SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier	:	Special boiling point (SBP-XX)
Other means of identification	:	Paraffin, Naphthenic Alphatic 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 :

Flammable liquid, Category 2
Acute toxicity (inhalation), Category 4
Skin irritation, Category 2
Eye irritation, Category 2
Carcinogenicity, Category 1A
Specific target organ toxicity after repeated exposure, Category 1
Germ cell mutagenicity, Category 1B
Aspiration hazard, category 1

Signal word : Danger

Hazard statement :

Physical Hazard

H225 - Highly flammable liquid and vapor

Health Hazard

H304 - May be fatal if swallowed and enters airways
H315 - Causes skin iritation
H319 - Causes serious eye irritation.
H332 - Harmful by inhalation.
H340 - May cause genetic damage.
H350 - May cause cancer.
H372 - Causes damage to organs through prolonged or repeated exposure.

Precautionary statement :

Prevention

P201 - Get special instructions before using it.
P202 - Do not handle the product until all safety precautions are read and understood.
P210 - Keep away from heat / spark / fire
P233 - Keep container tightly closed.
P240 - "Ground / Bond" container and receiving equipment.

2. HAZARD IDENTIFICATION

P241 - Use explosion proof electrical / vent / lighting equipment
P242 - Only use equipment that does not cause sparks.
P243 - Take action to prevent static discharges
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P264 - Wash hands properly after handling the product
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoor or indoor products with good ventilation
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P301+P310 - JIKA TERTELAN: Segera hubungi SENTRAL KERACUNAN atau tenaga medis
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 - IF INHALED: Remove the victim into the open air and lie down in order to breathe comfortably.
P308 + P313 - If exposed or feared exposure: Get medical help.
P332 + P313 - In case of skin irritation: Get medical attention.
P337 + P313 - If eye irritation persists: Get medical help.
P362 + P364 - Remove contaminated clothing and wash before reuse.
P370 + P378 - In case of fire: Use Dry chemical powder, alcohol resistant foam, CO2, water spray to extinguish.
P303 + P361 + P353 - IF ON SKIN (or hair): Move / remove immediately all contaminated clothing. Rinse skin with running water.
P305 + P351 + P338 - IF IN EYES: Wash carefully with water for a few minutes. Remove the contact lens if it is easy to do. Continue washing it.

Storage

P403 + P235 – Store in a well-ventilated place. Keep cool
P405 - Store locked.

Disposal

P501 - Dispose of contents/container in accordance with national regulations.

Pictogram :

Other hazards which do not result in classification : Can form a mixed vapor that is flammable or explosive while in the air.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration (%)
Hydrocarbon Light Distillate	848301-65-5	>98.0%
Benzene	71-43-2	<2.0%
Ethyl-Benzene	100-41-4	<0.2%

4. FIRST AID MEASURES

Necessary description

- **In case of eye contact** : Rinse with plenty of clean water for 15 minutes. If irritation occurs, seek medical attention.
- **In case of skin contact** : Remove contaminated shoes and clothing, and flush affected area(s) with flowing water and soap.
  If irritation or skin rash develops, seek medical attention.
  Wash contaminated clothing before reuse.
- **If inhaled** : Move the victim away from source of exposure and into fresh air in a position comfortable for breathing. If symptoms persist, seek immediate medical attention.
- **If swallowed** : Give 1 - 2 glass of water. Seek medical attention. Do not induce vomitting.
  Do not give something by mouth that can lead to vomiting or nausea.
  Swallowed chemicals may be absorbed into the lungs which can cause pneumonitis (chemical pneumonitis), so proper handling is necessary.

Most important symptoms/effects : Dry skin and possible irritation with repeated or prolonged exposure. High concentrations can cause minor respiratory irritation, headache, drowsiness, dizziness, loss of coordination, disorientations and fatigue. Ingestion can cause irritation of the digestive tract, nausea, vomiting, and diarrhea.

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

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry chemical powder, alcohol resistant foam, CO_2, water spray.

Unsuitable extinguishing media : Water with high pressure (water jet)

Specific hazards No data available

- **Other explosion and fire hazards** : This material can be easly ignited. When burning smoke toxic.

