SAFETY DATA SHEET

1. Identification of the preparation and of the company

Product name and/or code : HEMPEL's TOPAZ HI-HIDE GLOSS ALKYD ENAMEL 523ME

Company details : Hempel (Saudi Arabia) W.L.L.
P.O. Box 1077, Dammam 31431
Saudi Arabia, Tel.: +966 3 8471616

Hempel (Kuwait) K.S.C.C
P.O. Box 3400, Safat 13034
Kuwait, Tel.: +965 4813366 / 808828

Hempel (Bahrain) W.L.L.
P.O.. Box 997, Manama
Kingdom of Bahrain, Tel.: +973 17 728 668

Emergency telephone number (with hours of operation)
See section 4 First aid measures.

Product type : alkyd paint

Field of application : buildings and metal industry.

Date of issue : 11/15/2007.

Date of previous issue : No previous validation.

2. Hazards identification

Dangerous for the environment.

Flammable. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Contains 2-butanone oxime. May produce an allergic reaction.

3. Composition/information on ingredients

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

Ingredient name	CAS no.	%	EC number	Classification
white spirit	*64742-88-7	25 - 50		Xn; R65 N; R51/53
xylene	1330-20-7	1 - 3	215-535-7	R10 Xn; R20/21 Xi; R38
2-butanone oxime	96-29-7	0.3 - 0.5	202-496-6	Carc. Cat. 3; R40 Xn; R21 Xi; R41 R43

Notes

(*) See full text of phrases under chapter 16. Occupational exposure limits, if available, are listed in section 8.

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 person warm and at rest. If unconscious, place in recovery position and seek medical advice.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms persist, seek medical attention.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.

5. Fire-fighting measures

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to sewers or waterways. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Extinguishing media : Recommended: alcohol resistant foam, CO_2, powders, water spray.
Not to be used : waterjet.

Fire degradation products : Decomposition products may include the following materials: carbon oxides metal oxide/oxides

6. Accidental release measures

Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.
Contain and collect spillage with non-combustible absorbent 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, or sewers, inform the appropriate authorities in accordance with local regulation.

7. Handling and storage

Handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.
Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

Storage

Store in accordance with local regulations for flammable liquids. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure controls/personal protection

Engineering measures : Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Hygiene measures : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Ingredient name	Occupational exposure limits
white spirit	**80/1107/EEC (Europe, 2000).** TWA Tentativ: 25 ppm 8 hour(s). TWA Tentativ: 145 mg/m³ 8 hour(s).
xylene	**EU OEL (Europe, 5/2006). Skin** short term: 442 mg/m³ 15 minute(s). short term: 100 ppm 15 minute(s). 8 hours: 221 mg/m³ 8 hour(s). 8 hours: 50 ppm 8 hour(s).

Personal protective equipment

General : Gloves must be worn for all work that may result in soiling.
Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.

Respiratory protection : If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. When the product is applied by spraying and for continuous or prolonged work always wear an air-fed respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Be sure to use an approved/certified respirator or equivalent.

Skin protection : Wear suitable protective clothing. Always wear protective clothing when spraying.

Hand protection : Wear suitable gloves. For prolonged or repeated handling, use gloves. Barrier creams may help to protect the exposed areas of the skin, but should not be applied once exposure has occurred. Barrier creams may not be used under or instead of gloves.
Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type.

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

9. Physical and chemical properties

Physical state : Liquid.

Density : 1.07 g/cm^3

Solubility : Very slightly soluble in the following materials: cold water and hot water.

Flash point : Closed cup: 38°C (100.4°F)

Explosion limits : 0.5 - 8 vol %

Solvent(s) % by weight : Weighted average: 39 %

Water % by weight : Weighted average: 0 %

VOC content : Weighted average: 421 g/l (Calculated value for the mixture)

TOC Content : Weighted average: 359 g/l

Solvent Gas : Weighted average: 0.075 m^3/l

10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7).

Highly reactive or incompatible with the following materials: metals.
Reactive or incompatible with the following materials: oxidizing materials.
Slightly reactive or incompatible with the following materials: reducing materials.

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:
Decomposition products may include the following materials: carbon oxides metal oxide/oxides

11. Toxicological information

Effects and symptoms

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. 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. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the

lungs via vomiting.

Sensitization : Contains 2-butanone oxime. May produce an allergic reaction.

Acute toxicity

Ingredient name	Result	Dose	Species
xylene	LD50 Oral	4300 mg/kg	Rat
	LD50 Skin	>1700 mg/kg	Rabbit
	LDLo Oral	50 mg/kg	Human
2-butanone oxime	LD50 Oral	930 mg/kg	Rat

12. Ecological information

Do not allow to enter drains or watercourses. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Ingredient name	Result		Species	Exposure
xylene	Acute LC50 12 mg/L	Mortality	Fish	96 hours
2-butanone oxime	Acute LC50 843 mg/L	Mortality	Fish	96 hours

13. Disposal considerations

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.
Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

14. Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea.
The transport classification is according to ADR 2007, IMDG edition 2006 (incl. Amdt. 33-06).

	UN no.	Proper shipping name	Class	PG*	Label	Additional information
ADR/RID Class	1263	PAINT	3	III		-
IMDG Class	1263	PAINT. (white spirit)	3	III		(P)

PG* : Packing group

15. Regulatory information

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Product use : Consumer applications, Used by spraying.

Symbol : **Dangerous for the environment.**

Risk phrases : R10- Flammable.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S2- Keep out of the reach of children.
S29- Do not empty into drains.
S46- If swallowed, seek medical advice immediately and show this container or label.

Additional warning phrases : Contains 2-butanone oxime. May produce an allergic reaction.

16. Additional information

Full text of R-phrases referred to in the Safety Data Sheet : R10- Flammable.
R40- Limited evidence of a carcinogenic effect.
R21- Harmful in contact with skin.
R20/21- Harmful by inhalation and in contact with skin.
R65- Harmful: may cause lung damage if swallowed.
R41- Risk of serious damage to eyes.
R38- Irritating to skin.
R43- May cause sensitization by skin contact.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Notice to reader

Modified data or content compared with the previous version are maked with a triangular marker in the upper-left corner within the Safety Data Sheet.
The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications.
It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.