SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier	:	TB 192
Other means of identification	:	Petroleum Rubber Disinfectant
Recommended use of the chemical and restrictions on use	:	This product is used to cover wound on plant in order not to rot. Special characteristic of this product is to help wood be water-proof and protect from insects and other bacterias.
Manufacturer	:	PT Pertamina (Persero) Jl. Medan Merdeka Timur 1A Jakarta Pusat ZIP Code 10110 Phone: 1500-000 Email: pcc@pertamina.com
Emergency phone number	:	1500-000

2. HAZARD IDENTIFICATION

Classification : Acute toxicity (oral), category 3
Acute toxicity (dermal), category 3
Skin corrosion, category 1B
Carcinogenicity, category 1B

Signal word : Danger

Hazard statement :
Health Hazard
H301 - Toxic if swallowed.
H311 - Toxic in contact with skin.
H314 - Causes severe skin burns and eye damage.
H350 - May cause cancer.

Precautionary statement :
Prevention
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breath dust/fume/gas/mist/vapours/spray.
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.
Response
P312 - Call a POISON CENTER/doctor if you feel unwell.
P321 - Specific treatment (see Section 4).
P363 - Wash contaminated clothing before use.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P352 - IF ON SKIN: Wash with plenty of water.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing Rinse skin with water (or shower).
P304 + P340 - IF INHALED: Remove person to fresh air and

2. HAZARD IDENTIFICATION

keep comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 - IF exposed or concerned: Get medical advice/attention.
Storage
P405 - Store in a closed container.
Disposal
P501 - Dispose of contents/container according to valid disposal regulations.

Pictogram :

Other hazards which do not result in classification : No data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration (%)
Fuel oil, residual	68476-33-5	70-80
Petroleum jelly	8009-03-8	20-30
M-cresylic acid	1319-77-3	<0.1
1-hydroxy-2-methylbenzene	95-48-7	<0.1
Castor oil	8001-79-4	<1

4. FIRST AID MEASURES

Necessary description

- **In case of eye contact** : Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
- **In case of skin contact** : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
- **If inhaled** : Remove to fresh air. Do not attempt to rescue the victim unless proper respiratory protection is worn. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting, or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.
- **If swallowed** : If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Give nothing by mouth.

Most important symptoms/effects : No data available.

4. FIRST AID MEASURES

Indication of Immediate medical attention and special treatment needed, if necessary	:	No data available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Small Fire: foam, carbon dioxide, dry chemical, water fog Large Fire: foam, water fog or water spray.
Unsuitable extinguishing media	:	No data available.
Specific hazards	:	No data available.
Flash point °C	:	PMCC 108.0°C
Flammability value	:	No data available.
Hazardous chemical composition	:	Carbon dioxide, carbon monoxide, fumes, smoke, and / or unburned hydrocarbons.
Special protective actions for fire fighters		
a. Foam	:	If the fire is in a container, spray the foam to inner wall of the container (not to ignited liquid) in the same direction with the wind. If the fire occurs because spill, spray to the origin of fire in the same direction with wind until all the fire covered.
b. Carbon dioxide (CO_2)	:	Spray to the origin of fire in the same direction with the wind.
c. Dry chemical	:	Spray to the origin of fire in the same direction with the wind.
d. Water fog or spray	:	Spray to the origin of fire in the same direction with the wind.
Special protective equipment for fire-fighter	:	Wear a self-contained breathing apparatus with a full face shield and chemical resistant personal protective equipment to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures	:	Avoid contact with spilled or released material. Observe all relevant local and international regulations. Remove contaminated clothing. Evacuate the area of all non-essential personnel. Avoid contact with skin, eyes and clothing. Ventilate contaminated area thoroughly.
Environmental precautions	:	Prevent spill into drainage, sewage system, or it seepage into the soil.
Procedures	:	Report spill according to the valid system and procedures. If spill can go into drainage or streams, do immediate report to the authority.

6. ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up :

For small liquid spills (< 200 L)
Transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
For large liquid spills (> 200 L)
Transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations

7. HANDLING AND STORAGE

Precautions for safe handling : Keep containers closed when not in use. Do not handle or store near an open flame, heat, or other potential ignition sources. Protect container from direct sunlight, oxidizing materials and against physical damage. Empty containers may contain hazardous product residue. Do not reuse empty containers without commercial cleaning or reconditioning.

Conditions for safe storage (including any incompatibilities) : Store in a cool, dry, well-ventilated area, away from heat and ignition sources.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

- **Exposure limit** : No data available.
- **Biological exposure indicator** : No data available.

Appropriate engineering control

- **Ventilation** : No data available.