Flash point °C : <0 ^{o} C

Flammability value : No data available

5. FIRE-FIGHTING MEASURES

Hazardous chemical composition	:	No data available
Special protective actions for fire fighters		
a. Carbon dioxide (CO_2)	:	Spray to the origin of fire in the same direction with the wind.
b. Dry chemical powder	:	Spray to the origin of fire in the same direction with the wind.
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, spray to the origin of fire in the same direction with wind.
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	:	Keep all sources of ignition and hot metal surfaces away from spill/release (if safe to do so). Avoid direct contact with material. For huge spill, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection.
Environmental precautions	:	Prevent spill into drainage, sewage system, or its 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.
Methods and materials for containment and cleaning up	:	bsorb spill with sorbent, sand, vermiculite, and other fire retardant material). Clean and dispose cleaned material in the right waste disposal according to local regulations. In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling	:	Avoid exposure, get special instructions before using the product. Make sure there is good ventilation around the site. Use explosion proof equipment. Do not handle products in a confined space. Avoid forming or spreading mist in air. No smoking, eating and drinking in the product handling

7. HANDLING AND STORAGE

area.
Avoid contact with skin and eyes.
Use of Personal Protective Equipment see section 8.

Conditions for safe storage (including any incompatibilities) : Make sure electrical appliances and lighting are not a source of flame.
Keep container tightly closed in a dry, cool and well ventilated place.
Observe the preventive action labels.
No Smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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

Appropriate engineering control

- **Ventilation** : If used in a relatively closed room, exhaust fan must be available for use. Ventilation and other equipment used must be explosion-proof.

Individual protection measures

- **Eye and face protection** : Wear eye protection (*chemical type goggles*).
- **Skin protection** : Wear protective suit, protective rubber or PVC gloves.
- **Respiratory protection** : Wear respiratory protection with appropriate filter when there is accumulated vapor and excessive concentration which passes the TLV. In case of emergency, SCBA must be provided.
- **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)	:	Colorless liquid
Odor	:	Aromatic
Odor threshold	:	No data available
pH	:	Not applicable
Melting/freezing point	:	<20°C
Boiling point/boiling range	:	55-120 °C
Flammability	:	Flammable liquid
Flash point	:	<0 ° C
Evaporation rate	:	No data available
Lower/upper flammability limit and explosion limit	:	6.9%(V) – 1.2%(V)

9. PHYSICAL AND CHEMICAL PROPERTIES

Characteristic		Test Result
Vapor pressure	:	1.3 kPa (at 20°C)
Vapor density	:	No data available
Relative density	:	<0.71
Solubility		
• **Water solubility**	:	Insoluble
• **Other solubility**	:	soluble
Partition coefficient (n-octanol/water)	:	-2.64
Auto-ignition temperature	:	225 ° C
Decomposition temperature	:	Not applicable
Viscosity	:	0.479 cSt at 23° C

10. STABILITY AND REACTIVITY

Reactivity	:	Not corrosive and stable under recommended transportation or storage conditions
Chemical stability	:	Stable.
Posibility of hazardous reactions	:	No hazardous reactions if handled and stored according to the requirements.
Conditions to avoid	:	Heat, fire sparks, flame, or condition that induce electrostatic charges. Prevent vapor accumulation.
Incompatible materials	:	Strong oxidizer.
Hazardous decomposition products	:	CO, CO2, and smoke.

11. TOXICOLOGICAL INFORMATION

Comprehensive toxicological/health information

• **Acute toxicity** :

Route of exposure	Hydrocarbon Light Distillate	Benzene	Ethyl-Benzene
Oral	No adverse effect observed LD50 5000 mg/kg (tikus)	No adverse effect observed LD50 2000 mg/kg bw (tikus)	No adverse effect observed LD50 3500 mg/kg bw (tikus)
Inhalation	-	No adverse effect observed LC50 43767 mg/L (tikus)	No adverse effect observed LC50 17629 mg/^{m3} (tikus)
Dermal	-	No adverse	No adverse

11. TOXICOLOGICAL INFORMATION

		effect observed LD50 8260 mg/kg bw	effect observed LD50 15400 mg/kg bw (kelinci)

- **Skin corrosion/ irritation** : No data available. Suspected that it may cause skin irritation according to compound or product which has similar structure or composition.
- **Serious eye damage/irritation** : No data available. Suspected that it may cause serious damage or irritation to the eye according to compound or product which has similar structure or composition.
- **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** : May cause genetic damage.
- **Carcinogenicity** : May cause cancer
- **Reproductive toxicity** :

Route of exposure	Hydrocarbon Light Distillate	Benzene	Ethyl-Benzene
Effect on fertility:			
Oral	-	-	-
Inhalation	-	-	No adverse impact observed on NOAEC 4342.13 mg / m3 (subacute, rat)
Dermal	-	-	-

- **STOT-single exposure** : No data available. Suspected that it is not toxic to specific target organs after single exposure. This statement is derived from compounds or products that have similar structures or compositions.
- **STOT-repeated exposure** :

Route of exposure	Hydrocarbon Light Distillate	Benzene	Ethyl-Benzene
Oral - systemic effects	-	Adverse effect observed LOAEL 25 mg / kg bw / day	Adverse effect observed NOAEL 75 mg/kg bw/hari

11. TOXICOLOGICAL INFORMATION

		(chronic, rat)	(subchronic, rat)
Inhalation - systemic effects	-	-	-
Derma - systemic effects	-	-	-

- **Aspiration hazards** : May cause death if swallowed and enter the airway / airway.

