

## MATERIAL SAFETY DATA SHEET

REF. No. AA9972593-1000-E2

## 1. CHEMICAL PRODUCT IDENTIFICATION AND COMPANY IDENTIFICATION

## 【CHEMICAL PRODUCT IDENTIFICATION】

TRADE NAME : ENAMEL SPRAY SPACE ACE FOUR STAR CB-SHOKU

PRODUCT CLASS : Phthalic resin paint (Aerosol)

Use : Top coat for Metal

## 【COMPANY IDENTIFICATION】

NAME OF MANUFACTURER : Shinto Family Co., Ltd.

ADDRESS : 16-7, Ohtsuka 2-Chome, Toshima-ku, Tokyo (170-0005), Japan

INQUIRY SECTION : Development Department

DRAWER

: Yoshio TAJIMA

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DATE

: 2010/06/23

SECTION IN CHARGE : Development Department

PERSON IN CHARGE

: General Manager

TELEPHONE NUMBER : 81-3-5976-4911

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## 2. HAZARD IDENTIFICATION

## 【GHS CLASSIFICATION】

FLAMMABLE AEROSOLS	: Hazard Category 2
FLAMMABLE LIQUIDS	: Hazard Category 3
FLAMMABLE SOLIDS	: Not classified
SUBSTANCES AND MIXTURES WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES	: Not classified
ORGANIC PEROXIDES	: Not classified
CORROSIVE TO METALS	: Not classified
ACUTE TOXICITY ORAL	: Not classified
SKIN	: Not classified
INHALATION(GAS)	: The classification is off the subject
INHALATION(STEAM)	: The classification is off the subject
INHALATION(DUST · MIST)	: Not classified
SKIN CORROSION/IRRITATION	: Hazard Category 2
SERIOUS EYE DAMAGE /EYE IRRITATION	: Hazard Category 2
RESPIRATORY SENSITIZATION	: Not classified
SKIN SENSITIZATION	: Not classified
GERM CELL MUTAGENICITY	: Not classified
CARCINOGENICITY	: Hazard Category 2
REPRODUCTIVE TOXICITY	: Hazard Category 1B
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY SINGLE EXPOSURE	: Hazard Category 1 (Respiratory system, Liver, Central nervous system, Kidney) Hazard Category 3 (Anesthetizing action)
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY REPEATED EXPOSURE	: Hazard Category 1 (Respiratory system, Nervous system) Hazard Category 2 (Liver, Testicle)
ASPIRATION HAZARD	: Not classified
HAZARDOUS TO THE AQUATIC ENVIRONMENT (ACUTE)	: Hazard Category 2
HAZARDOUS TO THE AQUATIC ENVIRONMENT (CHRONICITY)	: Hazard Category 2

## 【GHS LABEL Element】

[SYMBOL]



[SIGNAL WORD]

Danger

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**[HAZARD STATEMENT]**

- Flammable aerosol
- Flammable liquid and vapor
- Causes skin irritation
- Causes serious eye irritation
- Suspected of causing cancer
- May damage fertility or the unborn child
- Causes damage to organs
- May cause respiratory irritation or May cause drowsiness or dizziness
- Causes damage to organs through prolonged or repeated exposure
- Toxic to aquatic life
- Toxic to aquatic life with long lasting effects

**[PRECAUTIONARY STATEMENTS]****«PREVENTION»**

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from ignition sources such as heat/sparks/open flame. - No smoking.
- Do not spray on an open flame or any white-hot material.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Take precautionary measures against static discharge.
- Use explosion-proof electrical/ventilating/lighting equipments.
- Use only non-sparking tools.
- Pressurized container : Do not pierce or burn, even after use.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Do not eat, drink or smoke when using this product.
- Wash hands thoroughly after handling.
- Wear protective gloves and eye/face protection.
- Use personal protective equipment as required.

**«RESPONSE»**

- If inhaled : Remove to fresh air and keep at rest in a position comfortable for breathing.
- If in eyes : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy. Continue rinsing.
- If eye irritation persists, get medical advice/attention.
- If on skin : Wash with plenty of soap and water.
- Wash hands after handling.
- If skin irritation occurs, get medical advice/attention.
- Take off contaminated clothing and wash before reuse.
- If exposed or concerned : Get medical attention/advice.
- Get medical attention/advice if you feel unwell.
- In case of fire, use suitable equipment for extinction, if water increases risk.
- Collect spillage.

**«STORAGE»**

- Protect from sunlight and do not expose to temperatures exceeding 50°C.
- Store in cool/well-ventilated place.
- Store container tightly closed in well-ventilated place.
- Store locked up.

