

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name KBS HI TEMP PRIMER AEROSOL
Synonyms 6810 - PRODUCT CODE • HI TEMP PRIMER AEROSOL

1.2 Uses and uses advised against

Uses INDUSTRIAL COATING

1.3 Details of the supplier of the product

Supplier name FORMULA MARKETING LTD
Address 23 Ross Reid Pl, East Tamaki, Auckland, 2013, NEW ZEALAND
Telephone 09 273 3600
Fax 09 271 2304
Email sales@formula.co.nz
Website <http://www.formula.co.nz>

1.4 Emergency telephone numbers

Emergency 0800 764 766

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO HAZARDOUS SUBSTANCES [CLASSIFICATION] REGULATIONS 2001

HSNO classifications

2.1.2A(1)	Flammable aerosols.
6.1D (dermal)	Substances that are acutely toxic - Harmful.
6.1D (inhalation)	Substances that are acutely toxic - Harmful.
6.1D (oral)	Substances that are acutely toxic - Harmful.
6.3A	Substances that are irritating to the skin.
6.4A	Substances that are irritating to the eye.
6.7B	Substances that are suspected human carcinogens.
6.8B	Substances that are suspected human or reproductive developmental toxicants.
6.9B (Repeated)	Substances that are harmful to human target organs or systems.
9.1D (H402)	Harmful to aquatic life.
9.3C	Substances that are harmful to terrestrial vertebrates.

2.2 GHS Label elements

Signal word DANGER

Pictograms



PRODUCT NAME KBS HI TEMP PRIMER AEROSOL**Hazard statements**

H222	Extremely flammable aerosol.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H402	Harmful to aquatic life.
H433	Harmful to terrestrial vertebrates.

Prevention statements

P102	Keep out of reach of children.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurized container: Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response statements

P101	If medical advice is needed, have product container or label at hand.
P321	Specific treatment is advised - see first aid instructions.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing and wash before re-use.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

Storage statements

P405	Store locked up.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C.

Disposal statements

P501	In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.
------	---

2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
BUTANE	106-97-8	203-448-7	10 to 30%
DICHLOROMETHANE (METHYLENE CHLORIDE)	75-09-2	200-838-9	10 to 30%
PROPANE	74-98-6	200-827-9	10 to 30%
XYLENE	1330-20-7	215-535-7	10 to 30%
ETHYLBENZENE	100-41-4	202-849-4	<10%
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC (<0.1% W/W BENZENE)	64742-95-6	265-199-0	<10%
TOLUENE	108-88-3	203-625-9	<10%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion	For advice, contact the National Poisons Centre on 0800 764 766 (0800 POISON) or +643 479 7248 or a doctor (at once). If swallowed, do not induce vomiting.
First aid facilities	Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture

Highly flammable aerosol. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition. Aerosol may explode at temperatures exceeding 50°C. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, heaters, naked lights, pilot lights, etc when handling. May evolve nitrogen oxides when heated to decomposition.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

2YE
2 Fine Water Spray.
Y Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.
E Evacuation of people in and around the immediate vicinity of the incident should be considered.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

PRODUCT NAME KBS HI TEMP PRIMER AEROSOL**7.2 Conditions for safe storage, including any incompatibilities**

Store in a cool (< 50°C), dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure aerosol containers/ cans are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for damaged/ leaking containers. Large storage areas should have appropriate fire protection systems. Store below 21°C.

7.3 Specific end uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 Control parameters****Exposure standards**

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Butane	WES (NZ)	800	1900	--	--
Ethyl benzene	WES (NZ)	100	434	125	543
Methylene chloride	WES (NZ)	50	174	--	--
Propane	WES (NZ)	Asphyxiant			
Shellsol A	WES (NZ)	100	525	--	--
Toluene	WES (NZ)	50	188	--	--
Xylene	WES (NZ)	50	217	--	--

Biological limits

Ingredient	Determinant	Sampling Time	BEI
DICHLOROMETHANE (METHYLENE CHLORIDE)	Dichloromethane in urine	End of shift	0.3 mg/L
ETHYLBENZENE	Sum of mandelic acid and phenylglyoxylic acid in urine	End of shift at end of workweek	0.7 g/g creatinine
	Ethyl benzene in end-exhaled air	Not critical	-
TOLUENE	o-Cresol in urine	End of shift	0.02 mg/L
	Toluene in urine	End of shift	0.03 mg/L
	Toluene in blood	Prior to last shift of workweek	0.02 mg/L
XYLENE	Methylhippuric acids in urine	End of shift	1.5 g/g creatinine

Reference: ACGIH Biological Exposure Indices

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

PPE

- Eye / Face** Wear splash-proof goggles.
- Hands** Wear PVA or viton (R) gloves.
- Body** When using large quantities or where heavy contamination is likely, wear coveralls.
- Respiratory** Where an inhalation risk exists, wear a Type A-Class P1 (Organic gases/vapours and Particulate) respirator.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Appearance LIQUID (AEROSOL DISPENSED)
CHARACTERISTIC HYDROCARBON ODOUR

9.1 Information on basic physical and chemical properties

Odour	
Flammability	HIGHLY FLAMMABLE
Flash point	-104°C to 42°C
Boiling point	-42°C to 170°C
Melting point	NOT AVAILABLE
Evaporation rate	33.494 (Butyl acetate = 1)
pH	NOT AVAILABLE
Vapour density	> 1 (Air = 1)
Specific gravity	0.981
Solubility (water)	INSOLUBLE
Vapour pressure	0.9 kPa @ 20°C (xylene)
Upper explosion limit	NOT AVAILABLE
Lower explosion limit	NOT AVAILABLE
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to avoid

Avoid shock, friction, heavy impact, heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), heat and ignition sources.