Individual protection measures

- **Eye and face protection** : Safety glasses with side shields are recommended, eyewash fountain should be.
- **Skin protection** : Use chemical-resistant gloves.
  The selection of personal protective equipment varies depending upon conditions of use.
- **Respiratory protection** : Wear approved respiratory protective equipment, when vapor or mist concentrations exceed applicable standards.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- **Hygiene practices** : Wash hand thoroughly after handling.
  Do not eat or drink when using this product.
  Do not smoke while using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Characteristic		Test Result
Organoleptic (physical appearance, color, etc)	:	Liquid, black
Odor	:	Characteristic
Odor threshold	:	No data available
pH	:	No data available
Melting/freezing point	:	30 °C at 101.325 kPa*
Boiling point/boiling range	:	202-511 °C at 101.325 kPa*
Flammability	:	Not flammable
Flash point	:	PMCC 108.0°C
Evaporation rate	:	No data available
Lower/upper flammability limit and explosion limit	:	No data available
Vapor pressure	:	20-861 Pa at 120-150 °C*
Vapor density	:	No data available
Relative density	:	1003.7 kg/m^3 at 15°C
Solubility		
• **Water solubility**	:	Not soluble
• **Other solubility**	:	Soluble
Partition coefficient (n-octanol/water)	:	0.38
Auto-ignition temperature	:	250-537 °C at 101.325 kPa*
Decomposition temperature	:	No data available
Viscosity	:	>4727 cSt at 23°C

*Data refers to ECHA Europe

10. STABILITY AND REACTIVITY

- **Reactivity** : Hazardous substance polymerization does not occur.
- **Chemical stability** : Stable under normal conditions.
- **Posibility of hazardous reactions** : No hazardous reaction in normal condition.
- **Conditions to avoid** : Keep away from heat, flame, other potential ignition sources
- **Incompatible materials** : Strong acids, alkalis or oxidizing agents.
- **Hazardous decomposition products** : Carbon dioxide, carbon monoxide, fumes, smoke, and/or unburned hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Comprehensive toxicological/health information

- **Acute toxicity** :

	Fuel oil, residual	Petroleum jelly
Oral	No adverse effect observed LD50 4320	No adverse effect observed LD50 5000

11. TOXICOLOGICAL INFORMATION

	mg/kg	mg/kg
Dermal	No adverse effect observed LD50 2000 mg/kg	No adverse effect observed LD50 2000 mg/kg
Inhalation	Adverse effect observed LC50 1400 mg/m^3	-

- **Skin corrosion/ irritation** : Causes severe skin burns.
- **Serious eye damage/irritation** : Causes severe eye damage.
- **Respiratory or skin sensitization** : No data available. Suspected that it may not cause respiratory or skin sensitization according to compound or product which has similar structure or composition.
- **Germ cell mutagenicity** : No data available. Suspected that it is not mutagen according to compound or product which has similar structure or composition.
- **Carcinogenicity** : May cause cancer.
- **Reproductive toxicity** : No data available. Suspected that it may not toxic to reproductive organs according to compound or product which has similar structure or composition.
- **STOT-single exposure** : No data available. Suspected that it is not toxic to specific organs after single exposure according to compound or product which has similar structure or composition.
- **STOT-repeated exposure** :

	Fuel oil, residual	Petroleum jelly
Oral – systemic effects	-	Adverse effect observed LOAEL 125 mg/kg (subchronic, mouse)
Dermal – systemic effects	Adverse effect observed NOAEL 1.06 mg/kg (subchronic, mouse)	Adverse effect observed LOAEL 100 mg/kg (chronic, rat)

- **Aspiration hazards** : No data available. Suspected that it is not aspiration hazards. This statement comes from compounds or products which have similar structures or compositions.

Information on the likely routes exposure : Inhaled, ingested, skin contact, and eye contact.

Symptoms related to the physical, chemical, and toxicological characteristics : No data available. Further testing has not been done.

Delayed and immediate effects, and also chronic effects from both short or long term exposure : No data available. Further testing has not been done.

Numerical measure of toxicity : No data available. Further testing has not been done.

Interative effects : No data available. Further testing has not been done.

Where specific chemical data : No data available. Further testing has not been done.

11. TOXICOLOGICAL INFORMATION

are not available

Mixture : No data available. Further testing has not been done.

Mixture vs. Ingredient information : No data available. Further testing has not been done.

Other in formation : No data available. Further testing has not been done.

