

GHS - SAFETY DATA SHEET

Date: 2023.12.6

Section 1. Identification of the substance/mixture and of the company/undertaking

Product Name **TFOUT IIIIE Nitro**

Recommended Use: Catalytic material for use in TFOUT IIIIE Catalyst Package (Catalyst B) for high temperature TFOUT oxidation test equipment.

Supplier: Tannas Company/Savant Tech (a division of Savant, Inc.)
4800 James Savage Rd.
Midland, MI 48642 USA

Emergency Phone: 989-496-2301

Section 2. Hazards identification

GHS Classification: This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Label Elements

Hazard pictograms:



Signal Word: Danger

Hazard Statement: Flammable liquid and vapor
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation.
May damage fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long-lasting effects.

Precautionary Statements

Prevention: Keep away from heat/sparks/open flames/hot surfaces/- No smoking.
Do not breathe dust/fume/gas/mist/vapors/spray.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Call a POISON CENTER or doctor/physician If you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Not applicable.

Other Hazards: None known.

GHS - SAFETY DATA SHEET

Date: 2023.12.6

Section 3. Composition/information on ingredients

Substance/Mixture: Substance

Chemical Name	CAS-No	Weight %
Petroleum Distillates	Proprietary	<20%
1-Nitropropane	108-03-2	>80%

Section 4. First aid measures

Eye contact: Flush eyes with large amounts of water for fifteen minutes. Sperate eyelids with fingers. If irritation persists, seek medical attention.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention

Inhalation: Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

Ingestion: Clean mouth with water. Get medical attention.

Most Important Symptoms/Effects: Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Indication of immediate medical attention and special treatment needed: No information available.

Section 5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media: Carbon dioxide (CO₂). Dry chemical. Chemical foam. Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media: No information available

Special exposure hazards arising from mixture: Flammable. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air.

Special protective equipment for fire-fighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

GHS - SAFETY DATA SHEET

Date: 2023.12.6

Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures:

Remove all sources of ignition. Take precautionary measures against static discharges.

Methods and materials for containment and cleaning up:

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not let this chemical enter the environment.

Environmental Precautions:

Do not flush into surface water or sanitary sewer system.

Section 7. Handling and storage

Precautions for Safe Handling:

Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools.

Advice in general, occupational hygiene:

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges.

Conditions for Safe Storage:

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Flammables area. Keep container tightly closed in a dry and well-ventilated place. Incompatible Materials. Acids. Strong oxidizing agents. Strong acids. Strong bases. Amines. Ammonium nitrate: fertilizers capable of self-sustaining decomposition. Lead. Metals. copper. Reducing Agent.

Section 8. Exposure controls/personal protection

Occupational Exposure Limits:

OSHA		
Component	Type	Value
1-Nitropropane	PEL	25 ppm
ACGIH		
Component	Type	Value
1-Nitropropane	TWA	25 ppm
NIOSH		
Component	Type	Value
1-Nitropropane	TWA	25 ppm

GHS - SAFETY DATA SHEET

Date: 2023.12.6

Appropriate Engineering Controls:	Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment.
Individual Protection Measures, such as Personal Protective Equipment:	
Eye/Face Protection:	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Hand Protection:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Skin and Body Protection:	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection:	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
General Hygiene Considerations:	Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and chemical properties

Appearance	Amber
Physical State	Liquid
Odor	Strong
Odor Threshold:	Not Available
pH:	6 0.01M aq. solution
Melting/Freezing Point:	-108°C / -162.4°F
Initial Boiling Point:	132°C / 269.6°F @ 760 mmHg
Flash Point:	33°C / 91.4°F
Evaporation Rate:	Not Available
Flammability (solid,gas):	Not Available
Upper/Lower Flammability or Explosive Limits	
Flammability Limit	
Lower %:	2.20%
Upper %:	11.00%
Explosive Limit	
Lower %:	Not Available
Upper %:	Not Available
Vapor Pressure:	7.6 mmHg @ 25°C
Vapor Density:	3.07
Relative Density:	~ 1.13
Solubility (water):	Insoluble

GHS - SAFETY DATA SHEET

Date: 2023.12.6

Partition Coefficient (n-octanol/water):	Not Available
Auto-ignition Temperature:	420°C / 788°F
Decomposition Temperature:	Not Available
Viscosity:	0.844 cP at 20°C

Section 10. Stability and reactivity

Reactivity:	None known, based on information available
Chemical Stability:	Stable under normal conditions.
Possibility of Hazardous Reactions:	No Specific Data
Conditions to Avoid:	Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.
Incompatible Materials:	Strong oxidizing agents
Hazardous Decomposition Products:	Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

Section 11. Toxicological information

Information on Likely Routes of Exposure

Inhalation	No known significant effects or critical hazards.
Eye Contact	No known significant effects or critical hazards.
Skin Contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics:	Not available.
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Eye contact:	No specific data.
Inhalation:	No specific data.

Information on Toxicological Effects

Acute Toxicity:	Not applicable.
Skin Corrosion / Irritation:	Not applicable.
Serious Eye Damage / Eye Irritation:	Not applicable.
Respiratory or Skin Sensitization	Not available.
Respiratory Sensitization:	Not available.
Skin Sensitization:	Not available.
Mutagenicity:	Not available.
Carcinogenicity:	Not available.

Reproductive Toxicity:	Not available.
Specific Target Organ Toxicity - Single Exposure	Not available.
Specific Target Organ Toxicity - Repeated Exposure	Not available.

GHS - SAFETY DATA SHEET

Date: 2023.12.6

Aspiration Hazard

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Chronic Effects

Not available.

Section 12. Ecological information

Ecotoxicity:

Do not empty into drains. Contains a substance which is harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.

Persistence and Degradability:

Persistence is unlikely

Bio accumulative Potential:

Not available.

Mobility in Soil:

Will likely be mobile in the environment due to its water solubility.

Other Adverse Effects:

Not available.

Section 13. Disposal considerations

Disposal Instructions:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities, with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. The material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

DOT:

Not regulated as dangerous goods.

IMDG:

Not regulated as dangerous goods.

Section 15. Regulatory information

U.S. Federal Regulations:

Yes

**United States Inventory:
(TSCA 8b)**

This material is listed or exempted.

GHS - SAFETY DATA SHEET

Date: 2023.12.6

Section 16. Other information

Issuing Date: 2015 August 17th
SDS Revision Date: 2023 December 6th
Revision Note: Date Extension- Review Completed

This safety data sheet compiles with the requirements of Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EU) No. 1907/2006.

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End of Safety Data Sheet