

**FAB 10 ENVIRONMENTAL HEALTH & SAFETY
INDUSTRIAL HYGIENE
MATERIAL SAFETY DATA SHEET
EURO FORMAT**

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1	Identification of substance (as per label): Other means of identification:	Flammable liquid NOS GlobalTech® - Solder Paste & Flux Remover <i>Date of Last Revision:</i> 01/05
1.2	Company Name: Full Address: Web Site: www.jnj-industries.com E Mail: sales@jnj-industries.com Telephone Number: Fax Number: Emergency Number:	JNJ Industries Inc. 290 Beaver Street Franklin, MA 02038 (508) 553-0529 (508) 553-9973 InfoTrac (800) 535-5053

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NUMBER	INGREDIENTS	0%	SYMBOLS	RISK PHASE
34590-94-8	Glycols	1-99%	CnHmOp	N/E
107-98-2	Aliphatic Glycol Ethers	1-99%	CnHmOp	N/E
111-41-1	N-Amino Ethanol	1-99%	CnHmOpNx	N/E

2.1	Substances presenting a health hazard:	All GlobalTech® solvents are CFC, HCFC, & ODS FREE
2.2	Exposure Limit Value:	300 ppm ACGIH Calculated
2.3	If substance is confidential-indicate chemical nature to ensure safe handling:	Combustible liquid - keep away from heat and flame

3. HAZARDS IDENTIFICATION

3.1	Critical Hazards:	Combustible liquid
3.2	Critical Hazards to Man & Environment: Adverse Human Health Effects and Symptoms:	Hazard Rating: Toxicity: 2, Fire: 2, Reactivity: 0 HMIS Refer to Section 11 - Toxicological Information

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4. FIRST AID MEASURES

<p>4.1</p> <p>Skin Contact: First Aid: Symptoms: Effects: Delayed Effects: Medical Attention Needed:</p> <p>Eye Contact: First Aid: Symptoms: Effects: Delayed Effects: Medical Attention Needed:</p> <p>Inhalation: First Aid: Symptoms: Effects: Delayed Effects: Medical Attention Needed:</p> <p>Ingestion: First Aid: Symptoms: Effects: Delayed Effects: Medical Attention Needed:</p> <p>Immediate Treatment Available at Workplace:</p>	<p>Flush with large amount of water Skin drying after prolonged contact Prolonged contact can result in skin drying Prolonged contact can result in skin drying Flush with large amounts of water</p> <p>Flush with large amount of water Irritation may cause eye reddening Irritation may cause eye reddening Irritation may cause eye reddening Flush with large amount of water</p> <p>Move to fresh air, artificial respiration if necessary May cause irritation to nose or respiratory tract May cause irritation to nose or respiratory tract May cause irritation to nose or respiratory tract Seek medical attention</p> <p>Do Not induce vomiting May cause dizziness, nausea, vomiting, diarrhea May cause dizziness, nausea, vomiting, diarrhea May cause dizziness, nausea, vomiting, diarrhea Seek medical attention</p> <p>(Refer to Corporate First Aid Policy)</p>
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5. FIRE FIGHTING MEASURES

<p>5. 1</p> <p>5. 2</p> <p>5. 3</p> <p>5. 4</p> <p>5. 5</p>	<p>Suitable Extinguishing Media:</p> <p>Unsuitable Extinguishing Media:</p> <p>Exposure Hazards:</p> <p>Combustion Products: Resulting Gases:</p> <p>Protective Equipment for Firefighters:</p>	<p>CO2, Dry Chemical, Foam</p> <p>“Alcohol” Foam, Water Spray</p> <p>During fire, oxides of nitrogen may evolve</p> <p>Oxides of Carbon and Nitrogen</p> <p>Self-contained breathing apparatus and full protective gear</p>
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6. ACCIDENTAL RELEASE MEASURES

<p>6.1</p>	<p>Personal Precautions: Ignition Sources:</p> <p>Provisions for sufficient ventilation: Control of dust: Prevention of skin contact: Prevention of eye contact:</p>	<p>Avoid heat, sparks, and flame & Temperatures above 250°C Use local exhaust ventilation- see section 2.2 N/A Natural Rubber Gloves Safety Glasses or Goggles</p>
<p>6.2</p>	<p>Environmental Precautions:</p>	<p>Components in this product are non-hazardous and do not require reporting under the Comprehensive Environmental & Liability Act (CERCLA) of 1980</p>
<p>6.3</p>	<p>Methods for Cleaning Up: (List materials for)</p>	<p>Small spills/absorbent material Large spills/flush with water, avoid discharge into sewers and waterways</p>
<p>6.4</p>	<p>Materials Not to be Used for Cleaning Up:</p>	<p>Keep from strong oxidizers, bases, acids, ketones, aldehydes, anhydrides</p>

7. HANDLING & STORAGE

<p>7.1</p>	<p>Handling:</p> <ul style="list-style-type: none"> ■ General Rules: ■ Technical Precautions for Safe Handling: ■ Measure necessary to prevent air levels of chemical being generated as a result of handling: 	<p>INDOOR/OUTDOOR storage at ambient temperature Heated: N/A Refrigerated: N/A Keep away from heat and flame Avoid strong oxidizers, bases, acids, ketones, aldehydes, anhydrides Use adequate ventilation</p>
<p>7.2</p>	<p>Recommended Storage Conditions:</p> <ul style="list-style-type: none"> ■ List incompatible materials: ■ Quantity Limits for storage: ■ Special Requirements for proper storage of chemical: 	<p>Strong oxidizers, bases, acids, ketones, aldehydes, anhydrides N/E Avoid contact with Copper & Copper Alloys such as Brass. Use only polyethylene valves & containers</p>