12. ECOLOGICAL INFORMATION

Ecotoxicity :

	Fuel oil, residual	Petroleum jelly
Short-term toxicity to fish	LL50 (4 days) 79 mg/L	LL50 (4 days) 100 mg/L
Long-term toxicity to fish	No data available	No data available
Short-term toxicity to aquativ invertebrates	EL50 (48 h) 220 µg/L	EL50 (48 h) 10 g/L
Long-term toxicity to aquativ invertebrates	No data available	No data available
Toxicity to algae and cyanobacteria	EL50 (72 h) 320 µg/L NOELR (72 h) 50 µg/L	No data available

Persistence and degradability : No data available. Further testing has not been done.

Bioaccumulative potential : No data available. Further testing has not been done.

Mobility in soil : No data available. Further testing has not been done.

Other adverse effects : No data available. Further testing has not been done.

13. DISPOSAL CONSIDERATION

Disposal methods : Discard any product, residue, disposal container or liner in accordance with local regulation.

14. TRANSPORT INFORMATION

USA DOT

UN Number : -

UN proper shipping name : -

Transport hazard class(es) : -

Packing group (if available) : -

Environmental hazard : -

Special precautions for user (UN Model Regulation) : -

RID / ADR

UN Number : -

14. TRANSPORT INFORMATION

UN proper shipping name : -
Transport hazard class(es) : -
Packing group (if available) : -
Environmental hazard : -
Special precautions for user : -

IMO

UN Number : -
UN proper shipping name : -
Transport hazard class(es) : -
Packing group (if available) : -
Environmental hazard : -
Special precautions for user : -

ICAO / IATA

UN Number : -
UN proper shipping name : -
Transport hazard class(es) : -
Packing group (if available) : -
Environmental hazard : -
Special precautions for user : -

15. REGULATORY INFORMATION

Safety, health, and environmental regulation (specific for the product in question) :

- Peraturan Menteri Perindustrian Nomor 23/M-IND/PER/4/2013 tentang Perubahan Atas Peraturan Menteri Perindustrian Nomor 87/M-IND/PER/9/2009 Tentang Sistem Harmonisasi Global Klasifikasi dan Label pada Bahan Kimia
- Peraturan Direktur Jenderal Basis Industri Manufaktur No. 04/BIM/PER/I/2014 tentang Petunjuk Teknis dan Petunjuk Pengawasan Pelaksanaan Sistem Harmonisasi Global Klasifikasi dan Label Pada Bahan Kimia
- Peraturan Pemerintah Republik Indonesia Nomor 74 Tahun 2001 Tentang Pengelolaan Bahan Berbahaya dan Beracun
- Keputusan Menteri Tenaga Kerja No Kep-187/Men/1999 tentang Pengendalian Bahan Kimia Berbahaya
- Peraturan Menteri Kesehatan Republik Indonesia Nomor 70 Tahun 2016 tentang Standar dan Persyaratan Kesehatan Lingkungan Kerja Industri
- ACGIH®. 2016. TLVs® and BEIs®

16. OTHER INFORMATION

Revision date : 2017
Key/legend or acronym used : ACGIH® – The American Conference of Governmental

16. OTHER INFORMATION

in the SDS

Industrial Hygienists
ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road
BEIs® – Biological Exposure Indices
CAS No. – Chemical Abstract Service Registry Number
ECHA – European Chemicals Agency
IATA – The International Air Transport Association
ICAO – The International Civil Aviation Organization
IMO – The International Maritime Organization
LOAEL – Lowest Observed Adverse Effect Level
NOAEL – No Observed Adverse Effect Level
PG – Packaging Group
RID – Regulation concerning the International Carriage of Dangerous Goods by Rail
SCBA – Self-Contained Breathing Apparatus
UN – United Nations
USA DOT – United States Department of Transportation

Key literature references and sources for data used in the SDS : echa.europe.eu

NFPA :

Degrees	Red	Blue	Yellow
0	Will not burn	Live ordinary material	Normally stable
1	Must be preheated to burn	Slightly hazardous	Unstable if heated – use normal precautions
2	Ignites when moderately heated	Hazardous – use breathing apparatus	Violent chemical change possible – use hose streams from distance
3	Ignites at normal temperatures	Extremely dangerous – use full protective clothing	Strong shock or heat may detonate - use monitors from behind explosion resistant barriers

16. OTHER INFORMATION

4	Extremely flammable	Too dangerous to enter vapor or liquid	May detonate – vacate area if materials are exposed to fire

White	
	Radioactive
	Never contact with water

Disclaimer

The information is composed based on current knowledge and intended to describe safety, health, and environment hazard of the product. Therefore, it should not be construed as guarantee any specific property of the product. All risks while using this product is the user's responsibility. It is not allowed to make change of this document, except there is legal consent.