10.6 Hazardous decomposition products

May evolve carbon oxides and hydrocarbons when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Harmful if swallowed, in contact with skin, and/or if inhaled. This product may have the potential to cause adverse health effects if intentionally misused (e.g. deliberately inhaling contents).

PRODUCT NAME KBS HI TEMP PRIMER AEROSOL**Information available for the ingredients:**

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
BUTANE	Study not feasible	Study not feasible	658000 mg/m ³ /4H (rat)
DICHLOROMETHANE (METHYLENE CHLORIDE)	> 2000 mg/kg (rat) (OECD Test Guideline 401)	> 2000 mg/kg (rat) (OECD Test Guideline 402)	88 mg/L/30min; vapour (rat) (IUCLID)
PROPANE	Study not feasible	Study not feasible	> 800000 ppm/15M (rat)
XYLENE	4300 mg/kg (rat)	> 1700 mg/kg (rabbit)	4330–5984 ppm/6 hours (rat)
ETHYLBENZENE	3500 mg/kg (rat)	17800 mg/kg (rabbit)	50 g/m ³ /2 hours (mouse)
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC (<0.1% W/W BENZENE)	> 5000 mg/kg (OECD TG 401)	> 2000 mg/kg (OECD TG 402)	> 5610 mg/m ³ (OECD TG 403)
TOLUENE	5580 mg/kg (rat)	5000 mg/kg (rabbit)	25.7 - 30 mg/L/4hrs (rat)

Skin	Contact may result in drying and defatting of the skin, irritation, rash and dermatitis.
Eye	Contact may result in irritation, lacrimation, pain and redness.
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Mutagenicity	Insufficient data available to classify as a mutagen.
Carcinogenicity	Suspected of causing cancer. Dichloromethane is classified as possibly carcinogenic to humans (IARC Group 2B). Ethylbenzene is classified as possibly carcinogenic to humans (IARC Group 2B).
Reproductive	Over exposure to toluene may damage fertility or the unborn child.
STOT - single exposure	Over exposure may result in irritation of the nose and throat, coughing, nausea and headache. High level exposure may result in dizziness, drowsiness, breathing difficulties and unconsciousness.
STOT - repeated exposure	Repeated exposure to toluene may result in central nervous system (CNS), liver and kidney damage.
Aspiration	Ingestion is considered unlikely due to product form. However, if liquid component is ingested, aspiration into the lungs may cause chemical pneumonitis and pulmonary oedema.

12. ECOLOGICAL INFORMATION**12.1 Toxicity**

Harmful to aquatic organisms. Harmful to terrestrial vertebrates.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

If aromatic hydrocarbons are released to soil, they will evaporate from near-surface soil & leach to groundwater. Biodegradation occurs in soil & groundwater but may be slow, especially at high concentrations, which can be toxic to microorganisms. Will exist largely as vapour in air. Half life in atmosphere depends on particular hydrocarbon (eg 1-2 days (xylene); 3 hrs-1 day (toluene)).

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Waste disposal	For small amounts, absorb contents with sand or similar and dispose of to an approved landfill site. Do not puncture or incinerate aerosol cans. Contact the manufacturer/supplier for additional information (if required).
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005; NZS

PRODUCT NAME KBS HI TEMP PRIMER AEROSOL

5433:2012, UN, IMDG OR IATA



	LAND TRANSPORT (NZS 5433)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	1950	1950	1950
14.2 Proper Shipping Name	AEROSOLS	AEROSOLS	AEROSOLS
14.3 Transport hazard class	2.1	2.1	2.1
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

Not a Marine Pollutant

14.6 Special precautions for user

Hazchem code 2YE
EMS F-D, S-U

15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Approval code HSR002517
Group standard Aerosols (Flammable, Toxic [6.7]) Group Standard 2006
Inventory listings **NEW ZEALAND: NZIoC (New Zealand Inventory of Chemicals)**
 All components are listed on the NZIoC inventory, or are exempt.

16. OTHER INFORMATION

Additional information AEROSOL CANS may explode at temperatures approaching 50°C.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PRODUCT NAME KBS HI TEMP PRIMER AEROSOL**Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CCID	Chemical Classification and Information Database (HSNO)
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
EPA	Environmental Protection Authority [New Zealand]
GHS	Globally Harmonized System
HSNO	Hazardous Substances and New Organisms
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m ³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

Prepared by

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmtglobal.com

[End of SDS]