

H TECH

Material Safety Data Sheet

According to SANS10234 / 11014:2009/10

1. IDENTIFICATION OF SUBSTANCE/PRODUCT AND THE COMPANY

Product Trade name: H TECH HYDROCARBON CONVERTOR

Supplier: Lubritech (Pty) Ltd
11 Ibis Lane, Fourways, Johannesburg

Emergency information: Arno Lamprecht. Phone: 0861 000 487 / 082 494 2 0819

Chemical abstract no.: Not Available

Chemical family: Water based Emulsion

Chemical name: Emulsion

Synonyms: Water based Emulsion

NIOSH no.: Not Available

Hazchem code: Not Available

UN no.: Not Available

2. SOURCE AND COMPOSITION/DATA ON CONTENTS

Hazardous components:

| Ingredient | CAS no. | R Phrase | EEC |
|--------------------------|-------------|----------|-----|
| Sodium Silicate (20-30%) | 1344-09-08 | None | |
| Silane Siloxane Emulsion | Proprietary | R22 | Xi |
| Detergent | Proprietary | R22 | Xi |

Chemical characterization

description: Aqueous silicates in solution and additives

Additional information: For information about ingredients with occupational exposure limits – see section 8

3. HAZARDS IDENTIFICATION

| | |
|-------------------------------------|-----------------------------------|
| Main hazard: | Possible skin and eye irritant |
| Flammability: | None |
| Chemical hazard: | None |
| Biological hazard: | None |
| Reproductive hazard: | None |
| Health effects – eyes: | Reddening, irritation |
| Health effects – skin: | Skin reddening, irritation |
| Health effects – ingestion: | Stomach ache, nausea and vomiting |
| Health effects – inhalation: | None |
| Carcinogenicity: | None |
| Mutagenicity: | None |
| Neurotoxicity: | None |

(This product is not classified – no symbol according to EC directives)

See also section 11

| | |
|--------------|----------------|
| Fire: | Not applicable |
|--------------|----------------|

4. FIRST AID MEASURES

Inhalation:

Not applicable. If in doubt, remove to fresh air. In the unlikely event any symptoms persist seek medical attention.

Skin contact:


Remove contaminated clothing and wash skin thoroughly with soap and water, Seek medical advice if rash develops

Eye contact:


Flush **immediately** with a plenty of water for at least 10 minutes. (Remove contact lenses) If irritation persists seek medical attention.

Ingestion:


Drink plenty of water or milk and seek medical advice immediately. Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.

Burning:

Not applicable.

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents:

Not applicable

For safety reasons unsuitable extinguishing agents:

Not applicable

Special hazards caused by the material, its products of combustion of resulting gasses:

Not applicable

Special equipment: extinguishing media:

Suitable for surrounding materials

Special hazards: None

Protective clothing: Suitable for surrounding materials

6. ACCIDENTAL RELEASE MEASURES

Person related safety precautions: Use alkali resistant gloves in cases of spillage.

Measures for environmental protection: Not applicable. The product is developed for treatment of soil contamination with various kinds of organic or inorganic pollutants. Do not allow spillage (from larger quantities – eg store) to enter drains or water sources.

Measures for cleaning/collecting: Sand and other porous materials can remove accidental spillage in larger quantities. Can be stored in a container. See also section 13

Personal precautions: Wear protective clothing as indicated in section 8

Environmental precautions: Do not discharge to natural water systems

Small spills: Collect in a container for disposal and wash areas with clean water

Large spills: Collect in containers for disposal. Rinse affected areas with clean water to effluent.

Avoid applying to glass.

7. HANDLING AND STORAGE

Suitable material: Keep in original containers

Handling / storage precautions: Keep containers closed and in a dry place. Product is normally shipped in 25 litre and 210 litre plastic drums. Product may be stored in aluminum, steel, concrete, or plastic containers. Store in cool areas with original caps in place to prevent evaporation.

Avoid skin and eye contact. Eating and drinking should be prohibited in workplaces.

Avoid applying to glass.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

| | |
|---|------------------------------|
| Occupational exposure limits: | None |
| Personal protection – respiratory: | None |
| Personal protection – hand: | Rubber gloves |
| Personal protection – eye: | Not expected to be necessary |

Additional information about design of technical systems: No special measures required; see section 7

Engineering control measures: Local exhaust systems, natural air flow

Components with limit values that require monitoring at the workplace:

| CAS NO | Designation | % | Index | R-phrases |
|--------|-------------|---|-------|-----------|
|--------|-------------|---|-------|-----------|

Not required

Additional information: The general precautionary rules and measures for handling chemicals should be adhered to.

