SATREAT HALOGENATION PRIMER

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Description: SATREAT is a solvent-borne solution for priming (halogenating) rubber surfaces which are to be bonded with a polyurethane adhesive. The primer reacts with (chlorinates) the rubber surfaces which are to be bonded with a polyurethane adhesive, thus giving good compatibility between substrate and adhesive.

Applications:

- Priming vulcanised rubbers – resin rubber, microcellular rubber, gristle rubber and moulded rubber units (including solid and expanded gristle) – before applying polyurethane adhesive.
- Priming natural crepe rubber before applying polyurethane adhesive (Polychloroprene adhesive is usually effective on halogenated crepe rubber but NOT ON other halogenated rubbers. Special primers, solutions of modified natural rubber, are also available for crepe as an alternative to halogenation).
- Priming thermoplastic rubbers before applying polyurethane adhesive.

Physical Characteristics:

Appearance	Clear or slightly turbid (milky) flammable liquids.
Specific Gravity	Approx 0.902
Flammability	Highly flammable
Shelf Life (Under Recommended Storage Conditions)	3 months 1 month once opened
Any other essential data	Halogenation primers are sensitive to moisture and light and must be stored in the special black polythene containers in which they are supplied. They must never be mixed with water, solvents and other materials, or poured into metal containers

Recommended Usage:
MANUAL APPLICATION:
Scrub the SATREAT onto the rubber surface using a stiff bristled brush, such as a large 'toothbrush' type to provide an even wetting of the entire surface to be bonded. The scrubbing action is necessary to disperse soaps and other contaminants from the surface at the same time as it is chlorinated. In some cases, especially with moulded rubber units and gristle rubbers, contamination is such that roughing or LACSOL priming is necessary before SATREAT application.
The normal minimum time between SATREAT scrubbing and adhesive application is 15 minutes. This time can usually be extended without problems but it is good practice to apply the SATREAT and adhesive on the same working day. If essential, to suit process conditions, the time may be reduced, many vulcanised rubbers giving good results once the surface is visibly dry, eg after 1 minute. However, check adhesion tests should be carried out if short SATREAT drying times are envisaged.

Natural Crepe Rubber
Scrub the SATREAT onto the rubber surface using a still bristled brush, as for vulcanised rubbers.
The time between SATREAT scrubbing and adhesive application should be at least 15 minutes but not beyond the end of the working day.

Thermoplastic Rubbers
Thermoplastic rubber is sensitive to solvents and will dissolve in SATREAT primer. The SATREAT must, therefore, be applied by lightly painting the entire surface to be bonded with a soft bristled brush. The surface MUST NOT BE SCRUBBED. Flooding should be avoided as the rubber may crack if it is deformed during handling while still set. It is good practice to store treated units in the inverted position on racks, so that any excess primer in the cavities or wells of the units can drain out.

Solvents can weaken the surface layers of thermoplastic rubber and if they are present (from SATREAT or adhesive) at heat reactivation and pressing, they may cause failure due to delamination of the rubber. The time between SATREAT and other adhesive application should, therefore, be at least 30 minutes and the adhesive open time at least 2 hours.

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These times can usually be extended but it is good practice to apply the SATREAT and the adhesive on the same working day. Check adhesion tests are recommended if changes are made in process conditions or in TR compounds

MACHINE APPLICATION
Machine application of SATREAT primer offers a faster, more consistent, cleaner process.

Spray Machine
Spray halogenation machines may be effective for applying SATREAT to thermosplastic rubbers, also some vulcanised rubbers. However, the lack of scrubbing action may make a prior roughing or cleaning step necessary on vulcanised rubbers. Spray machines can handle both flat soles and moulded units.

Roller-Scrub Machines
Roller machines incorporating a scrubbing action are effective for applying SATREAT to flat or reduced (chamfered) vulcanised rubber such as resin rubber soles. They cannot handle moulded units.

All machines for use with SATREAT must be constructed so that the primer does not come in to contact with metals, which it corrodes.

Machines generally apply a thin even coating of SATREAT. The drying time between SATREAT priming of vulcanised rubbers by machine and adhesive application, therefore may often be safely reduced to as little as 5-10 seconds, providing the surface is visibly dry.

The drying time recommendations for thermosplastic rubbers are the same as for manual application.

Precautions in Use:
Important: For full details please refer to the separate *Material Safety Data Sheet* for this Product
This product is highly flammable. Keep away from sources of ignition. Avoid prolonged or repeated breathing of vapour. Use with adequate ventilation. Avoid excessive contact with the skin during use. Wear solvent resistant gloves and eye protection.

The SATREAT primer is designed to directly chlorinate rubber surfaces without release of 'free chlorine gas, which is toxic (REL 1ppm). The amount of free chlorine evolved from primer which is correctly stored and used is negligible, and careful attention to venting the solvent should ensure that unsafe atmospheric levels of chlorine are not reached. If SATREAT primer is inadvertently mixed with water or other solvents, free chlorine and other toxic materials will be produced, and care must be taken to ensure that stock and bench containers are not contaminated.
For these reasons, SATREAT must not be poured directly down drains, into waste bins or into extraction ducting (see 'Disposal of waste'). Large deposits of dried residues should not be allowed to build up on and under treating areas. They may present a fire risk or react with other products used in the same working area.

DISPOSAL OF WASTE
Small quantities (such as residues from bench containers, up to 1 litre or 2 pints).
Disperse in 20 litres (5 gallons) of 1% sodium carbonate solution (made by dissolving 200g (8 oz) of sodium carbonate (washing soda) in 20 litres of water). Immediately flush the resulting mixture down the drain with several volumes of water.

Wiping cloths used for cleaning brushes, benches, etc should be emersed in sodium carbonate solution before disposal.

Environmental and Waste Issues:
Solvent-based residues should be disposed of as hazardous waste.
Storage:
Keep away from heat, sparks and flame. Keep container closed.