**«DISPOSAL»**

- Disposal of contents/container must be done in compliance with local, state or federal laws and regulations

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## 3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT		CAS No.	PERCENT
N-butane	(Inflammable gas)	106-97-8	25~30%
White spirit		8052-41-3	15~20%
Xylene		1330-20-7	10~15%
Isobutane	(Inflammable gas)	75-28-5	5~10%
Ethylbenzene		100-41-4	5~10%
Titanium dioxide		13463-67-7	1~5%
Methanol		67-56-1	0.1~1%

## 4. FIRST-AID MEASURES

## [EYE CONTACT]

- Gently rinse the affected eyes with clean water for at least 15 minutes as soon as possible. Rinse well the eyes up to the back of eye-lids.
- Seek medical advice immediately.

## [SKIN CONTACT]

- Wipe off contacted materials from skin quickly with clean cloth.
- Wash the affected areas under running water using a mild soap. Do not use organic solvents to wash.
- If there is any change on skin appearance and/or any pain, seek medical advice immediately.

## [INHALATION]

- Remove the victim from the contamination immediately to fresh air zone and keep the victim warm and quiet. If Breathing is weak, irregular or has stopped, open his airway, loosen his collar and belt and administer artificial respiration. Should not let vomit swallowed up. Seek medical advice immediately.
- Show this MSDS or the labels on container, as medical examination.

## [INGESTION]

- Keep the victim quiet and seek medical advice immediately, as drink the substances.
- Should not let vomit swallowed up.

## 5. FIRE-FIGHTING MEASURES

## [EXTINGUISHING MEDIA]

WATER [—]    CARBON DIOXIDE [O]    BUBBLE [O]    POWDER [O]    DRY SAND [O]

## [EXTINCTION METHOD]

- Firefighters should wear proper protective equipment (heat resistive clothes).
- Move flammable substance from fire areas, if it can be done without risk.
- Use the fire extinguisher specified.
- Do not use water for extinguishment.

## 6. ACCIDENTAL RELEASE MEASURES

- Wear proper protective equipment (Gloves, Gas mask with an organic vapor canister, Apron, Safety goggles and etc.)
- Place spills in a chemical waste container and move to safety areas.
- Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations.
- Remove all sources of ignition, high temperature equipments or flammable substances quickly, if it can be done without risk.  
Remove all sources of ignition, high temperature equipments or flammable substances quickly, if it can be done without risk.
- Prepare proper extinguisher for protection to sudden ignition.
- Use reduced-sparking tools and instruments.
- Absorb spills with inert material (e.g., dry sand or earth). For large spills, dike for later disposal.
- Prevent spills from entering rivers, sewers, watercourses or low areas.

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## 7. HANDLING & STORAGE

### [HANDLING]

- Use only in the well-ventilated areas.
- Keep container tightly closed.
- Forbid using spark and high temperature object.
- Equipments should be grounded and bonded to prevent build-up of electrostatic charges. Use explosion proof electrical (ventilating and lighting) equipment.
- Use reduced-sparking hand tools.
- Immerse used cloth and paper, paint scum or etc. into the water until disposal.
- Use proper protective equipments to avoid contact with skin, eyes or clothing.
- Wash hand and face well after handling this material. Do not bring contaminated protective equipment to a resting room etc.
- The confined work place should be well-ventilated.

### [STORAGE]

- Protect from direct sunlight.
- Keep container in a well-ventilated location place.
- Keep away from all possible source of ignition.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

### [CONTROL PARAMETERS OF INGREDIENT]

INGREDIENT	CONTROL CONCENTRATION	ACGIH	IARC	OTHERS
N-butane		800ppm		LD50 Oral 2632mg/kg
White spirit		100ppm		
Xylene	50ppm	100ppm		LD50 Oral 3500mg/kg
Isobutane				
Ethylbenzene		100ppm		LD50 Oral 3500mg/kg
Titanium dioxide		10mg/m <sup>3</sup>		
Methanol	200ppm	200ppm		LD50 Oral 7939mg/kg

(Attention: An empty column is information or means no correspondence.)

### [ENGINEERING MEASURES]

- Use explosion proof electrical equipments.
- Use exhaust ventilation to keep airborne concentrations below exposure limits.
- Equipments (e.g. truck, pump and stirrer) should be grounded and bonded.
- Do not install all possible source of ignition by the operation area.
- In confined working places, use automatic sprayers or insulate facility where workers have no direct contact or can be protected from explosion and exposure by ventilation.
- In confined working areas like tank inside, install device to ventilate the confined areas especially at the bottom.
- Use in the well-ventilated areas.

### [PERSONAL PROTECTIVE EQUIPMENT]

#### 《RESPIRATORY PROTECTION》

- Wear chemical cartridge respirator with an organic vapor cartridges.
- Use airline respirator at the confined working place.

#### 《EYE PROTECTION》

- Wear protective eyeglasses.

#### 《HAND, SKIN AND BODY PROTECTION》

- To prevent any contact, wear impervious clothing such as gloves, apron, boots or whole body suits made from neoprene, as appropriate.

