

MATERIAL SAFETY DATA SHEET

Conforms to ISO 11014-1

PRODUCT:

LAMBOND HARDENER

1. Product and Company Identification

Commercial name of Product:

LAMBOND HARDENER

UN Number: 2213

C.A.S. number: Mixture

Manufacturer:

Chemicals & Research cc,
12 Regents Avenue,
Anzac,
BRAKPAN

Supplier:

Rystix Sales CC
16 – 7th Avenue
Newton Park
PORT ELIZABETH

Emergency telephone numbers: 0861 – 797 849

Fax: 041 – 365 6973

2. Composition/Information on ingredients

Substance/preparation:

Preparation

Information on hazardous ingredients

Chemical name	CAS No.	%	Symbol	R-Phrases
Paraformaldehyde	30525-89-4	27 – 33	Xn	R16, R18, R20/21/22
Trade Secret		67 – 73	Xn	

Occupational exposure limits, if available, are listed in section 8.

3. Hazards identification

Physical/chemical hazards:

Combustible.
Explosive when mixed with oxidizing substances.
In use may form flammable/explosive air/vapour mixtures.

Human health hazards:

Harmful by inhalation, in contact with the skin and if ingested.
Irritating to the eyes.

Environmental hazards:

Harmful to aquatic organisms.

4. First aid measures

Effects and symptoms

Inhalation:

Slightly hazardous by inhalation (lung irritant).

Ingestion:

Slightly hazardous if ingested.

Skin contact:

Slightly hazardous in case of skin contact (irritant, sensitizer).

Eye contact:

Slightly hazardous in case of eye contact (corrosive, irritant).

Aggravating conditions:

None known.

First aid measures

Inhalation:

Allow exposed persons to rest in a well-ventilated area.

Ingestion:

Do not induce vomiting. Rinse out mouth with copious quantities of water and obtain medical attention.

Skin contact:

Wash contaminated skin with water and soap.

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Eye contact:

Check for and remove contact lenses and rinse the eyes with clean water.
Obtain medical attention.

Note to Physician:

Treat symptomatically.

Protection of first-aiders:

Wear a surgical mask and latex gloves.

5. Fire fighting measures

Suitable extinguishing media:

Small fire: use dry powder,
Large fire: use alcohol resistant foam, never use strong water jets.

Special fire-fighting procedures:

Remove unaffected containers, if safe.
Keep all persons up-wind from fire.

Unusual/explosion hazards:

Unopened containers may explode if subjected to fire.

Hazardous thermal decomposition
Products:

Oxides of Carbon.

Protection of fire-fighters:

Fire fighters should wear full turn-out gear and correct type respirators.

6. Accidental release measures

Personal Precautions:

Splash goggles, gloves, boots, respirator, full suit.

Environmental precautions
And clean-up methods:

Do not allow spilt material to enter sewers or streams. Dyke in if necessary
. Absorb spilt material onto a suitable absorbant and dispose of in an approved dump.

7. Handling and storage

Handling:

Use chemical resistant gloves to protect hands, together with splash goggles.

Storage:

Store in a cool, dry place away from heat and sources of ignition

Suitable packaging materials:

Sturdy metal containers.

8. Explosion controls/Personal protection

Engineering controls:

Provide adequate ventilation.
Ensure that the correct type of eye wash station is in the vicinity of the work place.

Hygiene measurers:

Wash hands before leaving the work place.

Occupational exposure limits:

Hazardous ingredients	TLV/PEL
Paraformaldehyde	TWA: 10 mg/m ³ from ACGIH (1994) Inhalation, Respirable

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9. Physical and Chemical properties

Physical state and appearance:	Free-flowing solid.
Colour:	White to off-white.
Odour threshold:	Not available.
Boiling point:	N.A.
Melting point:	Decompose.
Bulk density:	Not available.
Vapour density:	Not available.
Vapour pressure:	Not available.
Evaporation rate:	<1 (Butyl Acetate)
Solubility:	Slightly soluble in water.
Octanol/water partition coefficient:	The product is more soluble in water than in oil.
pH:	N.A.
Flashpoint:	71°C (Cleveland O.C.).
Flammability:	Combustible.
Auto ignition point:	Not available.
Explosion properties:	Explosive in presence of fire and sparks. Explosive in presence of heat.
Lower explosion limit:	N.A.
Viscosity:	N.A.

10 Stability and reactivity

Stability:	Product is stable.
Conditions to avoid/ materials to avoid:	Exposure to temperatures >35°C should be avoided. .
Hazardous reactions:	None known.
Hazardous decomposition products:	Oxides of Carbon.

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11. Toxicological information

Acute data [LD50, LC50]
Toxicity to test animals:

Acute oral toxicity for product = 1350 mg/Kg (calculated) [Rat].

Local effects:

Skin irritation:

Corrosive to the skin.

Eye irritation:

Slightly hazardous in case of eye contact (irritant).

Sensitization:

Slightly hazardous in case of skin contact (sensitizer).

Chronic toxicity:

None known.

Specific effects:

Carcinogenic effects:

None known.

Mutagenic effects:

Not available.

Reproduction effects:

Not available.

12. Ecological information

Mobility:

Slightly mobile in nature.

Persistence/degradability:

Product is not freely biodegradable.

Bioaccumulation potential:

Unknown.

Ecotoxicity:

Product is harmful to aquatic organisms.

13. Disposal considerations

Methods of disposal

Waste or residues

Dispose of in accordance with national legislative requirements.

Contaminated packaging:

Dispose of in accordance with national legislative requirements.

14. Transport information

International transport regulations

UN number:

2213

Land - Road/Railway:

Proper shipping name:

Combustible solids n.o.s. (Paraformaldehyde).

ADR/RID class:

4.1

ADR/RID item number:

4.1

Marginal:

Not known.

Sub-marginal:

Not known.

Packing group:

b.

Hazard identification number:

Not available.

ADR/RID label:

Xn

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Sea:

Proper shipping name:	Combustible solids n.o.s. (Paraformaldehyde).
IMDG Class:	4.1
IMDG page no.:	4164
IMDG label:	
Medical First Aid Guide [MFAG]:	300
Emergency Schedule [EmS]:	4.1-03
Marine pollutant:	P

Air:

Proper shipping name:	Combustible solids n.o.s. (Paraformaldehyde).
UN/ID no.:	2213
IATA-DGR Class:	Not available.
IATA label:	

15. Regulatory information

Hazard symbols:	P
Risk phrases:	R16 Explosive when mixed with oxidizing substances, R18 In use it may form flammable/explosive air/vapour mixtures, R20/21/22 Harmful by inhalation, in contact with the skin and if inhaled,
Safety phrases:	S2 Keep out of reach of children, S24/25 Avoid contact with skin and eyes. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S46 If ingested seek medical attention and show this document,
Child protection:	Prevent children access to this product.
Contains:	Paraformaldehyde.

16. Other information

History

Date of printing:	2004.06.22
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Version:	1.
Prepared by:	A.L.B. du Plessis

NOTICE TO READER

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