


**SAFETY DATA SHEET****1. IDENTIFICATION**

Product identifier	: PERTASOL CC
Other means of identification	: LAWS 4, Paraffinic, Napththenic, Aliphatic Solvent
Recommended use of the chemical and restrictions on use	: These products are used as diluents for paints, lacquers & varnishes; solvents & diluents on the printing ink industry; components in the manufacture of retreaded tires; adhesives, pharmaceutical industry, cleaning and degreasing industries; supporting printing process in textile industry; thinner & resin industry.
Manufacturer	: PT Pertamina (Persero) Jl. Medan Merdeka Timur No. 1A Jakarta Pusat ZIP Code 10110 Phone: 1500-000 Email: pcc@pertamina.com
Emergency phone number	: 1500-000

2. HAZARD IDENTIFICATION

Classification	: Carcinogenicity, Category 1B
Signal word	: Danger
Hazard statement	: <u>Health Hazards</u> H350 - May cause cancer.
Precautionary statement	: <u>Prevention</u> P201 – Obtain special instructions before use P202 – Do not handle until all safety precautions have been read and understood P280 – Wear protective gloves/protective clothing/eye protection/face protection. <u>Response</u> P308 + P313 – IF exposed or concerned: Get medical advice/attention. <u>Storage</u> P405 - Store locked up <u>Disposal</u> P501 – Dispose of contents/container according to valid disposal regulations
Pictogram	: 
Other hazards which do not result in classification	: No data available

**SAFETY DATA SHEET****3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	Concentration (%)
Distillates, hydrotreated heavy naphthenic	64742-52-5	>99

4. FIRST AID MEASURES

Necessary description	Rinse
• In case of eye contact	: Flush eyes with plenty of water. Contact medical department immediately
• In case of skin contact	: Wash the contaminated skin with water and soap. Remove clothes. Wash the contaminated clothing before reuse. Dry the oil before reuse.
• If inhaled	: Remove the affected person to fresh air and obtain medical attention.
• If swallowed	: Do not induce vomiting. Give activated charcoal (2-3) tablets, swallowed milk or water. Obtain medical attention or send to hospital immediately.
Most important symptoms/effects	: Eye irritation is mild when exposed to fluid. Repeated exposure can cause irritation, redness, and crust on the skin. High concentrations can cause headaches, fainting, throat and kidney irritations. May cause loss of balance, fatigue, nausea, and vomiting if swallowed.
Indication of Immediate medical attention and special treatment needed	: No data available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Carbon dioxide (CO ₂), dry chemical powder and foam
Unsuitable extinguishing media	: No data available
Specific hazards	
• Other explosion and fire hazards	: Fire and explosion hazards may occur in unprotected storage tank near fire location.
Flash point °C	: 23 °C.
Flammability value	: No data available
Hazardous chemical composition	: Carbon monoxide (CO)
Special protective actions for fire fighters	
a. Carbon dioxide (CO₂)	: Spray it to the base of fire from upwind
b. Dry chemical powder	: Spray it to the base of fire from upwind
c. Foam	: If the fire is in a container, spray the foam to inner wall of the container (not to the ignited liquid) in the same direction with the wind. If the fire occurs because spill,

**SAFETY DATA SHEET****5. FIRE-FIGHTING MEASURES**

- spray to the origin of fire in the same direction with wind until all the fire covered. Do not dispose the spill to the clean water source (drinking water).
- Special protective equipment for fire-fighter** : If fire occurs in limited/indoor/closed area, fire fighter operator must wear Self-Contained Breathing Apparatus (SCBA).

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment, and emergency procedures** : Notify the author promptly about the occurrence of the spills.
- Environmental precautions** : Prevent spill into drainage, sewage system, or its seepage into the soil.
- Procedures** : In the event of a spill expected to enter a drain or stream, immediately report it to the authorized officer.
- Methods and materials for containment and cleaning up** : Eliminate all possible ignition condition. Do oil spill absorption using sorbent, sawdust, vermiculate, and other fire retardant material. Clean and dispose cleaned material in the right waste disposal according to valid regulations.

