LATEX HA *is a natural rubber latex concentrate obtained by centrifugation and preserved with a high amount of ammonia. It is a general purpose latex and is widely used in many latex applications like dippings, castings and adhesive bindings. It gives excellent films of high clarity and has good adhesion characteristics as a binding agent when suitably compounded.*

1. TYPICAL PROPERTIES

Total Solid Content (%)		-	61.20 – 62.00
Dry Rubber content (%)		-	60.00 min.
Non-Rubber Solids (%)		-	1.50 max
Alkalinity (%)		-	0.60 min
MST @ 55% TSC (sec.)		-	800 min.
Volatile Fatty Acid No.		-	0.05 max
KOH No.		-	0.60 max
Magnesium Content (ppm)		-	50 max
Coagulum Content (ppm)		-	100 max
Brookfield Viscosity,	s2/r30	-	75 - 100
at 26±2 °C (cP)	s2/r60	-	65 - 80
pH		-	10.0 – 11.5
Specific Gravity		-	0.94 – 0.95

2. APPLICATION

LATEX HA after compounding, has a wide application especially in dipped products like gloves, balloons, etc. It is also used as an adhesive for casting on to a backing substrate, in wood lamination and for binding different types of materials.

3. PACKING

LATEX HA is packed in non-returnable, internal-lined metal drums of net weight 205kg or delivered in larger bulk quantities using appropriate tanks.

4. STORAGE

It is recommended that this product be stored in a sheltered premise, away from direct exposure to sunlight or subjected to temperatures above 35°C, but also not in extremely cold or freezing conditions. Some creaming of the product may occur over a long storage period, and if this has happened, stirring or gentle agitation is required to re-disperse the cream into the bulk of the latex before use.

When properly stored, the product should have a shelf life of up to 12 months. Longer storage than this period is however not recommended.

5. HEALTH HAZARD AND SAFETY

LATEX HA is an ammoniated latex concentrate and hence the normal precautions taken in the handling of ammonia solutions must be strictly followed. It should not be ingested or consumed. Avoid direct contact with the skin and eyes in particular. If latex is accidentally splashed onto any part of the body or eyes, wash the affected area immediately with plenty of running water, and seek medical advice if there is pain or sign of redness.

No adverse physiological reaction has been observed in the use of this product when it was handled correctly and used in the manner suggested above.

The above information is given in good faith and without liability.

MATERIAL SAFETY DATA SHEET

MSDS/R2/240102/HA

1. **PRODUCT IDENTIFICATION**
   Trade Name: LATEX HA
   Product : Latex HA is a natural rubber latex of 60% Dry Rubber content in water. It contains 0.6% by weight of ammonia.
   Chemical Family : Natural rubber latex concentrate consists mainly of Cis-1, 4, Polyisoprene (CAS nr. 9006-04-6 ; proportion >=60.0%)
   Formula: $- [CH_2 - C (CH_3) = CH - CH_2]_n -$

2. **COMPOSITION**
   Substances Posing a Health Hazard
   Ammonia Solution Xi
   Substances Subjects to a Recognised Exposure Limits.
   Ammonia – 25 ppm (8 hr TWA)
   R and S phases appropriate to the above
   R 36/37/38 S7 – 26

3. **HAZARDS IDENTIFICATION**
   Most Important Hazards to Man
   Irritant
   Most Important Hazards to the Environment
   Ammonia is a preservative against bacteria

4. **FIRST AID MEASURES**
   INHALATION:
   Symptoms
   Irritation to mucous membrane of respiratory tract, coughing, dyspnoea and vomiting.
   Immediate First Aid
   Not necessary unless excessive exposure to ammonia.
   Remove from source of contamination.
   SKIN CONTACT:
   Delayed Onset of Symptoms is Possible
   Symptoms
   Allergic response (dermatitis)
   Immediate First Aid
   Wash with plenty of water.
   Medical Assistance
   If symptoms persist seek medical advice.
   EYE CONTACT:
   Symptoms
   Irritation of eyes, conjunctivitis.
   Drying of latex leaves behind a rubber deposit.
   Immediate First Aid
   Immediately wash with plenty of water.
   Medical assistance
   Seek medical help.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

No special requirement.

