

**MATERIAL SAFETY DATA SHEET****Product Name:** Beger Duraguard-HB

Product Code: -

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Date of Issue: 05/10/2009

Version no.1

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANYProduct name: **Beger Duraguard-HB**

Supplier: Beger Co., Ltd.

Address: 90, 92 Buntudthong Road, Rachatavee, Bangkok 10400 Thailand.

2. COMPOSITION / INFORMATION ON INGREDIENTS

No.	Description	UN Number	CAS.No.	Symbol	Weight (%)
1	Epoxy Resin	Not Listed	Not Listed	Xn, Xi	>20 – 30
2	Curing Resin	Not Listed	Not Listed	Xn, Xi	>5 – 7
3	Pigment / Extender	Not Listed	Not Listed	Xn, Xi	>45 – 55
4	Solvent Naphtha (Petroleum), light arom	1268	64742-95-6	Xn, Xi	>10 – 15
5	Methyl Isobutyl Ketone	1245	108-10-1	F, Xn	>1 – 2
6	n-Butyl Alcohol	1120	71-36-3	Xn, Xi	>2 – 5

Carcinogen: None.

Legend: T+=Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, IK=No classification required, E=Explosive, O=Oxidizing, F+=Extremely flammable, F=Very flammable, Fo=Flammable, N=Danger to the environment.

3. HAZARDS IDENTIFICATION

Primary Routes of Exposure

Inhalation: Slightly irritation.

Eye Contact: Direct contact with material can cause irritation.

Skin Contact: Prolonged or repeated skin contact can cause skin irritation.

4. FIRST AID MEASURES

General Advice: Avoid contact with skin and eyes.

Inhalation: Move subject to fresh air.

Skin Contact: Wash affected skin areas thoroughly with soap and water. Consult a physician if irritation.

Eye Contact: Flush eyes with a large amount of water for at least 15 minutes. Consult a physician if irritation persists.

Ingestion: If swallowed, give 2 glasses of water to drink. Consult a physician. Never give anything by mouth to an unconscious person.



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5. FIRE FIGHTING MEASURES

Flash Point: 39 ± 2°C

Ignition Temperature High Temperature.

Extinguishing Agents: Use extinguishing media appropriate for surrounding fire.

Extinguishing Media: Dry Powder, Foam, Carbon dioxide.

Personal Protective Equipment: Wear self-contained breathing apparatus (pressure-demand MSHA-NIOSH approved or equipment) and full protective gear.

In Case of Fire: Formation of carbon monoxide, nitrogen oxide, and traces of hydrogen cyanide is possible.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contacts with the skin and the eyes.

Environmental Precautions: Do not let product enter drains.

Procedures for Cleaning up: Soak up immediately with inert absorbent material (e.g. sand, earth). Transfer liquids and solid material to separate suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Handling: Use only in well-ventilated areas. Keep away from heat and source of ignition.
General industrial hygiene practice.

Storage: Keep containers tightly closed in a cool, well ventilated place.

Storage Temperature: 5 – 35°C.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: An air-fed mask, or short periods of works, a combination of charcoal filter and particulate filter is recommended.

Hand Protection: Rubber or plastic gloves.

Eye Protection: Chemical splash goggles, face shield.

Skin and Body Protection: Light weights protective clothing.

Hygiene Measures: Keep away from food, drink. Wash hands before breaks and at end of work. Keep working clothes separate. Take off immediately all contaminated clothing. General industrial hygiene practice.



HYGIENIC PRACTICES: Good personal hygiene practices are required at all times when handling chemicals. These practices including, but are not limited to, washing when safety equipment is removed, at the end of each shift or when going on breaks and especially of contamination occurs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid

Colour: White or according to colour card

Odour: Specific

pH Value: Not applicable

Flash Point: $39 \pm 2^{\circ}\text{C}$

Viscosity: 95 ± 5 KU at 25°C

Specific Gravity (Water = 1): 1.40 to 1.60

Initial Boiling Point: $>300^{\circ}\text{C}$ Water

Solubility in Water: Insoluble

Explosion Limits

Lower: n.d.a.

Upper: n.d.a.

Vapour Pressure: n.d.a.

10. STABILITY AND REACTIVITY

Hazardous Decomposition Products: No hazardous decomposition products when stored and handled correctly.

Hazardous Reactions: Exothermic reaction with amines and alcohols; reacts slowly with water forming CO_2 , in closed containers risk of bursting owing to increase of pressure.



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11. TOXICOLOGICAL INFORMATION

Skin and mucous membrane compatibility, rabbit:

Skin 4 hours exposure – slightly irritant.

Eyes:

Non-irritant (Taste according to OECD Guidelines No.404 and No.405).

Long term contact with skin:

Tanning and irritating effects are possible.

Over-exposure, especially during spraying operations without the necessary precautions, entails the risk of concentration-dependent irritation effects on eyes, nose throat, and respiratory tract.

12. ECOLOGICAL INFORMATION

Ecological information: Do not allow to escape into water, wastewater or soil.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Solidify unexposed surplus and dispose of together with processed material as cured plastic waste-in accordance with local and national regulations.

Contaminated packing: In accordance with local and national regulations.

14. TRANSPORT INFORMATION

US DAT Hazard Class: No regulated. Not dangerous cargo. Keep dry. Slightly smell. Keep away from food-stuffs, acids and alkalis.

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15. REGULATORY INFORMATION

The product is classified and labeled for supply in accordance with the EC directives. (1999/45/EC)

Danger Symbol: Xn, F

Danger Classification: Harmful Flammable

Product Contain:

Solvent Naphtha (Petroleum), light arom

Methyl Isobutyl Ketone

n-Butyl Alcohol

R20/21: Harmful by inhalation and in contact with skin.

R38: Irritating to skin

R11: Highly flammable.

Labeling for Industrial Users

S16: Keep away from sources of ignition – No smoking.

S23: Do not breathe spray dust / solvent vapour.

S33: Take precautionary measures against static discharges.

S36/37: Wear suitable protective clothing and gloves.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

Restricted to professional users.

Full text of risk warning for components listed in section 2.

R10: Flammable.

R11: Highly flammable.

R20: Harmful by inhalation.

R20/21: Harmful by inhalation and in contact with skin.

R38: Irritating to skin.

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapours may cause drowsiness and dizziness.

National Regulations.





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16. OTHER INFORMATION

Recommended Use: Protective Coating.

Recommended Restrictions: Use only in well-ventilated area.

This information contain herein relates only to the specific material identified. The company believes than such information is accurate and reliable as of the date of this safety date sheet, but no representation, guaranty, expressed or implied, is made as to the accuracy, or completeness of the information.