SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE SUPPLIER

(a) Product Identifier	**LSC HIGH GLOSS PAINT**
(b) Other means of identification	LSC High Gloss Alkyd Enamel Packaging: Metal tin: 1 litre / 5 litre / 20 litre
(c) Recommended use and restrictions on use	For metal and wood surface, interior use.
(d) Details of the principal supplier	LSC Chemical & Paints Sdn. Bhd, No. 39, Jalan Bestari 2/KU7, Kawasan Perindustrian Kapar Bestari, 42200 Kapar, Selangor, Selangor Darul Ehsan, Malaysia. Tel.: + 603-3292 8816
(e) Email	lsc_cp@hotmail.com

2. HAZARD IDENTIFICATION

(a) Classification of substance/mixture and any nation or regional information	
Physical: flammable liquids – category 2. **Health:** acute toxicity – category 4. **Environment:** chronic hazard – category 4.	
(b) Label elements	
Hazard Pictogram  Signal word : Danger	
Hazard statements	H225: Highly flammable liquid and vapour H302 (oral): Harmful if swallowed H312 (dermal): Harmful if in contact with skin H332 (inhalation): Harmful if inhaled H413: May cause long lasting harmful effects to aquatic life H411: Toxic to aquatic life with long lasting effect
Precautionary statements - prevention	P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P264 Wash hand thoroughly after handling. P270 Do not eat, drink, or smoke when using this product. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/ eye protection/face protection.

Precautionary statements - response	P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P303 + P361 + P353 IF ON SKIN: Remove/take off immediately all contaminated clothing. Rinse skin with water/ shower. P330 Rinse mouth. P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use ABC powder for extinction.
Precautionary statements - storage	P403 + P235 Store in a well-ventilated place. Keep cool.
Precautionary statements - disposal	P501 Dispose of contents/container to in accordance with local/international regulation
(c) Others hazards	Not known

3. COMPOSITION AND INFORMATION OF THE INGREDIENTS

(a) Substance		
Ingredient name	**CAS number**	**%**
Alkyd Resin	63148-69-6	40 – 55
Hydrocarbon resin	68410-16-2	5 – 10
Pigments	-	10 – 25
2-ethylhexanoic acid zirconium salt	22464-99-9	≤ 1
Calcium bis (2-ethylhexanoate)	136-51-6	≤ 0.3
2-butanone oxime	96-29-7	≤ 0.3

* According to the list of classified chemicals specified in Part 1 of the Industry Code of Practice on Chemicals Classification and Hazard Communication.

4. FIRST AID MEASURES

(a) Description of first aid measures	
Inhalation	Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek emergency medical attention.
Skin	Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.
Eye contact	Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.
Ingestion	Give two glasses of water for dilution; induce vomiting by sticking fingers down throat; never give anything by mouth to an unconscious person; seek medical attention.
(b) Most important symptoms/effects, acute and delayed	
Information for health personnel	Treat Symptomatically. Do not give victim anything to drink if he is unconscious.
(c) Indication of any immediate medical attention and special treatment needed	
Specific details on antidotes	No recommendation given.

5. FIRE-FIGHTING MEASURES

(a) Extinguishing media	Carbon dioxide, water fog, dry chemical, chemical foam. DO NOT use water jet.
(b) Specific hazards arising from the chemical	
Fire and explosion hazards	Closed containers can explode due to buildup of pressure when exposed to extreme heat. Vapors may cause a flash fire or ignite explosively. Vapors may travel a considerable distance to a source of ignition and flash back.
Hazardous combustion products	Fire creates: Smoke, fumes, oxides of carbon, i. e., .Carbon monoxide (CO). Carbon dioxide (CO_2).
(c) Special protective equipment and precautions for fire-fighters	Self - contained respiratory equipment; cool containers to prevent pressure buildup and explosion when exposed to extreme heat. Caution - material is flammable.

