chemical powder, water fog for larger fires. Do NOT use water jet.
SPECIAL FIRE FIGHTING PROCEDURES
Fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Exposure to decomposition products may be a hazard to health. Appropriate positive-pressure self-contained breathing apparatus (SCBA) and full fire fighting turn-out gear (Bunker gear) should be worn. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains, sewers, ditches or waterways.
UNUSUAL FIRE & EXPLOSION HAZARDS
SENSITIVITY TO MECHANICAL IMPACT
The product is not sensitive to mechanical impact or physical shock.
SENSITIVITY TO STATIC DISCHARGE
Probably not sensitive to static discharge.
AUTO IGNITION TEMPERATURE
(°C)
NIA
FLAMMABILITY LIMIT - LOWER (%)
NIA
FLAMMABILITY LIMIT - UPPER (%)
NIA
FLASH POINT (°C)
>200 (392°F) CC (Closed cup).
FLAMMABILITY CLASS
3.2 Combustible Liquid IIIB

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Avoid contact with eyes, skin and clothing. Refer to protective measures listed in Section 8.
ENVIRONMENTAL PRECAUTIONS
Prevent the product from entering into soil, drains, sewers, ditches or waterways in large quantities.
SPILL CLEAN UP METHODS
Scrape the majority of the product into a suitable labeled container. Cover the spill area with sand or other suitable inert material and sweep up into the container. Clean surfaces down with a water and detergent mixture. Refer to disposal methods listed in Section 13.

SECTION 7 – HANDLING AND STORAGE

HANDLING
GENERAL
Vapors may collect in the container headspace during transit or prolonged storage. Avoid breathing vapor when opening the container.
Where possible open containers and mix components in a well ventilated place away from the application area. Avoid contact with eyes, skin and clothing. Smoking, eating and drinking should be

prohibited in areas of storage and use. For personal protection see Section 8.
Always keep in containers made of the same material as the supply container. Good housekeeping methods and regular safe removal of waste materials should be observed.
FIRE/EXPLOSION
This product is combustible. Exclude sources of heat, sparks and open flame.
STORAGE
Observe the label precautions. Store between 5°C (41°F) and 30°C (86°F) unless otherwise stated in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.
ENVIRONMENTAL STORAGE PRECAUTIONS
Spillage, incorrect storage of chemicals or waste materials or unsuitable disposal activities can result in pollutants seeping through the soil, causing serious harm to groundwater- which is a vital source of drinking water. All wastes especially liquid wastes, should be securely stored on site in designated areas that are isolated from waterways and groundwater and diked to contain any spillages

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

INGREDIENT COMMENTS
No exposure limits noted for ingredient(s). Consult local authorities for acceptable exposure limits.
ENGINEERING MEASURES
Open containers in a well ventilated area.
RESPIRATORY EQUIPMENT
STANDARD APPLICATIONS
Respirators are not normally required, but may be required where adequate ventilation cannot be achieved. Where necessary, it is recommended that an OSHA/NIOSH approved air-purifying full facepiece or half-face respirator equipped with appropriate vapor/particulate cartridge(s) should be worn. It is essential that the facepiece is correctly fitted and the filter is changed in accordance with the manufacturer's instructions.
EMERGENCY SITUATIONS
Where entry into unknown or Immediately Dangerous To Life or Health (IDLH) atmospheres is required, an OSHA/NIOSH approved pressure-demand self-contained breathing apparatus (SCBA) with a full facepiece or a pressure-demand supplied-air respirator (SAR) with a full facepiece in combination with an auxiliary pressure-demand SCBA respirator should be worn.
HAND PROTECTION
GENERAL GUIDANCE ON HAND PROTECTION
The breakthrough time of the gloves selected should exceed the expected use period. Where this is not possible gloves should be changed in good time, and in any case before the breakthrough time is exceeded. Where doubt exists, advice should be sought from manufacturers or vendors of protective gloves in order to determine appropriate types for the particular circumstances. Barrier creams may help to protect exposed areas of skin but are not substitutes for full physical protection. They should not be applied once exposure has occurred.
SPECIFIC RECOMMENDATIONS
Use protective gloves made of: Neoprene. Nitrile.
STANDARD APPLICATIONS / EMERGENCY SITUATIONS
Medium-heavy weight gauntlet type gloves that provide wrist protection are suitable.
EMERGENCY REPAIRS OR APPLICATION OF SINGLE UNITS
Light weight disposable gloves are normally suitable

EYE PROTECTION
STANDARD APPLICATIONS
It is recommended that eye protection, for example safety glasses with side shields or goggles are worn at all times during the handling and use of this material. During subsequent machining, grinding, abrasion or removal of this product appropriate eye protection should be selected according to the type of tools or equipment used.
EMERGENCY SITUATIONS
Refer to 'Respiratory Equipment' above.
OTHER PROTECTION
STANDARD APPLICATIONS
Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner.
EMERGENCY REPAIRS OR APPLICATION OF SINGLE UNITS
Cotton overalls are normally suitable.
EMERGENCY SITUATIONS
Wear chemical resistant splash suit and boots made from neoprene or PVC, as appropriate
HYGIENE MEASURES
Wash at the end of each work shift and before eating, smoking and using the toilet. Ensure eye wash facilities (fountain, bottle, vials, etc.) are readily available. Do not put contaminated articles or equipment e.g. spatulas, applicators, brushes, cloths etc., into pockets. Where necessary, contaminated work clothing and shoes should be removed to prevent cross contamination of surfaces and the risk of inadvertent skin contact and ingestion.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE
Thixotropic liquid.
COLOR
Clear to Dark.
ODOR
Epoxy.
PHYSICAL DATA COMMENTS
This section contains typical values for Health, Safety and Environmental guidance only and is not intended to represent a technical specification for the product. LP = See Section 12.
SOLUBILITY
Immiscible with water
BOILING POINT (°C)
>200 (392°F) @ 760 mm Hg
MELTING POINT (°C)
NIA
RELATIVE DENSITY
1.34 - 1.38 @ 20°C (68°F)
VAPOUR DENSITY (air=1)
>1
VAPOUR PRESSURE
<0.00001 kPa @ 20°C (68°F)
EVAPORATION RATE
N.ap