Extinguishing Media that Must NOT be used

Nil

Exposure Hazards

From Preparation

If contact with skin, wash with plenty of water. Wear protective clothing and mask.

From Combustion Products

Toxic fumes and smoke are liberated.

Wear protective mask.

From Resulting Gases

See above.

Special Protective Equipment for Fire Fighters

Impervious overalls, boots and gloves.

6. ACCIDENTAL RELEASE MEASURES

Personnel Precautions:

Removal of Ignition Sources

The product is inflammable, but if water is evaporated off, the dry product could burn.

Provision for Ventilation / Respiratory Protection

Care should be taken to ensure that atmosphere concentration of ammonia in working environment is reduced as far below the Occupational Exposure Std (see Ref. 1). Working areas should be well ventilated. Respiratory protection is only required when ventilation is inadequate.

Control of Dust

Not relevant.

Environment Precautions:

It is recommended that the latex be coagulated with acid and the serum neutralized before discharge; solid waste is normally disposed off as "Notifiable Waste".

7. HANDLING AND STORAGE SAFETY

Safe Handling Procedure

No special precautions other than wearing protective goggles, gloves, mask & clothing; ensure good ventilation.

Safe Storage Procedures

Keep container tightly closed in a cool & well ventilated place.

High standards of industrial hygiene should be maintained (see Ref. 2).

8. EXPOSURE CONTROL / PERSONNEL PROTECTION

Respiratory Protection	Wear protective mask.
Hand Protection	Wear protective gloves.
Eye Protection	Wear goggles.
Skin Protection	Wear protective clothing, gloves and boots. Overall work wear may be used.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	White suspension in water
Odour	Pronounced ammonia.
pH	10.0 – 11.0
Boiling Point	Same as water
Melting Point	(Not Applicable) N/A
Flash Point	N/A
Flammability	N/A
Explosive Properties	None
Oxidizing Properties	N/A
Vapour Pressure	N/A
Specific Gravity	0.94 – 0.95
Solubility – Water	Miscible
- Oil	Insoluble

10. STABILITY & REACTIVITY

Conditions To Avoid

Avoid excessive exposure to ammonia when opening drums of latex. Exposure of large surface in poorly ventilated room.

Material To Avoid

Nil

Hazardous Decomposition Products

Dry products when heated or ignited will give off toxic fumes and smoke.

11. TOXICOLOGOCAL INFORMATION

LD	No Data
Sensitization	No Data
Corrosive / Irritant	Irritant
Reproductive Toxicity	No Data

12. ECOLOGICAL INFORMATION

Effects of Preparation	No Data
Behaviour of Preparation	No Data
Rate of Preparation	No Data
Mobility	No Data
Persistence / Biodegradability	No Data, expected to be biodegradable
Bioaccumulative Potential	No Data, expected to be none.
Aquatic Toxicity / Ecotoxicity	No Data, expected to be none.

13. DISPOSAL CONSIDERATIONS

Appropriate Disposal Method

Do not pour into drain or soil.

Dispose off in accordance to Local Statutory Regulations.

Of Product

Solid waste after coagulation can be burnt in an incinerator.

Of Containers

No special requirement.

14. TRANSPORT INFORMATION

UN, NO	None
RID / ADR / IMDG	No restriction for transport purposes.

15. REGULATORY INFORMATION

CFD	Ammonia solution is an irritant
Limits	25 ppm in air 8 hr TWA 35 ppm in air 10 min TWA

16. OTHER INFORMATION

- Product contains 0.6% by weight of ammonia.

17. REFERENCES

1. Occupational Exposure Limits for 10., Guidance Note EH40/….; issue annually by the UK Health and Safety Executive.
2. Toxicity and Safe Handling of Rubber Chemicals, BRMA Codes of Practice 197 published by BRMA Ltd., Birmingham 1.