7. HANDLING AND STORAGE

- Precautions for safe handling** : Avoid steam or mist from being sucked by the airway. Use blast-proof equipment and do not spray. Movable containers must pass the feasibility test. When filling, the container should be placed on the ground surface, where the cover should be in the container to prevent static electricity.
- Conditions for safe storage (including any incompatibility)** : Storage areas should be grounded and bonded and equipped with pressure vacuum valve and flame arrester. Keep away from combustible materials, fire, electricity or other sources of heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Control parameters**
- **Exposure limit** : 5 mg / m³ (as total hydrocarbon vapor).
 - **Biological exposure indicator** : No data available
- Appropriate engineering control**
- **Ventilation** : If the product is used in a relatively closed room then it should be equipped with exhaust fan (exhaust fan). Ventilation and equipment used shall be explosion-proof.

**SAFETY DATA SHEET****8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Individual protection measures**

- **Eye and face protection** : Wear eye protection (*chemical type goggles*).
- **Skin protection** : Wear protective gloves (leather or PVC). Apply good personal hygiene.
- **Respiratory protection** : Wear respiratory protection when the pollution concentration in the air is higher than the permissible TLV.
- **Hygiene practices** : Wash hands at rest and after work.
Do not eat and drink while using the product.
No smoking while using the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Characteristic	Test Result
Organoleptic (physical appearance, color, etc)	: Liquid
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting/freezing point	: 0°C at 101.235 kPa*
Boiling point/boiling range	: 120 °C
Flammability	: Non-flammable
Flash point	: 23 °C
Evaporation rate	: No data available
Lower/upper flammability limit and explosion limit	: No data available
Vapor pressure	: 10 Pa at 20°C
Vapor density	: 782 - 796 kg/m ³ at 15 °C
Relative density	: No data available
Solubility	
• Water solubility	: No data available
• Other solubility	: No data available
Partition coefficient (n-octanol/water)	: -0.12
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: 1.170 cSt pada 25 °C

*Data refers to ECHA Europe

10. STABILITY AND REACTIVITY

- Reactivity** : Polymerization of hazardous materials is not formed.
- Chemical stability** : Stable
- Possibility of hazardous reactions** : No hazardous reaction if handled and stored according to regulations
- Conditions to avoid** : Heat, fire sparks, flame, or condition that induce electrostatic. Prevent the formation of steam

**SAFETY DATA SHEET****10. STABILITY AND REACTIVITY**

- accumulation.
- Incompatible materials** : Halogen, strong acid, strong base dan strong oxidizer.
- Hazardous decomposition products** : Carbon monoxide (CO).

11. TOXICOLOGICAL INFORMATION**Comprehensive toxicological/health information**

- **Acute toxicity** : Oral: No adverse effect observed LD50 5000 mg / kg.
Inhalation: No adverse effect observed LC50 5000 mg / m³.
Dermal: No adverse effect observed LD50 2000 mg / kg.
- **Skin corrosion/irritation** : No data available. Suspected that it may not cause skin corrosion/irritation according to compound or product which has similar structure or composition.
- **Serious eye damage/irritation** : No data available. Suspected that it may not cause serious damage or irritation to the eye according to compound or product which has similar structure or composition.
- **Skin sensitization/inhalation** : 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** : Expected to cause cancer
- **Reproductive toxicity** : No data available. Suspected that it is not mutagen 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 target organs after single exposure according to compound or product which has similar structure or composition.
- **STOT - Repeated exposure** : Oral - systemic effect:
Cause adverse effect to LOAEL 125 mg / kg bw / day (sub chronic, mice).
Dermal - systemic effect:
Cause adverse effect to LOAEL 100 mg / kg bw / day (chronic, rat).
Inhalation - systemic effect:
No adverse effects on NOAEC 980 mg / m³ bw / day (subacute, mice).
- **Aspiration hazards** : No data available. Suspected that it is not aspiration hazards according to compound or product which has similar structure or composition.
- **Information about the route of exposure** : Inhaled, ingested, skin contact, and eye contact.

**SAFETY DATA SHEET****11. TOXICOLOGICAL INFORMATION**

- **A collection of symptoms related to physical, chemical and toxicological properties** : No data available. Further testing has not been done.
- **Acute, delayed, and chronic effects of short and long term exposure** : No data available. Further testing has not been done.
- **Numerical size of the toxicity level** : No data available. Further testing has not been done.
- **Interactive effect** : No data available. Further testing has not been done.
- **If chemical data is not specifically available** : No data available. Further testing has not been done.
- **Mixtures** : No data available. Further testing has not been done.
- **Mixtures vs composed materials** : No data available. Further testing has not been done.
- **Other information** : No data available. Further testing has not been done.