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

Symptoms related to the physical, chemical, and toxicological characteristics : Irritation and redness on the skin and eyes in contact with the chemical material. In addition, redness and pain in the mouth as well throat. Irritation of the throat may cause a sense of tightness in the chest. Then exposure to this material may cause coughing or wheezing.

Delayed and immediate effects, and also chronic effects from both ~~in~~ 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 are not available : No data available. Further testing has not been done.

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

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

12. ECOLOGICAL INFORMATION

Ecotoxicity :

Exposure effect	Hydrocarbon Light Distillate	Benzene	Ethyl-Benzene
Short-term toxicity in fish	No data available	LC50 (4 days) 5.3 mg / L (freshwater fish)	LC50 (4 days) 4.2 mg / L for freshwater fish; 5.1 mg / L for saltwater fish
Long-term toxicity in fish	No data available	EC10 / LC10 or NOEC (32 days) 800 µg /	No data available

12. ECOLOGICAL INFORMATION

		L (freshwater fish)	
Short-term toxicity in Aquatic intervetebrata	No data available	EC50/LC50 (48 hr) 10 mg/L	EC50 (48 hours) 1.8 for freshwater invertebrates; 2.6 mg / L for saltwater invertebrates
Long-term toxicity in Aquatic intervetebrata	No data available	EC10 / LC10 or NOEC 3 mg/L	EC10 / LC10 or NOEC 1 mg / L (freshwater invertebrates)
Toxicity to algae and cyanobacteria	No data available	EC50/LC50 (72 hr) 100 mg/L	EC50 / LC50 3.6 mg / L for freshwater algae; 7.7 mg / L salt water algal

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

Bioaccumulation potential : No data available. Details about toxic effects relate to nominal concentrations. 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 : SBP-XX waste is categorized as B3 waste so that its disposal is in accordance with applicable government regulations.

**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 3295
UN proper shipping name	:	Hydrocarbons, liquid (Naphtha (Petroleum), Hydro treated light)
Transport hazard class(es)	:	3
Packing group (if available)	:	II
Environmental hazard	:	
Special precautions for user (UN Model Regulation)	:	

RID / ADR

UN Number	:	UN3295
UN proper shipping name	:	Hydrocarbons, liquid (Naphtha (Petroleum), Hydro treated light)
Transport hazard class(es)	:	3
Packing group (if available)	:	-
Environmental hazard	:	-
Special precautions for user	:	-

IMO

UN Number	:	UN 3295
UN proper shipping name	:	Hydrocarbons, liquid (Naphtha (Petroleum), Hydro treated light)
Transport hazard class(es)	:	3
Packing group (if available)	:	II
Environmental hazard	:	-
Special precautions for user	:	-

ICAO / IATA

UN Number	:	UN 3295
UN proper shipping name	:	Hydrocarbons, liquid (Naphtha (Petroleum), Hydro treated light)
Transport hazard class(es)	:	3
Packing group (if available)	:	II
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

15. REGULATORY INFORMATION

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 in the SDS :

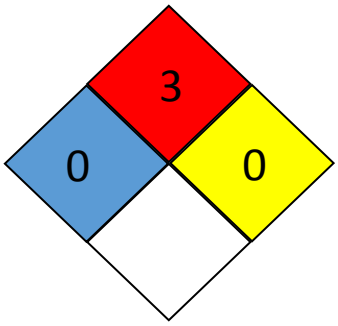
ACGIH - American Conference on Governmental Industrial Hygienist
BEI - Biological Exposure Indices
CAS No. - Chemical Abstract Service Number
EC – Effective Concentration
IMO - International Maritime Organization
ICAO/IATA - International Civil Organization Aviation/ International Air Transport Association
LC – Lethal Concentration
LOAEL - Lowest Observed Adverse Effect Level
NOEC - No Observed Effect Concentration
NOAEL - No Observed Adverse Effect Level
PVC - Poly Vinyl Chlorida
RID/ADR - European Agreements Concerning the International Carriage of Dangerous Goods by Rail and by road
TLV - Threshold Limit Value
SCBA - Self Contained Breathing Apparatus
USA DOT - United States Department of Transportation

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

16. OTHER INFORMATION



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

White	
	Radioactive
W	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.