



# Smart Solvent Based Roadline Paint N/Ref

## Alkyd Road Marking Paint

### 1 Litres & 5 Litres



Version No. : 2.1.2

Issue Date: 01/10/2023

Safety Data Sheet according to CLASS requirement

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING	
<b>Product Identifier</b>	
Product Name	Smart Solvent Based Roadline Paint
Product Code	SPRSNR
Chemical Name	Not Applicable
Chemical Formula	Not Applicable
Other means of Identification	Alkyd Road Marking Paint
CAS Number	Not Applicable
<b>Relevant use of the chemical and restriction</b>	
Relevant identified uses	Use according to manufacturer's directions
<b>Details of manufacturer / importer</b>	
Registered Company Name	SMART PAINT MANUFACTURING SDN BHD (1031014-A)
Address	No. 9 & 11, Jalan Indah Gemilang 5, Taman Perindustrian Gemilang, 81800 Ulu Tiram, Johor, Malaysia.
Telephone	+607-863 9855
Fax	+607-861 5055
Email	info@smart-paints.com
Web	<a href="http://www.smart-paints.com">http://www.smart-paints.com</a>
<b>Emergency telephone number</b>	
Association / Organisation	Not Applicable
Emergency telephone number	Not Applicable
Other emergency telephone number	Not Applicable
SECTION 2 HAZARDS IDENTIFICATION	
<b>Classification of the substances or mixture</b>	
GHS Classification	<b>Flammable liquids</b> - Category 3 <b>Health Hazard</b> Aspiration Hazard - Category 1 Carcinogenicity - Category 1B Respiratory Sensitisation - Category 1 Reproductive Toxicity - Category 2 Reproductive Toxicity - Category 1B Reproductive Toxicity - Category 1A Skin Corrosion/Irritation - Category 2 Specific Target Organ Toxicity- Single Exposure - Category 3 Specific Target Organ Toxicity- Repeated Exposure - Category 2 <b>Environment Hazard</b> Hazardous To The Aquatic Environment – Chronic Hazard - Category 3
<b>Label elements</b>	
GHS label elements	
Signal word	Warning
<b>Hazard statement(s)</b>	
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H350	May cause cancer ( route of exposure inhalation or dermal)
H340	May cause genetic defects (routes of exposure inhalation or dermal).
H334	May cause allergic or asthma symptoms or breathing difficulties if inhaled.
H361	Suspected of damaging fertility or the unborn child (routes of exposure inhalation or dermal).
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement(s)	
<b>P210</b>	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
<b>P233</b>	Keep container tightly closed.
<b>P240</b>	Ground / bond container and receiving equipment.
<b>P241</b>	Wear protective gloves/protective clothing/eye protection/face protection.
<b>P242</b>	Wash thoroughly after handling.
<b>P243</b>	Take precautionary measures against static discharge.
<b>P280</b>	Wear protective gloves/protective clothing/eye protection/face protection.
<b>P201</b>	Obtain special instructions before use.
<b>P202</b>	Do not handle until all safety precautionary have been read and understood.
<b>P281</b>	Use personal protective equipment as required.
<b>P261</b>	Avoid breathing dust/fume/gas/mist/vapours/spray.
<b>P285</b>	In case of inadequate ventilation wear respiratory protection.
<b>P264</b>	Wash thoroughly after handling.
<b>P271</b>	Use only outdoors or in a well-ventilated area.
<b>P272</b>	Contaminated work clothing shall not be allowed out of the workplace.
<b>P273</b>	Avoid release to the environment.

## SECTION 2 HAZARDS IDENTIFICATION

### Precautionary statement(s) Response

<b>P303+P361+P353</b>	IF ON SKIN (or hair) : Remove/take off immediately all contaminated clothing. Rinse skin with water / shower.
<b>P370+P378</b>	In case of fire : Evacuate area.
<b>P301+P310</b>	IF SWALLOWED : Immediately call a POISON CENTER or doctor/physician.
<b>P331</b>	Do NOT induce vomiting.
<b>P308+P313</b>	IF exposed or concerned : Get medical advice / attention.
<b>P304+P341</b>	IF INHALED : If breathing is difficult, remove victim to fresh air and keep at rest.
<b>P342+P311</b>	If experiencing respiratory symptoms : CALL a POISON CENTER or doctor / physician .
<b>P302+P352</b>	IF ON SKIN : Wash with plenty of water and soap.
<b>P321</b>	Specific treatment (see information on this label).
<b>P332+P313</b>	If skin irritation occurs : Get medical advice / attention
<b>P362</b>	Take off contaminated clothing and was before reuse.
<b>P304+P340</b>	IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>P312</b>	Call a POISON CENTRE or doctor/physician if you feel unwell.
<b>P333+P313</b>	If skin irritation or rash occurs : Get medical advice / attention.