6. ACCIDENTAL RELEASE MEASURES

(a) Personal precautions, protective equipment and emergency procedures	Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Ventilate well. Stop leak if possible without risk. Avoid contact with skin and eyes. Do not breathe vapour.
(b) Environmental precautions	Avoid discharge into lakes, ponds, streams, or public waters.
(c) Methods and material for containment and cleaning.	Confine and absorb with sand, earth or other non-combustible material; place material into approved containers for disposal

7. HANDLING AND STORAGE

(a) Precautions for safe handling	Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures.
(b) Conditions for safe storage, including any incompatibilities.	CAUTION - FLAMMABLE - keeps away from all sources of ignition. “Empty” containers may contain residue, which may form explosive vapors. Do not weld or cut near empty container that has not been professionally reconditioned. Use non-sparking tools when opening and closing containers. Maintain well-ventilated work areas to minimize exposure when handling this material.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

(a) Control parameters

Ingredient name	NIOSH				ACGIH			
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
White spirit	300	-	400	--	-	-	-	-
Xylene	100	435	150	655	100	-	150	-

(b) Appropriate engineering controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended practices, most recent edition, for details. Use explosion-proof equipment.

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(c) Individual protection measures
Personal respirators (NIOSH approved) If the exposure limit is exceeded, a half-face organic vapor respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece organic vapor respirator may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. Warning: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Eye protection Maintain eye wash fountain and quick-drench facilities in work area. Use chemical safety goggles and/or full-face shield where dusting or splashing of solutions is possible.
Work/hygienic practices Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

9. PHYSICAL AND CHEMICAL PROPERTIES

(a) Physical state	Liquid
(b) Colour	Clear
(c) Odour	Solvent-like, mild
(d) Odour threshold	Not established
(e) pH	Not applicable
(f) Melting point	Not applicable
(g) Freezing point	Not applicable
(h) Initial boiling point and boiling range	Not applicable
(i) Flash point	Closed cup: 25°C
(j) Evaporation rate	Not applicable
(k) Flammability (solid, gas)	Highly flammable in the presence of open flames, sparks and static discharge and heat.
(l) Upper flammability or explosive limits	7 vol %
(m) Lower flammability or explosive limits	0.8 vol %
(n) Vapour pressure	0.01 kPa
(o) Vapour density	Not applicable
(p) Relative density	0.95 – 1.19
(q) Solubility(ies)	Not soluble in water
(r) Partition coefficient : n-octanol/water	Not applicable
(s) Auto-ignition temperature	Lowest known value: 333°C (631.4°F)
(t) Decomposition temperature	Not applicable
(u) Viscosity	Not applicable

10. STABILITY AND REACTIVITY

(a) Reactivity	Heating may cause a fire.
(b) Chemical stability	Product is stable under normal operating and storage conditions.
(c) Possibility of hazardous reactions	Not known
(d) Condition to avoid	Extreme temperatures, open flames, spark.
(e) Incompatible materials	Water, strong oxidizers, strong acids, strong alkalis.
(f) Hazardous decomposition products	Decomposition will not occur if handle and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes, and smoke may be produced.

11. TOXICOLOGY INFORMATION

(a) Information on the likely routes of exposure	Eye contact, inhalation, skin contact, ingestion	
(b) Symptoms related to the physical, chemical and toxicological characteristics;		
Eye contact	pain or irritation, watering, redness	
Inhalation	No specific data.	
Skin contact	Irritation, redness	
Ingestion	No specific data.	
(c) Delayed and immediate effects and also chronic affects from short and long term exposure;		
	Short term exposure	Long term exposure
Potential immediate effects	Not available	Not available
Potential delayed effects	Not available	Not available
Potential chronic health effects	Not available	Not available

(d) Numerical measures of toxicity (such as acute toxicity estimates).