12. ECOLOGICAL INFORMATION

- Ecotoxicity : Short-term toxicity in fish:
LL50 (4 days) 100 mg / L
Short-term toxicity in aquatic invertebrates:
LL50 (48 hours) 10 g / L
EL50 (48 hours) 10 g / L
- Persistence and degradability : No data available. Further testing has not been done.
- Bioaccumulation 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 : Seepage of this substance to the soil can contaminate soilwater or aquifer

13. DISPOSAL CONSIDERATION

- Disposal methods : This product may be burned with incinerator according to the valid regulation. This product also may be processed in a recycling unit specified by the government.

**Law information: this product sludge waste is classified as hazardous waste (except it is not proven after TCLP (Toxicity Characteristic Leaching Procedure) testing), so that the disposal must follow valid provision.*

14. TRANSPORT INFORMATION**USA DOT**

- UN Number : UN 1300
- UN proper shipping name : Turpentine substitue
- Transport hazard class(es) : III
- Packing group (if available) : PG I

**SAFETY DATA SHEET****14. TRANSPORT INFORMATION**

Environmental hazard : -
Special precautions for user : -
(UN Model Regulation)

RID / ADR

UN Number : UN 1300
UN proper shipping name : -
Transport hazard class(es) : 3 (Subclass-3)
Packing group (if available) : PG III
Environmental hazard : -
Special precautions for user : -

IMO

UN Number : UN 1300
UN proper shipping name : Turpentine Substitute
Transport hazard class(es) : 3
Packing group (if available) : PG I
Environmental hazard : -
Special precautions for user : -

ICAO / IATA

UN Number : UN 1300
UN proper shipping name : Flammable liquid
Transport hazard class(es) : 3
Packing group (if available) : PG I
Environmental hazard : No data available.
Special precautions for user : No data available.

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 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 Direktur Jenderal Basis Industri Manufaktur Nomor 04/BIM/PER/1/2014 Tentang Petunjuk Teknis dan Petunjuk Pengawasan Pelaksanaan Sistem Harmonisasi Global Klasifikasi dan Label pada Bahan Kimia
- ACGIH®. 2016. TLVs® and BEIs®
- Terdaftar pada TSCA EINECS/ELINCS dan AICS

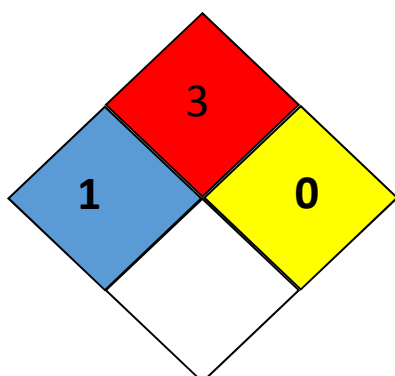
**SAFETY DATA SHEET****15. REGULATORY INFORMATION**

- OSHA 29 CFR 1910.1200

16. OTHER INFORMATION

Revision date : 2017
Key/legend or acronym used in the SDS : ACGIH - American Conference on Governmental Industrial Hygienist
BEI (Biological Exposure Indices)
CAS No. - Chemical Abstract Service Number
SCBA - Self Contained Breathing Apparatus
PVC - Poly Vinyl Chloride
LEL - Lower Explosion Limit
UEL- Upper Explosion Limit
TCLP - Toxicity Characteristic Leaching Procedure
B3 - Bahan Beracun dan Berbahaya
USA DOT - United States Department of Transportation
RID/ADR - European Agreements Concerning the International Carriage of Dangerous Goods by Rail and by road
IMO - International Maritime Organization
ICAO/IATA - International Civil Organization Aviation/ International Air Transport Association
UN - United Nations
PBB - Perserikatan Bangsa-Bangsa
PG - Packing Group
Key literature references and sources for data used in the SDS : echa.europa.eu

NFPA





Tingkatan	Merah	Biru	Kuning
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 at when moderately heated	Hazardous - use breathing apparatus	Violent chemical change possible - use hose streams for distance
3	Ignites at normal temperatures	Extremely dangerous - use protective	Strong shock or heat may detonate -



SAFETY DATA SHEET

16. OTHER INFORMATION

		clothing	use monitors from behind explosion resistant barriers
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.