LITERATURE INTRODUCTION:

Shack Fires a real problem in Informal settlements and rural communities. Ethanol Safety Gel™ is currently the only alternative fuel that addresses the problem from the ground up.

LITERATURE CONTENT:

There is a current estimated 1.8 million South Africans living in informal settlements. A large majority of these people use paraffin as a source of heat for cooking and the heating of water for sanitary use. However all too often the consequences of this widespread domestic paraffin use has a huge cost attached.

Every year some 45 000 paraffin fires claim the lives of between 2 500 and 3 000 South Africans. Many thousands more are burned, often carrying lifelong physical and psychological scars.

Besides this incalculable human tragedy, the cost of fire-fighting and feeding and re-housing people who have lost everything is enormous. This does not begin to account for the knock-on economic impact resulting from lost productivity or the township entrepreneurs whose livelihoods are destroyed.

Damage caused by fire is not the only problem. There is the very real danger of lung and lung related disease. It is said that 12 billion rand is spent on lung and lung related disease in the public health sector. Much of this disease can be attributed to poor people cooking on paraffin stoves in poorly ventilated shacks.

Paraffin poisoning is also commonplace, particularly amongst young children who mistake paraffin stored in milk or soft-drink bottles for water or cool drink. The real tragedy is that most of these incidents are preventable.

Safety Gel™ was specifically designed to address most of the above mentioned issues.

Shack Fires…

Safety Gel™ has a higher viscosity than paraffin so if spilled it does not spread rapidly over the floor or over someone even when alight. This gives the user enough time to act to contain the fire to the immediate area of spillage. This greatly reduces the chance of a fire spreading rapidly within a contained or restricted area. It also restricts the area that is burned should it come into contact with skin thus, reducing the chances of major burn injury and scarring.

Accidental Poisoning…

The higher viscosity of Safety Gel™ also prevents the quick ingestion of gel as well as the ability to swallow large quantities before the mistake is discovered. This greatly

reduces the risk of a fatality. The bitter tasting additive also serves as a warning when tasted.

Lung Disease…

Safety Gel™ has none of the noxious emissions that paraffin has which are further compounded when inhaled in a small and badly ventilated space. It is a clean burning and odorless fuel. When used in conjunction with the Safety Stove™ there are no un-burnt latent fumes circulating in the air either as the Safety Stove™ has a special afterburner which ignites this gas. So not only is the air around the stove fume free, but the maximum energy output is being harnessed from the safety Gel™ making it more cost effective and last longer.

Economic Cost…

In every aspect mentioned above associated with paraffin usage there is a tremendous negative economic knock on effect whether it be a direct monetary cost such a s loss of income or medical cost or an indirect cost such as that of strained government financial resources in departments such as health, housing and other public services and the added manpower costs within these departments.

By switching to Safety Gel™ which is cheaper in the 1st place than paraffin there is a huge cist saving to be gained by cutting out the knock on effect experienced with paraffin.