Handling / storage precautions: Keep containers closed and in a dry place.
 Product is normally shipped in 25 litre and 210 litre plastic drums. Product may be stored in aluminum, steel, concrete or plastic containers. Store in cool areas with original caps in place to prevent evaporation.
 Avoid applying to glass

PERSONAL PROTECTIVE EQUIPMENT

| | |
|------------------------------------|--|
| Breathing equipment: | Not required. |
| Personal protection – skin: | Apron, closed shoes, overalls |
| Protection of hands: | Use safety gloves of alkali resistant materials e.g. rubber (neoprene or nitrile). Ask the manufacturer. Wash your hands at intervals and at end of work. |
| Eye protection: | Use goggles/face protection against splash of materials. |
| Body protection: | Wear suitable protective clothing - alkali resistant, apron, closed shoes, overalls |
| Other protection: | None |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------------|---------------------------|
| Appearance: | Clear liquid |
| Form: | Liquid |
| Odour: | Neutral / Weak |
| pH: | 10-10.5 |
| Boiling point: | 100 degrees Celsius |
| Melting point: | None |
| Flash point: | None |
| Ignition temp: | Not applicable |
| Flammability: | None |
| Auto flammability: | None |
| Explosive properties: | None |
| Oxidizing properties: | None |
| Vapour pressure: | None |
| Density: | 1,2-1,3 g/m ³ |
| Neurotoxicity: | None |
| Critical values for explosion: | |
| Lower: | Not applicable |
| Upper: | Not applicable |
| Solubility in water: | 100% |
| In other: | Not applicable |
| Solvent: | No |
| Viscosity: | Not determined |
| pH: | 11.3 – 11.7 (Concentrate) |

10. STABILITY AND REACTIVITY

Conditions to avoid: Humid, hot conditions

Incompatible materials: Strong organic acids and alkalis

Hazardous decomposition products: None

Normally stable at temperatures above 5 degrees C.

Product may cause a gelling effect to materials that contain acids or ammonia.
Upon drying the crystals formed from this solution become sharp and abrasive.
Hazardous polymerization will not occur.

Note:

Avoid contact with any acid. H TECH will convert acids into a gel like form at the same time neutralizing them.

Dangerous products of decomposition: Not applicable

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Not known

Skin and eye contact: Acute Oral Toxicity LD50 (rat) 2000-3000 mg/kg

Chronic toxicity: Not known

Carcinogenicity: None

Mutagenicity: None

Neurotoxicity: None

Reproductive hazardous: None

Some irritation. Direct splashes to the eye may cause strong irritation. Possible irritation to the respiratory system, if inhalation occurs. Direct contact may cause skin irritation. May cause strong irritation to mouth and throat, if swallowed.

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12. ECOLOGICAL INFORMATION

| | |
|------------------------------------|---|
| Aquatic toxicity – fish: | Not known |
| Aquatic toxicity – daphnia: | 48 hour LC 50 for Fathead minnow is 11.1 mgms/L |
| Aquatic toxicity – algae: | Not known |
| Biodegradability: | Materials |
| Mobility: | No |
| German wgk: | Not Available |

H TECH is totally miscible with water and will progressively be diluted if allowed to enter drains or water courses. The product does not contain substances that are harmful to the environment, fish and wildlife. None of the substances in the product are classified as harmful or dangerous according to all EC rules relating to harmful substances. The product will be mineralized by the carbon dioxide in the air and the soil and transformed into non reversible organo silicates. The product can be used for treatment of soil contaminated with various kinds of organic or inorganic pollutants with no impact on the environment. See also section 6 and 13

13. DISPOSAL CONSIDERATIONS

| | |
|--|---|
| Product: | Minor spillage of the product can be flushed out with plenty of water. Larger quantities can be removed by sand or other likely porous materials and can be stored in containers. Avoid contact with skin - use safety gloves. Disposal - according to national regulations, if any. Remark: the primary function of the product is cleaning of contaminated hard surfaces and soil |
| Uncleansed and empty packaging etc: | Disposal (Including remaining product) must be made according to official regulations. |

14. TRANSPORT INFORMATION

| | |
|--------------------------------|---------------|
| UN no.: | Not Available |
| Substance identity no.: | Not Available |
| ADR/RID class: | Available |
| ADR/RID item no.: | Not Available |

| | |
|-------------------------------------|---------------|
| ADR/RID hazard identity no.: | Not Available |
| IMDG – shipping name: | Not Available |
| IMDG – class: | Not Available |
| IMDG – packaging group: | Not Available |
| IMDG – marine pollutant: | Not Available |
| IMDG – EMS no.: | Not Available |
| IMDG – MFAG table no.: | Not Available |
| IATA – shipping name: | Not Available |
| IATA – class: | Not Available |
| IATA – subsidiary risk(s): | Not Available |
| ADNR – class: | Not Available |
| UK – description: | Not Available |
| UK – description: | Not Available |
| UK – emergency action class: | Not Available |
| UK – classification: | Not Available |
| Tremcard no.: | Not Available |
| ADR/RID class: | Not Available |

This product is not regulated as a hazardous material by the U.S. Department of Transportation.

15. REGULATORY INFORMATION

| | |
|------------------------------|------|
| EEC hazard classification: | Xi |
| Risk phrases: | R22 |
| Safety phrases: | S7 |
| National legislation: | None |

16. OTHER INFORMATION

The information of this MSDS (COSHH) is based on the present state of our knowledge and on current EEC and national laws.

The user's working conditions are beyond our knowledge and control. It is always the responsibility of the user to take all necessary steps in order to fulfil the demands laid down in the rules and legislation.

The information in this MSDS (COSHH) is meant as a description of safety requirements of our product. It is not to be considered as guarantee of the product's properties.

Manufactured under the certification of ISO 9002.
