

TOP GLOVE, TOP QUALITY, TOP EFFICIENCY, GOOD HEALTH, SAFETY FIRST & BE HONEST F2A & F9

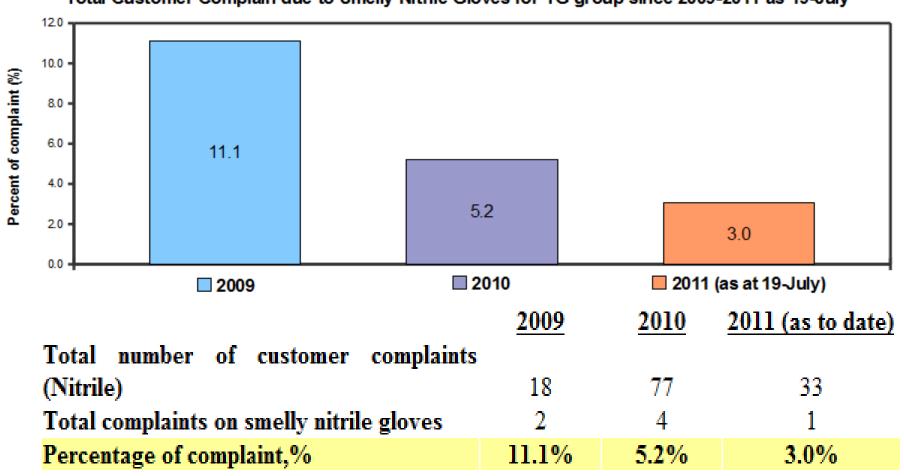
SMELLY GLOVE ON NITRILE



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1.0 Customer Complaints on Smelly Nitrile Gloves

Total Customer Complain due to Smelly Nitrile Gloves for TG group since 2009-2011 as 19-July







i. MATERIAL

- Raw Material of the nitrile latex supplied from the supplier is manufactured with strong and/or stringent smell.
- Source of smell is believed to be from the acrylonitrile group (ACN) in its chemical structure.

Smelly Gloves



ii. METHOD

- Chemical cured latex compound gives odors commonly coming from its residue compounded chemicals. i.e. accelerator group and curatives.
- Poor ventilation during online packing also leads to smelly gloves.

Smelly Gloves



Smelly Gloves

iii. MACHINE

- Poor leaching process to removes residue chemicals leads to smelly gloves.
- Heat loss from the leaching tank due to poor insulation.
- With current higher line speed to improve on the output causes the deficiency in leaching process.
- Limitation on the production line. Stripping area is short gives insufficient ventilation after final drying and curing process.



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iv. MAN

- Poor monitoring of the control parameters such as inconsistent leaching tank temperatures, and leaching water quality.
- Poor compliance of the SOP.
- Human error in process control.
- Subjectivity of human in quantifying the odor of the synthetic latex.



3.0 CORRECTIVE

PREVENTIVE ACTIONS



i. MATERIAL

- To work together with supplier regarding to formulate a better nitrile latex with lesser or no smell.
- Chemically modify its chemical structure or adding additives to remove the smell during latex manufacturing.
- To improve on the raw material quality.

Smelly Gloves



ii. METHOD

- To use lower dosage of accelerator or
- To use accelerator free nitrile latex.
- Improve ventilation during online packing and handling of gloves from stripping till packing. To invest in air conditioning conveyor to improve ventilation before packing.
- To sell flavoring gloves such Vanilla flavored nitrile gloves.

Smelly Gloves



Smelly Gloves

iii. MACHINE

- Improve the leaching process in terms of better water quality and higher temperature to removes residue chemicals which leads to smelly gloves.
- To improve the leaching efficiency by upgrading the insulation on the leaching tanks.
- To improve on the leaching capacity and sufficient leaching process (Longer leach time).



Smelly Gloves

iv. MAN

- To improve the monitoring process using systematic and analytic measurements such as SPC or SCADA system.
- To automate the current process control in conjunction to reduce the analytic error and random error such as human error and machine error.
- To implement and introduce sensing device / measurement in quantifying the qualitative control in odor in order to reduce the subjective judgmental factor.



TERIMA KASIH... **THANK** YOU...