#### 《OTHER PROTECTION》

- Especially use anti-static boots in case of static spraying.

## 9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE : Liquid

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COLOR : Yellow  
 BOILING POINT/RANGE : 136.2°C~200°C  
 DENSITY : 1.03  
 ODOR : solvent odor  
 VAPOR PRESSURE : 1333Pa(20°C)  
 pH : No  
 OTHER : None

## 10. STABILITY AND REACTIVITY

FLASH POINT : (Paint liquid) 34°C (Spraying materials) -73.3°C  
 AUTO IGNITION TEMPERATURE : 232°C  
 EXPLOSIVITY LIMITS : (LOWER) 0.9 % (UPPER) 7 %

## [KEEPING HANDLING CONDITION(TEMPERATURE · LIGHT)]

- This material is considered a stable material under normal and anticipated storage and handling conditions.

## [INCOMPATIBLE MATERIALS]

- Contacting with oxidizers may be dangerous.

## [HAZARDOUS DECOMPOSITION PRODUCTS WHEN BURNED]

- Decomposition products: Toxic fumes of carbon monoxide, carbon dioxide and nitrogen oxides.

## [HAZARDOUS DECOMPOSITION PRODUCTS WHEN HEATED]

- Generate vapor organic solvents at baking process.

## [OTHER HAZARDOUS INFORMATION]

- Heat may generate and accumulate in paint residues or paint-stuck rags.
- The vessel may burst when heated to about 80°C.

## 11. TOXICOLOGICAL INFORMATION

## [HARMFUL INFORMATION]

ACUTE TOXICITY	ORAL	: No	
	SKIN	: No	
	INHALATION(DUST · MIST)	: No	
SKIN CORROSION/IRRITATION		: Yes	White spirit(Hazard Category 2)、Xylene(Hazard Category 2)
SERIOUS EYE DAMAGE /EYE IRRITATION		: Yes	Xylene(Hazard Category 2)、Ethylbenzene(Hazard Category 2)
RESPIRATORY SENSITIZATION		: No	
SKIN SENSITIZATION		: No	
GERM CELL MUTAGENICITY		: No	
CARCINOGENICITY		: Yes	Ethylbenzene(Hazard Category 2)
REPRODUCTIVE TOXICITY		: Yes	Xylene(Hazard Category 1B)、Ethylbenzene(Hazard Category 1B)、Methanol(Hazard Category 1B)
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY SINGLE EXPOSURE		: Yes	Xylene(Hazard Category 1)、Ethylbenzene(Hazard Category 2)、N-butane(Hazard Category 3)
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY REPEATED EXPOSURE		: Yes	Xylene(Hazard Category 1)、White spirit(Hazard Category 2)
ASPIRATION HAZARD		: No	

## [COMPOSITION]

- Take care that Xylene is stimulus to the eyes.
- Take care that Dimethyl ether is narcotic.
- Continuous contact with spraying materials may cause frostbite or inflammation.

## [PRODUCT]

- Product safety test is not carried out.

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**12. ECOLOGICAL INFORMATION****[GENERAL NOTES]**

- Handle with care because the spill or disposal of product posing effects on environment.

**[HAZARDOUS TO THE AQUATIC ENVIRONMENT (ACUTE HAZARD)]**

- White spirit(Hazard Category 2)、Xylene(Hazard Category 2)、Ethylbenzene(Hazard Category 2)

**[HAZARDOUS TO THE AQUATIC ENVIRONMENT (CHRONIC HAZARD)]**

- White spirit(Hazard Category 2)、Xylene(Hazard Category 2)

**[HAZARDOUS TO ECOLOGY]**

- No Information

**[PERSISTENCE AND DEGRADABILITY]**

- No Information

**[BIOACCUMULATIVE POTENTIAL]**

- No Information

**[MOBILITY IN SOIL]**

- No Information

**13. DISPOSAL CONSIDERATIONS**

- Any disposal practice must be in compliance with local, state or federal laws and
- Do not dump into sewers, on the ground or into any water.

**14. TRANSPORT INFORMATION**

Any transportation practice must be in compliance with local, state or federal laws and regulations.  
(Contact local or environmental agency for specific rules.)

- UN No : 1950-2.1

**15. REGULATORY INFORMATION**

Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.

**16. OTHER INFORMATION****[REFERENCE]**

- Material Data Base for MSDS (Paints) (edited by Japan Paint Manufacturers Society)
- Handbook for Solvents (KODANSHA)
- Handbook for Industrial Poisoning (ISHIYAKUSHUPPAN)
- Chemical Products (published by Kagaku Kogyo Nipposha)

**[REMARK]**

- To the best of our knowledge, the information herein is given in good faith, but no warranty, expressed or implied, is made.