### Precautionary statement(s) Storage

<b>P403+P235</b>	Store in a well - ventilated place. Keep cool.
<b>P405</b>	Store in locked up.
<b>P403+P233</b>	Store in a well - ventilated place. Keep container tightly closed.

### Precautionary statement(s) Disposal

<b>P501</b>	Dispose of content/ container to appropriate waste site or reclaimer in accordance with local or national regulations.
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## SECTION 3 COMPOSITION / INFORMATION OF INGREDIENTS

CAS number	% [weight]	Name
108-67-8	8.1 – 8.10	1,3,5-Trimethylbenzene
95-63-6	2.7 – 2.7	1,2,4-Trimethylbenzene
100-41-4	6.5 – 6.5	Ethylbenzene
67-56-1	0.1 – 0.1	Methyl hydroxide
64742-81-0	0.5 – 0.5	Naptha(petroleum),heavy, hydrosulfurised
64742-16-1	6.1 – 6.1	Petroleum hydrocarbon
64742-48-9	0.25 – 0.25	Naptha(petroleum),hydrotreated heavy
108-88-3	6.2 – 6.2	Toluene
96-29-7	0.14 – 0.14	2-butanone oxime

## SECTION 4 FIRST AID MEASURES

### Description of first aid measure

<b>Eye contact</b>	<ul style="list-style-type: none"> <li>Check or and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelid open. Do not use an eye ointment. Seek for medical attention.</li> </ul>
<b>Skin contact</b>	<ul style="list-style-type: none"> <li>Frequent or prolonged contact may irritate and cause dermatitis. Skin contact may aggravate an exiting dermatitis condition. Remove contaminated clothing – launder before reuse. Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. Get medical attention if redness or irritation occurs.</li> </ul>
<b>Inhalation</b>	<ul style="list-style-type: none"> <li>High vapour (&gt;1000 ppm) are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anaesthesia. Drowsine unconsciousness and other central nervous system effects. Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform mouth to mouth resuscitation. Administer oxygen if available. Allow the victim to rest in a well ventilated area. Seek medical attention.</li> </ul>

### SECTION 5 FIREFIGHTING MEASURES

**Suitable Fire Extinguishing Media :**

Small fire : Use dry chemical. Foam or CO2.  
Large fire : Use water spray. Fog or foam. Water or foam may cause frothing.

**Special Protective Actions For Fire Fighters:**

Cool container in water spray in order to prevent pressure build-up, auto ignition or explosion. Avoid flushing spilled material into sewers, stream or other bodies of water. For small outdoor fires, portable fire extinguishers may be used, and self contained breathing apparatus (SCBA) may not be required. Respiratory and eye protection are required for fire fighting personnel.

**Specific Hazards Arising From The Chemical :**

Static discharge, material can accumulate static charges which can cause an incendiary electrical discharge. "Empty" containers retain product residue (liquid and/or vapour) and can be dangerous. DO NOT pressurize, cut, Weld braze, solder, drill grind, or expose such containers to heat, flame sparks, static electricity, or other sources of ignition ; they may explode and cause injury or death.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment And Emergency Procedure**

**Eye /skin protection :**

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available. Wear appropriate protective clothing and chemical resistant gloves to prevent skin contact. Wear a face shield and chemical resistant clothing such as rubber apron when splashing is likely.

**Respiratory Protection :**

Use JKPP/NIOSH approved respiratory protection (full face piece recommended) when exposure limits are exceeded.

**Ventilation :**

Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits. If practical, use local mechanical exhaust ventilation at source of air contamination such as open process equipment.

**Environment Precaution**

Flammable liquid. Ventilate. Eliminate all sources of ignition. Prevent additional discharge of material. For small spills implement cleanup procedure; for large spills implement cleanup procedure and if in public area, keep public away and advice authorities , provide suitable personal protective. dike and contain spill with inert material (sand, earth, etc) and transfer liquid and solid separately to container for recovery or disposal. Report as per regulatory or disposal. Do not use combustible material such as sawdust. Report as per regulatory equipment.

**Methods And Materials For Containments And Clean Up**

For small liquid spills (<1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residue to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose to all salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Remove contaminated soil and dispose of safely.

### SECTION 7 HANDLING AND STORAGE

**Precautions For Safe Handling**

Avoid smoking and use of open fire. Avoid inhalation of vapours and contact with skin and eyes. Observe good industrial practices.

**Condition For Safe Storage ,including Any Incompatibilities**

Store in tightly closed original container in well-ventilated area. Avoid expose to direct sunlight.

### SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**Control Parameters/ Occupational Limits**

Ingredient/Bahan	ACGIH TLV-TWA		OSHA PEL-TWA	
	ppm	mg/m3	ppm	mg/m3
1,3,5-Trimethylbenzene	20	-	100	435
1,2,4-Trimethylbenzene	-	-	-	-
Ethylbenzene	-	-	-	-
Ethylbenzene	20	-	100	435
Naptha(petroleum),heavy, hydrosulfurised Petroleum hydrocarbon	20	-	100	435
Toluene	20	-	100	435
Naptha(petroleum), hydrotreated heavy	20	-	100	435
2-butanone oxime	20	-	100	435

**APPROPRIATE ENGINEERING CONTROL MEASURES**

If user operations generate dust, fumes, gas, vapours or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Emission 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.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### PERSONAL PROTECTION

#### 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. 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.

Recommended : Full mask with type Cartridge filter.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations.

#### Eye 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.

Recommended : Safety glasses with side-shields.

#### Skin/ 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.

Recommended : Wear protective clothing.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance / colour</b>	Liquid / Colours depend on catalogue
<b>Solid</b>	75.0%
<b>Specific Gravity (@ 25°C)</b>	1.35 – 1.76
<b>Viscosity (Ku)</b>	70.0 – 75.0
<b>*Boiling Point</b>	111 °C
<b>*Flash Point</b>	41 - 42 °C
<b>*Melting Point</b>	Not applicable
<b>*Vapour Pressure (@ 20°C)</b>	Not applicable
<b>Vapour Density (101.3 kPA / air=1)</b>	Not applicable
<b>Evaporation Rate (n - Butyl Ether=1)</b>	Not applicable
<b>Lower Flammable Limit LEL / Explosion limit (%)</b>	0.60
<b>Upper Flammable Limit UEL / Explosion limit (%)</b>	8.00
<b>Solubility</b>	Insoluble in water
<b>Odour</b>	Aromatic Hydrocarbon

## SECTION 10 STABILITY AND REACTIVITY

### REACTIVITY

No dangerous reaction known under condition of normal use.

### CHEMICAL STABILITY

Stable under normal temperature conditions and recommended use.

### POSSIBILITY OF HAZARDOUS REACTION

Under normal conditions of storage and use, hazardous reaction will not occur.

### CONDITIONS TO AVOID

Heat, flame , sparks.

Nitric acid, sulfuric acid, strong oxidizing agents.

Electrostatic accumulation hazard? If Yes, use proper grounding procedure.

### HAZARDOUS DECOMPOSITION PRODUCTS

Under normal conditions of storage and use, hazardous decompositions products should not be produced.

## SECTION 11 TOXICOLOGY INFORMATION

There is no data available on the product itself.

Toxicological information of hazardous ingredients :

### a. Aspiration Hazard

Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
1,2,4-Trimethylbenzene	5000	3160	DNA	DNA	DNA
Naptha(petroleum), hydrotreated heavy	15000	3000	DNA	6.1	DNA
Toluene	636	1960	DNA	49	DNA

### b. Carcinogenicity

Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
2-butanoe oxime	930	3160	DNA	DNA	DNA
Naptha(petroleum), hydrotreated heavy	15000	3160	DNA	17.2	DNA
Ethyl benzene	3500	17800	DNA	17.2	DNA

SECTION 11 TOXICOLOGY INFORMATION					
<b>c. Reproductive Sensitisation</b>					
Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
1,3,5-Trimethylbenzene	5000	2000	DNA	24	DNA
Toluene	636	1960	DNA	49	DNA
<b>d. Reproductive Toxicity</b>					
Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
Toluene	636	1960	DNA	49	DNA
Ethyl benzene	3500	17800	DNA	17.2	DNA
<b>a. Acute Toxicity – Oral</b>					
Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
1,2,4-Trimethylbenzene	5000	3160	DNA	DNA	DNA
1,2,4-Trimethylbenzene	DNA	DNA	DNA	24	DNA
Toluene	636	1960	DNA	49	DNA
<b>b. Specific Target Organ Toxicity-Repeated Exposure</b>					
Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
Toluene	636	1960	DNA	49	DNA
<b>b. Specific Target Organ Toxicity-Repeated Exposure</b>					
Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
1,2,4-Trimethylbenzene	5000	3160	DNA	DNA	DNA
1,2,4-Trimethylbenzene	DNA	DNA	DNA	24	DNA
Toluene	636	1960	DNA	49	DNA
Ethyl benzene	3500	17800	DNA	17.2	DNA
<b>a. Specific Target Organ Toxicity-Repeated Exposure</b>					
Ingredient	Oral LD50	Dermal LD50	Inh (Gas) LC50	Inh (Vapor) LC50	Inh (Dust/mist) LC50
2-butanone oxime	930	3160	DNA	DNA	DNA

SECTION 12 ECOLOGICAL INFORMATION					
1,2,4-Trimethylbenzene	5000	3160	DNA	DNA	DNA
1,2,4-Trimethylbenzene	DNA	DNA	DNA	24	DNA
Toluene	636	1960	DNA	49	DNA
<b>Persistence And Degradability</b> No information available.					
<b>Bioaccumulative Potential</b> Has the potential to bioaccumulate.					
<b>Mobility In Soil</b> Floats on water. Adsorbs to soil and has low mobility.					
<b>Other Adverse Effects</b> Do not allow product to reach ground water, water course or sewage system.					
Ingredient	Fish 96 hour, LC50	Crustacea 48 hour, EC50	Algae 72 or 96 hour, ErC50		
1,3,5-Trimethylbenzene	DNA	DNA	DNA		
1,2,4-Trimethylbenzene	7.19	1897	DNA		
Ethylbenzene	DNA	DNA	DNA		
Methyl hydroxide	DNA	DNA	DNA		
Naptha(petroleum),heavy, hydrosulfurised Petroleum hydrocarbon	2200	DNA	2.6		
Toluene	5.5	3.78	DNA		
Naptha(petroleum), hydrotreated heavy	2200	DNA	2.6		
2-butanone oxime	DNA	DNA	DNA		

#### SECTION 13 DISPOSAL INFORMATION

**Waste Disposal :**

Recover or recycle if possible. Otherwise dispose in accordance with all applicable with all applicable national environment laws and regulations.

**Product Disposal:**

This product when dispose of in its unused and uncontaminated state should be treated as a hazardous waste.

**Container Disposal :**

Drain container thoroughly. Rinse three times with suitable solvent. Treat rinsing as for product disposal. After draining, vent in a safe place away from sparks and fire. Send drum recoverer or metal reclaimer. Residue may cause an explosion hazard. Do not pincture, cut or weld uncleaned drums. Keep container labelled until cleaned and then remove or deface labels.

#### SECTION 14 TRANSPORT INFORMATION

Transport to be in accordance with ADR/RID for road/rail, IMDG for sea and IATA for air.

**LAND TRANSPORT**

Classified as Dangerous Goods by the criteria of the European Agreement concerning the international carriage of Dangerous Goods (ADR) by Road & Regulations concerning the international carriage of Dangerous Goods (RID) by Rail.

**UN Number:** 1263

**Proper shipping name :** Paint ( including paint, lacquer, enamel, stain, shellac, varnish, liquid filler and liquid lacquer base ) or paint related material (including paint thinning or reducing compound).

**Class:** 3

**Packaging Group:** III

**SEA TRANSPORT**

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG) for the transport of Sea.

**UN Number:** 1263

**Proper shipping name :** Paint ( including paint, lacquer, enamel, stain, shellac, varnish, liquid filler and liquid lacquer base ) or paint related material (including paint thinning or reducing compound).

**Class :** 3

**Packaging Group:** III

**Marine Pollutant:** No

**SEA (Annex II of MARPOL 73/78 and the IBC Code)/ LAUT (Annex II of MARPOL 73/78 dan the IBC Code) :** Not Applicable

**AIR TRANSPORT**

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for the transport by Air.

**UN Number:** 1263

**Proper shipping name :** Paint ( including paint, lacquer, enamel, stain, shellac, varnish, liquid filler and liquid lacquer base ) or paint related material (including paint thinning or reducing compound).

**Class:** 3

**Packaging Group:** III

#### SECTION 15 REGULATORY INFORMATION

Applicable national regulations :

- a) OSHA 1994 and relevant regulation
- b) Factories and Machinery Act 1967 and relevant regulations
- c) Environment Quality Act 1967 and regulations.
- d) Pesticide Act 1974 and regulations
- e) Occupational Safety and Health (Classification, Labelling And Safety Data Sheet of Hazardous Chemicals) Reg 2013
- f) Industry Code Of Practice (On Chemicals Classification And Hazard Communication

#### SECTION 16 OTHER INFORMATION

Date of preparation: 17-04-2019

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Version: 02

**ABBREVIATION/SINGKATAN**

ACGIH American Conference of Governmental Industrial Hygienists

TLV Threshold limit value

TWA Time-Weighted Average

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

LD50 Lethal Dose

LC50 Median Lethal concentration

IACR International Agency for Research in Cancer

CAS Registry Numbers Chemical Abstracts Service Registry Numbers

ICOP Industry Code Of Practice on Chemical Classification and Health approved by Minister under section 37 of the Act

C Ceiling Limit

CEIL Ceiling Limit airborne concentration

STEL Short Term Exposure Limit

DNA Data Not Available

N/R Not Regulated

**Disclaimer**

All information appearing here in is based on our present state of our knowledge. However the information in this SDS may not be valid for such material used in combination with any other materials or in any process. No representation, warranty or guarantee is made as to its accuracy, reliability or completeness. We do not accept liability for any loss or damage that may occur from the use of this information.