pH-VALUE, CONC. SOLUTION
N.ap
VISCOSITY
NIA
DECOMPOSITION TEMPERATURE
(°C)
>200 (392°F)
ODOR THRESHOLD, LOWER
NIA
FLASH POINT (°C)
>200 (392°F) CC (Closed cup).
PARTITION COEFFICIENT
(N-Octanol/Water)
LP
VOLATILE ORGANIC CONTENT
0 g/litre

SECTION 10 – STABILITY AND REACTIVITY

STABILITY
Stable under recommended storage and handling conditions (see Section 7). In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide may be produced.
CONDITIONS TO AVOID
Keep away from oxidizing agents and strongly alkaline and strongly acidic materials to prevent the possibility of exothermic reaction

SECTION 11 – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION
There is no data on the product itself.
Name
EPOXY PHENOL NOVOLAC RESIN
Toxic Dose 1 - LD 50
10,000 mg/kg (oral rat)
Toxic Dose 2 - LD 50
3,000 mg/kg (dermal rbt)
Toxic Conc. - LC 50
N.ap
Toxicological information
Repeated skin contact may lead to sensitization with possibly cross-sensitization to other epoxies

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY
There is no data on the product itself. The following information is provided on the basis of the individual component data available. The product should not be allowed to enter soil, drains, sewers, ditches and waterways or be deposited where it can affect ground or surface waters. See also Sections 5, 6, 7, 9 and 13.
BIOACCUMULATION

Based on the individual component data, the product is expected to bioaccumulate. Log octanol/water partition coefficient (Log Pow) is expected to be greater than 3.0.
DEGRADABILITY
Based on the individual component data, the product is not expected to be readily biodegradable according to OECD/EC guidelines.
ACUTE FISH TOXICITY
Based on the individual component data, the product is expected to have experimental LC50/EC50/IC50 values between 1 and 10 mg/l in most sensitive species.

SECTION 13 – DISPOSAL CONSIDERATON

DISPOSAL METHODS
GENERAL
Do NOT dump into any sewers, on the ground, or into any body of water. The product as shipped in its intended condition does not exhibit any of the 'Characteristics' of hazardous waste as defined in 40 CFR 261.20-24. Disposal must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations are the responsibility solely of the waste generator.
COMPONENT DISPOSAL
TRANSIT PACKAGING: shrink or stretch wrap, boxes and fittings that have not been contaminated with product should be re-used or recycled. UNREACTED PRODUCT: empty uncleaned containers and contaminated packaging should be disposed of as non-hazardous solid waste. REACTED PRODUCT: that has been mixed and cured in accordance with the relevant 'Instructions For Use'will form an inert filled polymeric compound that may be able to be disposed of as non-hazardous solid waste. Refer to your local licensed, permitted waste agent or facility.

SECTION 14 – TRANSPORT INFORMATION

TRANSPORT NOTES
Non-regulated for transport under current Domestic, or International Air and Sea Regulations.
Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of accident or spillage.

SECTION 15 – REGULATORY INFORMATION

SARA (311/312) HAZARD CATEGORIES
Acute
REGULATORY STATUS (US)
This product is considered "Hazardous" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.
Toxic Substance Control Act (TSCA): All constituents of this product are included on the Inventory or are not required to be listed.
CONTROLLED PRODUCT CLASSIFICATION
WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR SECTION 33).
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
REGULATORY STATUS
Domestic Substances List (DSL) & Non-Domestic Substances List (NDSL): All constituents of this

product are present on the DSL or are not required to be listed.

SECTION 16 – OTHER INFORMATION

GENERAL INFORMATION
Throughout this Material Safety Data Sheet; NIA = No Information Available; N.ap = Not applicable.
REVISION COMMENTS
REVISION. This material safety data sheet has been revised in the following Section(s): All Sections. Replaces all previous versions.
Please observe the REVISION DATE. Should you be reading a material safety data sheet that is more than 24 months old or have concerns over its validity, please contact your local POLINTEK® Distributor or POLINTEK® direct and the most current information will be sent to you.
REVISION DATE
03/07-2017
VERSION No.
1.0
SAFETY DATA SHEET STATUS
INDONESIAN

IMPORTANT NOTES

1. To the best of our knowledge this document complies with the National Code of Practice for the Preparation of Material Safety Data Sheets.
2. This material safety data sheet summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this material safety data sheet and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products.
3. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the Safety and Emergency Services Department.
4. Our responsibility for products sold, is subject to our terms and conditions, a copy of which is sent to our customers, and is also available on request.