Ingredient name	LD50 of Ingredient	LC50 of Ingredient	Hazard Symbol
White Spirit	>15000 mg/kg, oral-rat	>13.1 mg/L 4H; Inhalation-rat	F, Xi
Xylene	2000 mg/kg; oral-rat	> 5000 ppm /1H; Inhalation- rat	F, Xn

12. ECOLOGICAL INFORMATION

(a) Ecotoxicity

Ingredient name	**Result**	**Species**	**Exposure**
White Spirit	Acute EC50 0.58-1.2 mg/l	Algae	96 hours
	Acute EC50 10-22 mg/l	Daphnia	48 hours
	Acute LL50 10-30 mg/l	Fish	96 hours
Xylene	Acute IC50 >3.2 mg/l	Algae	72 hours
	Acute EC50 8.5 mg/l	Daphnia	48 hours
	Acute LC50 2 mg/l	Fish	96 hours

(b) Persistence and degradability

Ingredient name	**Aquatic half-life**	**Photolysis**	**Biodegradability**
White Spirit	-	-	Readily
Xylene	3.12	22	low

(c) Bioaccumulative potential

Ingredient name	**$LogP_{ow}$**	**BCF**	**Potential**
White Spirit	-	-	-

Xylene	3.12	22	low
(d) Mobility in soil	Soil/water partition coefficient (K_{OC}) is not available		
(e) Other adverse effects	No known significant effects or critical hazards.		

13. DISPOSAL CONSIDERATIONS

Waste treatment method	
Specify the appropriate methods of disposal	The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.
Product classified as hazardous waste	**Yes**
Packaging classified as hazardous waste	**Yes**

14. TRANSPORT INFORMATION

(a) UN number	UN1263
(b) UN proper shipping name	Paint
(c) Transport Hazard Class(es)	UN Class 3 FLAMMABLE LIQUID
(d) Packing group, if applicable	III
(e) Environmental hazards (e.g. marine pollutant	No
(f) Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)	Not applicable
(g) Special precautions which a user needs to be aware of, or needs to comply with, in connection either within or outside their premises.	Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the chemical			
This product is a "Hazardous Chemical" as it uses the ingredient classified as hazardous under the list of classified chemicals specified in Part 1 of the Industry Code of Practice on Chemicals Classification and Hazard Communication.			
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.			
HMIS III rating			
Health: 1	Flammability: 3	Physical hazard: 1	PPE: Safety glasses, gloves
Other label information	Not available		
Legislation and regulations	None of the component are listed under EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances of very high concern.		

16. OTHER INFORMATION

(a) SDS number	M-0035
(b) Date of preparation of the SDS;	07/07/2014
(c) Date of revision of the SDS	07/07/2024, version 0.00
(d) Date of previous issue	-
(e) Key literature references and sources for data used to compile the SDS	MSDS's and SDS for individual raw material, ICOP.
(f) Key/legend to the abbreviations and acronyms used in the SDS	
ATE = Acute Toxicity Estimate	BCF = Bio-concentration Factor
CAS number = Chemical Abstract Service registry number	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association	IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods	$LogP_{ow}$ = logarithm of the octanol/water partition coefficient
UN = United Nations	MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
F - Highly flammable	
T - Toxic	
Xn - Harmful	PPM - parts per million (mg/kg)
Xi - Irritant	STEL - short-term exposure limits
TWA – time-weighted average	PEL - Permissible exposure limit
Niosh - National Institute for Occupational Safety and Health	ACGIH - American Conference of Governmental Industrial Hygienists
LD50 is defined as the lethal dose at which 50% of the population if killed in a given period of time;	REACH - Registration, Evaluation, Authorisation and restriction of Chemicals of the EU
LC50 is the lethal concentration required to kill 50% of the population.	29 CFR 1910.1200 – Hazard communication of the Occupational Safety and Health Standard
CFR - Code of Federal Regulations	EU – European Union
Flam. Liq. 3 - Flammable liquids category 3 Acute Tox. 4 (inh) - Acute toxicity category 4 inhalation Acute Tox. 4 (dermal) - Acute toxicity category 4 Skin Irrit. 2 - Skin corrosion or irritation category 2 STOT SE 3 - Specific target organ toxicity – single exposure category 3	H226 Flammable liquid and vapour H336 May cause drowsiness or dizziness H332 Harmful if inhaled H312 Harmful if in contact with skin H315 Causes skin irritation
(g) Other information	None known
Disclaimer: This information is based on our present states knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for – a particular application.	