



**SAFETY DATA SHEET (HCS - 29 CFR 1910.1200(g))**

**1. CHEMICAL IDENTIFICATION and COMPANY CONTACT INFORMATION**

|   |  |
|---|--|
| Product trade name: Total SO2 UniFlex Reagent Kit | Supplier: Unitech Scientific LLC               |
| Product No. : TSO2-F                              | 12026 Centralia Rd, Ste H                      |
| Recommended Use: analysis                         | Hawaiian Gardens, CA 90716, USA                |
| Restrictions on Use: N/A                          |  |
| Date of Issue: 01-2011                            | Information, Operations: 562 924-5150          |
| Date of Revision: 01 Aug 2015                     | Information in case of Emergency: 562 924-5150 |

**2. HAZARD IDENTIFICATION**

Based on the concentrations in the composition, this is not a hazardous product per 29 CFR 1910.1200(g)

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

*3.1 dangerous components of the preparation.*

- substance: sodium azide  
concentration: 0.1 %  
symbol letters: T+  
R phrases: 28-32-50/53  
CAS number: 026628-22-8

CE number: 247-852-1

*3.2 classification of the substances*

sodium azide  
- very toxic, because of its acute lethal effects  
For the meaning of R phrases, please refer to paragraph 16  
"Other information"

**4. FIRST AID MEASURES**

|                                    |  |
|------------------------------------|--|
| Symptoms:                          | No symptoms expected   |
| <i>after inhalation</i>            | There is no know knowledge of any negative effects following product inhalation.                     |
| <i>after skin or eyes contacts</i> | There is no know knowledge of any negative effects due to contact with this product to eyes or skin. |
| <i>after swallowing</i>            | There is no know knowledge of negative effects following product ingestion.                          |

**5. FIRE FIGHTING**

*5.1 suitable extinguishing media*

This product is not inflammable; nevertheless, in the case in which has involved in a fire, it is advisable to use the fit extinguishing media to extinguish the source of ignition.

*5.2 extinguishing media which must not be used for safety reasons*

It is advisable to avoid the usage of extinguishing media that are not compatible with the physical chemical properties of the compound and which may develop combustive substances.

*5.3 special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases*

The release of an irritating smoke may result in case of fire.

*5.4 special protective equipment for fire-fighters*

Open cycle breathing apparatus and fire-proof equipment: helmet, jacket, pants, boots, gloves.

**6. SPILLAGE, ACCIDENTAL RELEASE**

*6.1 personal precautions*

Don on personal protective equipment (PPE) to avoid skin and eye contact, as well as product inhalation.  
Anyone who is not directly involved in rescue operations should be kept away from the scene.  
Suppress or exclude every source of ignition that could possibly start a fire.  
Stop the release of the product, provided the operation does not jeopardise the operators' safety.  
Neither touch nor trample a product that has leaked onto the ground.

*6.2 environmental precautions*

Take all the necessary steps to avoid air propagation and water table, waterways and soil contamination, by means of appropriate mediums or retaining materials:

- a) liquids shall be absorbed with earth, dry sand, vermiculites or any other non-flammable absorbing material;
- b) solids shall be removed by mechanical means; also, arrange for roofing or retainer walls to prevent dusting;
- c) vapors shall be suppressed with nebulized water, provided no soil or water pollution hazards exist.

*6.3 methods for cleaning*

Remove with mechanical means; alternatively, cover or absorb with earth, dry sand, infusorial earth or any other non-flammable compound, before transferring the product into an appropriate container for further disposal.

**7. HANDLING AND STORAGE**

*7.1 handling*

Use only in facilities that are well-ventilated or provided with a localised suction system.

*7.2 storage*

Both containers and associated materials used for product packaging shall comply, wherever applicable, comply with the standards governing road haulage of hazardous materials.

### 7.3 specific use(s)

For any particular usage of the product obtain specific informations or contact the supplier technical service.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Exposure limit values

VLEP for sodium azide:

0,1 mg/mc 8 h [- ppm 8 h]

0,3 mg/mc 15 min [- ppm 15 min]

note: Skin

rule: D.M. 26.02.04

### 8.2.1 respiratory protection

Generally speaking, breathing protection shall be enforced by means of technical provisions designed to prevent the operator from coming in contact with the substance.

Products are best handled in a closed system; if this procedure can not be implemented, arrange for a localised (stationary or mobile) suction system which returns drawn particles to an appropriate filter element or suppression system.

### 8.2.2 hand protection

Selecting appropriate hand PPE depends on its ability to withstand chemical agents corrosion, taking into account test results as set forth in EN 374 standard.

Use latex, neoprene, cyanocarbon, vinyl PVC gloves.

### 8.2.3 eye protection

Use protection goggles or a face shield made up of acetate.

### 8.2.4 skin protection

You must use: apron, boots or complete protective clothes for the protection of skin.

