



SAFETY DATA SHEET

Revision Date 10-August-2015

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name F-2409 TSGM-15045

UN/ID No UN1710
Product Code F-2409

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Solvent cleaner

Details of the Supplier of the Safety Data Sheet

Supplier Address

Delta Foremost Chemical Corporation
3915 Air Park St.
Memphis, Tennessee 38118

Emergency Telephone Number

Company Phone Number (901) 363-4340
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Flammable Liquids	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2 A
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure) (Respiratory system)	Category 3

Signal Word

DANGER

Hazard Statements

Combustible liquid.
Causes skin irritation.
Causes serious eye irritation
May cause respiratory irritation.
May damage fertility or the unborn child.



Appearance Amber gel

Physical State Liquid

Odor Solvents

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat/ sparks/ open flames/ hot surfaces. - no smoking
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves, protective clothing, eye protection, and face protection.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Get medical attention if irritation occurs
IF ON SKIN: Wash with plenty of soap and water
If skin irritation persists: Get medical advice/attention
Take off contaminated clothing and wash it before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor if you feel unwell.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

Other Hazards

Toxic to aquatic life with long lasting effects
Toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
N-Methyl-2-pyrrolidone	872-50-4	Proprietary

Product contains a proprietary mixture of ingredients.

4. FIRST AID MEASURES**First Aid Measures**

General Advice	If exposed or concerned: Get medical advice/attention. Provide this SDS to medical personnel for treatment.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician.
Skin Contact	Flush with water while removing contaminated clothing and shoes before reuse. Consult a physician.
Inhalation	Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Consult a physician.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Consult a physician immediately.

Most Important Symptoms and Effects, both Acute and Delayed

The most important known symptoms and effects are described in Section 2.2 or Section 11.

Indication of any Immediate Medical Attention and Special Treatment Needed

No data available

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam, carbon dioxide or dry chemical extinguisher, or water. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Carbon oxides, Nitrogen oxides.

Protective Equipment and Precautions for Firefighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures**Personal Precautions**

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes and inhalation of vapors. Ensure adequate ventilation. Remove sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and Material for Containment and Cleaning Up**Methods for Containment**

Contain spillage, then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

Methods for Cleaning Up

Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for Safe Handling**Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Wear eye/face protection. Avoid contact with skin, eyes or clothing. Avoid breathing vapors. Avoid breathing mists. Use only in well-ventilated areas. Keep away from sources of ignition.-No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep in properly labeled containers. Store locked up.
Incompatible Materials	Caustic soda, caustic potash, liquid oxygen or other oxidizing materials, alkali metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
N-Methyl-2-Pyrrolidone 872-50-4	TWA: 100mg/l	TWA: 10 ppm	

Appropriate Engineering Controls

Engineering Controls	Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.
-----------------------------	--

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection	Goggles or face shield.
Skin and Body Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear protective Neoprene™ gloves, Rubber gloves.
Respiratory Protection	Use self-contained breathing apparatus if there is a heavy vapor or risk assessment shows respirators are appropriate. Type ABEK or US multipurpose respirator cartridges are required.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Wash hands after use and wash contaminated clothes before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on Basic Physical and Chemical Properties**

Physical State	Liquid	Odor	Solvent
Appearance	Gelled liquid	Odor Threshold	Not determined
Color	Amber		
Property	Values	Remarks • Method	
pH	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	202 °C / 396 °F		
Flash Point	91 °C		
Evaporation Rate	No data available		
Flammability (Solid, Gas)	Not determined		
Upper Flammability Limits	9.5%(V)		
Lower Flammability Limit	1.3%(V)		
Vapor Pressure	Not established		
Vapor Density	3.42 - (Air = 1)		
Specific Gravity	1.028	(1=Water)	
Water Solubility	Insoluble in water		
Solubility in Other Solvents	Not determined		
Partition Coefficient	log Pow: -0.46		
Autoignition Temperature	Not determined		
Decomposition Temperature	Not determined		

Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible Materials

Strong acids, strong oxidizing agents, strong reducing agents.

Hazardous Decomposition Products

Carbon oxides, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact Causes serious eye irritation.

Skin Contact Causes skin irritation.

Inhalation Harmful if inhaled.

Ingestion May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
N-Methyl-2-Pyrrolidone	= 3914 mg/kg (Rat)	> 8 g/kg (Rabbit)	= 5100 ppm (Rat) 4 h

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Germ Cell Mutagenicity No data available.

Carcinogenicity No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed human carcinogen by IARC, ACGIH, NTP, or OSHA.

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

STOT - Single Exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

Chronic Toxicity

No data available.

Aspiration Hazard

No data available.

Reproductive Toxicity

May harm the unborn child.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Toxic to aquatic organisms. Toxic to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
N-Methyl-2-Pyrrolidone		LC 50 - Other fish - 4000mg/l - 96 h LC 50 - Leuciscus idus - > 500mg/l - 96 h	LC50 - Bacteria - >9000mg/l	EC50 - Daphnia magna - >1000mg/l - 24 h

Persistence and Degradability

90% - Readily biodegradable

Bioaccumulation

Not determined

Mobility

No data available

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material in accordance with local, state, and federal regulations.

Contaminated Packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No	NA 1993
Proper Shipping Name	Combustible liquid, n.o.s. (N-methyl-2-pyrrolidone)
Hazard Class	NA
Packing Group	III

IATA

Not dangerous goods

IMDG

Not dangerous goods

15. REGULATORY INFORMATION

International Inventories

Not Determined

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
N-methyl-2-pyrrolidone	872-50-4	Proprietary	0.1

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
N-Methyl-2-Pyrrolidone 872-50-4	Reproductive toxin

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
N-Methyl-2-Pyrrolidone 872-50-4	X	X	X

16. OTHER INFORMATION**NFPA****Health Hazards**

2

Flammability

2

Instability

0

Special Hazards

Not determined

HMIS**Health Hazards**

2

Flammability

2

Physical Hazards

0

Personal Protection

Not determined

Revision Date

10-August-2015

Revision Note

New product

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet