

Seng Fong Paints Pte Ltd
MATERIAL SAFETY DATA SHEET

Product Name : Tiger Brand Spirit/Industrial Alcohol (Ethanol 95%)
Color / Name : Clear

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

Intended Use : See Technical Data Sheet
Name of Company : Seng Fong Paints Pte Ltd
Address : No 38, Kian Teck Road, Singapore 628788
Telephone : + 65 62640100
Fax : + 65 62640277

2. COMPOSITION / INFORMATION ON INGREDIENTS

Substances presenting a health hazard within the meaning of the Dangerous Substances Directive 67 / 548 / EEC.

| Name | CAS-No. | Conc.Range | Symbol | R-Phrases |
|-------------|---------|------------|--------|---------------|
| Ethanol 95% | 64-17-5 | 50 - 100% | F, Xi | R11, R36, R67 |

See full text of phrases in section 16.

3. HAZARDS IDENTIFICATION OF THE PREPARATION

Very Flammable.
Irritating to eyes.
Vapours may cause drowsiness and dizziness.

4. FIRST AID MEASURES

General :
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 patient warm and at rest, if breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth. If unconscious place in recovery position and seek medical advice.
Eye Contact :
Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.
Skin contact :
Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion :
If accidentally swallowed, obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

5. FIRE-FIGHTING MEASURES

Extinguishing media
Recommended Alcohol resistant foam, CO2, Powders, Water spray
Not to be used Waterjet
Recommendations Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Exclude sources of ignition and ventilate the area. Avoid breathing vapors. Refer to protective measures listed in sections 7 and 8. Contain and collect spillage with non-combustible adsorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses. Clean preferably with a detergent; avoid use of solvents. If the product contaminates lakes, rivers

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or sewages, inform appropriate authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Handling Vapors are heavier than air and may spread along floors. Vapor may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Additionally, the product should only be used in areas from which all naked lights and others sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Preparation may charge electrostatically Always use earthing leads when transferring from one container another. Operators should wear anti-static footwear, and floors should be of the conducting type.

Container Storage Keep container tightly closed. Isolate from sources of heat, sparks and open flame.

No sparking tools should be used.

Always keep in containers of same material as the original one.

Never use pressure to empty : Container is not a pressure vessel.

Skin Contacted Avoid skin and eye contact. Avoid inhalation of vapor and spray mist.

Application areas Smoking, eating and drinking should be prohibited in application areas.

For personal protection see section 8.

Comply with the health and safety at work laws.

When operators ,Whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapor in all cases. In such circumstances they should wear a compressed aired respirator during the spraying process until such time as the particulates and solvent vapor concentration has fallen below the exposure limits.

Storage

Store in accordance with local rules and legislation. Observe label precautions .

Store between 5 and 30 °C in a dry, well ventilated place away from sources of heat and direct sunlight. Keep away from sources of ignition .Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. No smoking . Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures : Provide adequate ventilation. Where reasonably practicable this should be achieved by use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentration of particulates and solvent vapor below the WEL, suitable respiratory protection must be worn.

Ingredient

Propan-2-ol

Workplace Exposure Limits

EH40-WEL (United Kingdom (UK), 1/2005).

STEL: 1250 mg/m³ 15 minute/minutes. Form: All forms

STEL: 500 ppm 15 minute/minutes. Form: All forms

TWA: 999 mg/m³ 8 hour/hours. Form: All forms

TWA: 400 ppm 8 hour/hours. Form: All forms

Personal Protection

Respiratory Protection : When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators.

Hand Protection: For prolonged or repeated contact, wear suitable gloves.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Skin Protection: Personal should wear antistatic clothing made of natural fiber or of high temperature resistant synthetic fiber. All parts of the body should be washed after contact.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state :

| | | |
|-------------------------------|---|---------------------------------------|
| Flash point | : | 12°C |
| Volume Solids | : | 0% |
| Specific gravity at 30 °C | : | 0.79 gram/cm ³ (average) |
| Vapor density | : | Heavier than air |
| Color | : | Clear |
| Flammable in air(% by volume) | : | Lower limit : 2.0; Upper limit : 12.0 |
| Solubility in water | : | Partially miscible with water |

10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions. (See section 7) When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide smokes, oxides of nitrogen.

Keep away from oxidizing agents , Strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

11. TOXICOLOGICAL INFORMATION

There are no data available on the preparation itself.

Exposure to component solvents vapors concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney , liver and central nervous system .Symptoms and signs include headache ; dizziness , fatigue , muscular weakness ,Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

12. ECOLOGICAL INFORMATION

There are no data available on the preparation itself. The product should not be allowed to enter drains or water courses.

13. DISPOSAL CONSIDERATIONS

Do not allow into drains or water courses .

Waste and emptied containers should be disposed of according to the local rules and legislation.

14. TRANSPORT INFORMATION

Transport only in accordance with ADR for road , RID for rail, IMDG for sea and ICAO/IATA for air transport .

| | |
|--------------------------|------------------------|
| ADR/AIR | |
| UN Number | 1263 |
| Proper Shipping Name | Paint Related Material |
| Class | 3 |
| Packing Group | II |
| Label | 3 |
| Hazard Identification No | 30 |

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|----------------------|------------------------|
| IMDG | |
| UN Number | 1263 |
| Proper Shipping Name | Paint Related Material |
| Class | 3 |
| Packing Group | II |
| Label | 3 |
| Emergency Schedules | F-E, S-E |

| | |
|----------------------|------------------------|
| IATA-DGR | |
| UN Number | 1263 |
| Proper Shipping Name | Paint Related Material |
| Class | 3 |
| Packing Group | II |
| Label | 3 |

15. REGULATORY INFORMATION

In accordance with the Dangerous Preparations Directive 88/379/EEC the product is labeled as follow :

| | |
|-----------|--|
| R phrases | R11 Highly Flammable R36 Irritating to eyes. R67 Vapours may cause drowsiness and dizziness. |
| S phrases | S21 When using do not smoke. S23 Do not breathe spray. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S38 In case of insufficient ventilation, wear suitable respiratory equipment. S60 This material and its container must be disposed of as hazardous waste. S61 Avoid release to the environment. Refer to special instructions/safety data sheets. |

16. OTHER INFORMATION

Full text of R phrases appearing in section 2 :

| | |
|-------------|---|
| Propan-2-ol | R11 Highly flammable. R36 Irritating to eyes. R67 Vapours may cause drowsiness and dizziness. |
|-------------|---|

Full text of Symbol phrases appearing in section 2 :

F - Highly Flammable
Xi - Irritant

The information of this MSDS is based on the present state of our knowledge.
As the users ' working conditions are beyond our knowledge and control . The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction . It is always the responsibility of the user to take all local rules and legislation. The information in this MSDS is meant as a description of the safety requirements of our product : it is not to be considered as a guarantee of the products' properties .

Prepared/Last Amended On: 03-Jan-18