MATERIAL SAFETY DATA SHEET

1. Identification of the Substance and Company Undertaking

Product Name: Trioxi Pure Vegetable Glycerin – 1 Gallon

Substance Name: Glycerin

CAS No. : 200-289-5

EC No. : 56-81-5

Origin : Palm oil

Product Uses

Industrial & Consumer Users: Formulations for snack foods, polymers, surfactants, cosmetics, pharmaceuticals

2. Hazard Identification

Classification of Substance

Most important adverse physicochemical, human health and environmental effects: Substance is not classified as hazardous

<u>Label Element</u>

Label elements: Not relevant, substance is not classified as hazardous.

Other Hazards

Other hazards: Thermal burns are possible on contact with material at elevated temperatures.

3. Composition

Glycerol: > 99%

4. First Aid Measures

First Aid Measures

Eyes : Irrigate eyes with a heavy stream of water for at least 15 to 20 minutes

Skin : Wash immediately with plenty of soap and water. Remove all contaminated clothes and

footwear immediately unless stuck to skin.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so; seek medical

attention if symptoms persist.

Ingestion: Do not induce vomiting. Wash out mouth with water. If conscious, give half a litre of water

to drink immediately. If gastro-intestinal symptoms develop, consult medical personnel.

(Never give anything by mouth to an unconscious person)

5. Fire Fighting Measures

Extinguishing Media

Appropriate extinguishing media: Dry chemical powder, alcohol resistant foam, halon (may not be

permissible in some countries), CO2, water spray (fog).

Unsuitable extinguishing media: Water stream may splash the burning liquid and spread fire

Special Hazards

Combustion emits toxic fumes of carbon dioxide / carbon monoxide.

Oil soaked rags or spill absorbents (i.e. oil dry, polypropylene socks, sand, etc.) can cause spontaneous combustion if stored near combustibles and not handled properly.

Advice for Firefighters

Firefighters should use self-contained breathing apparatus to avoid exposure to smoke and vapor. Wear protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measure

Personal precautions, protective equipment and emergency procedures.

Eliminate all sources of ignition. If outside, do not approach from downwind. If outside, keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and

prevent access to unauthorized personnel. Turn leaking containers leak side up to prevent the escape of liquid.

Advice for Firefighters

Firefighters should use self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Environmental Precautions

Do not discharge into drains or rivers.

Spill Cleanup Procedures

Spill containment: Contain any spillage using bunding.

Spill clean-up : Pick up small spills with absorbent materials and dispose of properly to avoid

spontaneous combustion.

7. Handling and Storage

Recommendations for Safe Handling

Avoid excessive heating and as with any hot liquid, wear gloves and face shield when handling hot oil.

Occupational Hygiene Advice

Do not eat, drink or smoke in work areas; wash hands after use; and remove contaminated clothing and protective equipment before entering eating areas.

Safe Storage Conditions

Store in cool, well-ventilated area. Keep away from sources of ignition. Keep container tightly closed. Below normal ambient temperatures material will start to solidify. Protect from frost. Store at +25°C to +55°C. Keep away from oxidizing agents, excessive heat, exposure to uv light and ignition sources.

8. Exposure Control and Personal Protection

Control Parameters

Control parameters : No relevant control limits

Recommended monitoring procedures: No recommended monitoring procedures.

Applicable occupational exposure limit

values and/or biological limit values for

any air contaminants formed. : No applicable occupational exposure limit values and/or

biological limit values.

Exposure Controls

Appropriate engineering controls : No relevant engineering controls

Individual protection measures

Respiratory Protection: If vapours or mists are generated, wear a NIOSH approved organic

vapour/mist respirator.

Protective Clothing : Safety glasses, goggles, or face shield recommended to protect eyes

from mists or splashing. PVC coated gloves recommended to prevent

skin contact.

Other Protective Measures : Employees must practice good personal hygiene,

washing exposed areas of skin several times daily and laundering

contaminated clothing before re-use.

Environmental exposure controls : No relevant environmental exposure controls

9. Physical and Chemical Properties

Overview of physicochemical properties

Appearance : Colorless liquid

Odor : Odorless

Odor threshold : Not available

pH : 6 - 8

Melting point/freezing point: 18°C

Boiling point : 290°C

Flash point : 160°C

Evaporation rate : Not available

Flammability : Not flammable

UEL or LEL : < 0.9%

Vapor pressure : Not applicable

Vapor density : Not available

Relative density : 1.260 at 20°C

Solubility in water : Soluble

Auto-ignition temperature: 370°C

Decomposition temperature : Not available

Viscosity : 1400 mPas at 20°C

Explosive properties : Not explosive, the study does not need to be conducted since there are

no chemical groups associated with explosive proprieties present in the

molecule.

Oxidizing properties : Not oxidizing, the study does not need to be conducted since the

substance is incapable of reacting exothermically with combustible

materials based on the chemical structure

10. Stability and Reactivity

Reactivity hazards : This product is stable and hazardous reaction will not occur.

Chemical stability : Substance is stable under normal ambient and anticipated storage

and handling conditions of temperature and pressure

Possibility of hazardous reactions: This product is stable and hazardous reaction will not occur.

Conditions to avoid : See incompatible materials.

Incompatible materials : Strong oxidizing agents. Strong bases.

Hazardous decomposition products : Combustion produces carbon monoxide, carbon dioxide

along with thick smoke.

11. Toxicological Information

Toxicity Data : No toxicity is known

Carcinogenicity : No carcinogenicity is known Reproductive Effect : No harmful effects expected

Effects of Overexposure : No harmful effects expected

Chronic Effects : No harmful effects expected

Target Organs : The skin, especially if the product is hot

Medical conditions generally aggravated by exposure : No special requirements

12. Ecological Information

Mobility: Dissolves on water Bioaccumulation: Not expected Biodegradability: Biodegradable Aquatic Toxicity: Not expected

13. Disposal Information

Disposal method in accordance with all applicable national environment laws and regulations

14. Transport Information

Land transport (ADR/RID/)

UN number : Not classified

Class : Not classified

Classification code: Not classified

Packaging group: Not classified

Labels : Not classified

Inland waterway transport (AND(R))

UN number : Not classified

Class : Not classified

Classification code: Not classified

Packaging group: Not classified

Labels : Not classified

Marine transport (IMDG)

UN number : Not classified

Proper shipping name and description : Not classified

Chemical name : Not classified

Class : Not classified

Classification code : Not classified

Packaging group : Not classified

EMS number : Not classified

Labels : Not classified

Marine pollutant : No

Air transport ICAO/IATA

UN number : Not classified

Proper shipping name and description : Not classified

Chemical name : Not classified

Class : Not classified

Packaging group : Not classified

Labels : Not classified

15. Regulatory Information

Not available.

16. Other Information

Not applicable.