### 8.2.5 environmental exposure controls

In regards to the methods of usage of the product in various environmental compartments, it is advisable to respect local national or community norms and regulations set forth to protect the environment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

appearance: LIQUID

odour:

pH:

boiling point/boiling range:

melting point/melting range:

flash point:

flammability (solid, gas):

auto-ignition temperature:

explosive properties:

oxidising properties:

vapour pressure:

relative density:

water solubility:

fat solubility (solvent-oil to be specified):

partition coefficient n-octanol/water:

viscosity:

vapour density:

evaporation rate:

Other information:

## 10. STABILITY AND REACTIVITY

### 10.1 conditions to avoid

Additionally to that has been already said, there is no know hazardous environmental reaction in the occurrence of spillage of this product.

### 10.2 materials to avoid

Avoid contact with acids, bases, oxidizers, reducing agents or any other substance which may cause hazardous reactions whereas not expressly indicated in the respective technical bulletins.

### 10.3 hazardous decomposition products

To our knowledge, there does not exist any significant levels of hazardous decomposition.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 exposure for inhalation

There is no availability of specific informations based on scientific research or practical experiences to the toxicological effects due to the inhalation of the substances contained in this product.

### 11.2 exposure for swallowing

There is no availability of informations based on scientific research or practical experiences about the toxicological effects due to ingestion of substances contained in this product.

### 11.3 exposure for skin and eyes contact

There is no availability of specific informations based on scientific research or practical experiences to the toxicological effects due to the contact of the substances contained in this product with skin or eyes.

## 12. ECOLOGICAL INFORMATION

### 12.1 general environmental information

Use the product according to good working practices and avoid release in the atmosphere.

### 12.2 ecotoxicity

This product does not contain any significative microbial inhibitory effect, thus disposal directly to sewage treatment plants is consented.

### 12.3 mobility

This product does not contain any substances of which there are informations about their note or presumed distribution in the

environmental compartments or about their absorption/desorption.

#### 12.4 persistence and degradability

This product does not contain any substances of which is know the ability to degrade themselves in particular environmental circumstances following biodegradation or other reactions as oxidation or hydrolysis.

#### 12.5 bioaccumulative potential

This product does not contain any substances of which informations are been furnished about their ability to accumulate in living organisms and to pass through the food chain with reference to the values of Kow and BCF.

#### 12.6 other adverse effects

There is no availability of informations based on scientific research or practical experiences to the ability of this product to contribute to the reduction of the ozone layer, to the photochemical reactions, to the global heating.

### 13. DISPOSAL CONSIDERATIONS

Product residuals shall be dismantled in compliance with regional and national applicable standards.

Before being dumped or destroyed and subject to decontamination, product containers shall be entrusted to plants specialised in recycling, or disposing of, toxic-noxious waste.

### 14. TRANSPORT INFORMATION

#### 14.1 particular precautions

During transportation, the following provisions shall be observed:

- the heaviest packages shall be arranged underneath and light or fragile packages secured to the top;
- hazardous products shall be kept apart;
- hazardous products in liquid form shall be secured under non-hazardous products;
- flammable or combustible products shall be kept away from oxidising or corrosive products.

#### 14.2 transport classification according to ADR/RID, IMDG/IMO, ICAO/IATA

##### regulation ADR/RID

UN number:

hazard class:

proper shipping name:

packing group:

labels required:

other applicable information:

##### regulation IMDG/IMO

UN number:

hazard class:

proper shipping name:

packing group:

labels required:

other applicable information:

##### regulation ICAO/IATA

UN number:

hazard class:

proper shipping name:

packing group:

labels required:

other applicable information:

### 15. REGULATORY INFORMATION

Additional domestic or Community provisions governing the use of the product are listed below:

- D.P.R. 303/56 "General procedure for occupational health and industrial hygiene."
- D.P.R. 547/55 "Procedures for the prevention of industrial injuries on the workplace."
- Lab. D. 626/94 "Implementation of Community directives with regard to the improvement of occupational health and safety conditions on the workplace."
- Lab. D. 334/99 "Monitoring significant accident hazards in connection with specific hazardous substances."
- Lab. D. 152/99 "Provisions regarding water protection from pollution."
- Lab. D. 22/97 "Implementation of the directives dealing with waste disposal."
- D.P.R. 203/88 "Implementation of the directives governing air quality standards."
- M.D. 12.08.1998 "Restrictions concerning the release and the use of some hazardous substances and compounds."
- D. Lvo 25/2002 "Implementation of the directive 98/24/CE on the protection of the health and of the safety of the workers against the risks derives from chemical agents during the work"

Information that appears on the label

### 16. OTHER INFORMATION

#### 16.1 other relevant information

##### List of R phrases:

R 28 = Very toxic if swallowed.

R 32 = Contact with acids liberates very toxic gas.

R 50/53 = Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The data reported in this safety data sheet have been gathered mostly from the following sources:

- National Toxicology Program (NTP) - U.S. Department of Health and Human Services
- NIOSH - Registry of Toxic Effects of Chemical Substances
- SAX - Dangerous Properties of Industrial Materials (7° ed.)

#### 16.2 information added, erased or modified after revision of the safety data sheet

This safety sheet version replaces all previous versions in all points.

Information provided in this Safety Data Sheet are based on the best of our knowledge.

The references on the risks on using this product and its intrinsic characteristics, and to legislative norms and bibliographic sources, cannot be considered fully exhaustive. The user must evaluate every further risk that may derive from the manner and the usage conditions of the product.

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