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	<u>System Design:</u> (e.g. Fume Hoods, Ventilation Cabinets, Enclosure)	Use local exhaust ventilation to maintain airborne limits as in Section 2.2
8.2	<u>Control Parameters:</u> Limit Values or Biological Standards:	300 ppm ACGIH Calculated
8.3	<u>Recommended Monitoring Procedures:</u>	Refer to Country, State & Local ordinances
8.4	<u>Personal Protection:</u>	
	<i>Respiratory Protection:</i>	Self-contained breathing apparatus in high vapor concentrations.
	<i>Hand Protection:</i>	Natural Rubber Gloves
	<i>Eye Protection:</i>	Safety Glasses or Goggles
	<i>Skin Protection:</i>	Natural Rubber Gloves
8.5	CEN Standards:	

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1	Appearance:	Water clear liquid
9.2	Odor:	Mild odor
9.3	P.H.:	N/E
9.4	Boiling Point:	150°C
9.5	Melting Point/Freezing Point:	-50°C
9.6	Flash Point:	48°C
9.7	Flammability: (solid gas)	N/E
9.8	Auto flammability:	N/E
9.9	Explosive Properties:	None
9.10	Oxidizing Properties:	Keep away from strong oxidizers, bases, acids, ketones, aldehydes, anhydrides
9.11	Vapor Pressure:	1.5 mm Hg at 20°C
9.12	Relative Density:	0.89
9.13	Solubility:	
	■ Water Solubility:	Complete
	■ Fat Solubility:	N/E
9.14	Partition coefficient, n-octanol/water	N/E
9.15	Other Data:	
	■ Safety Parameters:	Keep away from strong oxidizers, bases, acids, ketones, aldehydes, anhydrides
	■ Vapor Density:	3.8
	■ Miscibility:	Complete with water
	■ Evaporation Rate:	0.2 (Butyl Acetate = 1)
	■ Conductivity:	N/E
	■ Viscosity:	N/E

10. STABILITY AND REACTIVITY

10.1	Stability:	Stable
10.2	Conditions to Avoid:	Heat, sparks, and flame & temperatures above 250°
	■ Effects:	- may decompose to oxides of carbon & nitrogen
10.3	Materials to Avoid:	Strong oxidizers, bases, acids, ketones, aldehydes, anhydrides
	■ Effects:	
10.4	Hazardous Decomposition Products:	Oxides of carbon & nitrogen
	■ The need for and the presence of stabilizers:	Stable
	■ Hazardous exothermic reaction:	Does not occur
	■ Change appearance in the substance:	N/E
	■ Hazardous products formed upon contact with water:	None
	■ Possible degradation to unstable products:	None

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11. TOXICOLOGICAL INFORMATION

<p>11.1</p>	<p>Skin Exposure:</p> <ul style="list-style-type: none"> ■ Symptoms: ■ Immediate Effects: ■ Delayed Effects: ■ Chronic Effects: ■ Special Health Effects: 	<p>Dry skin Skin drying can result after brief contact Prolonged contact can result in skin drying Prolonged contact can result in skin drying Not known</p>
<p>11.2</p>	<p>Eye Contact:</p> <ul style="list-style-type: none"> ■ Symptoms: ■ Immediate Effects: ■ Delayed Effects: ■ Chronic Effects: ■ Special Health Effects: 	<p>Irritation may cause eye reddening Irritation may cause eye reddening Irritation may cause eye reddening Irritation may cause eye reddening Not Known</p>
<p>11.3</p>	<p>Inhalation:</p> <ul style="list-style-type: none"> ■ Symptoms: ■ Immediate Effects: ■ Delayed Effects: ■ Chronic Effects: ■ Special Health Effects: 	<p>Move to fresh air, artificial respiration if necessary May cause irritation to nose or respiratory tract May cause irritation to nose or respiratory tract May cause irritation to nose or respiratory tract Seek Medical Attention</p>
<p>11.4</p>	<p>Ingestion:</p> <ul style="list-style-type: none"> ■ Symptoms: ■ Immediate Effects: ■ Delayed Effects: ■ Chronic Effects: ■ Special Health Effects: 	<p>May cause dizziness, nausea, vomiting May cause dizziness, nausea, vomiting Not Known Not Known Seek Medical Attention</p>

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2. ECOLOGICAL INFORMATION

12.1	Mobility: 1. Distribution to environmental compartments: 2. Surface tension: 3. Absorption / desorption: 4. Physical & chemical properties:	N/E N/E N/E Refer to section 9
12.2	Degradability: 5. Biotic and abiotic degradation: 6. Acrobic and anaerobic degradation: 7. Persistence:	N/E N/E N/E
12.3	Accumulation: 8. Bioaccumulation potential: 9. Biomagnification:	N/E N/E
12.4	Short and Long Term Effects on: 10. Ecotoxicity: 11. aquatic organisms: 12. soil organisms: 13. plants and terrestrial animals: 14. Other Adverse Effects: 15. ozone depletion potential: 16. photochemical ozone creation potential: 17. effects on waste water treatment plants:	N/E N/E N/E None N/E N/E

3. DISPOSAL CONSIDERATIONS

13.1	Safe Handling:	Keep away from heat, flame, and spark; store at ambient temperature, wear natural rubber gloves, and safety glasses or goggles
13.2	Methods of Disposal:	Local waste hauler should be consulted
13.3	Community Provisions: National or Regional Provisions:	(To be completed by individual Corporation)

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14. TRANSPORT INFORMATION

14.1	UN Nr:	UN 1993
14.2	UK Road & Sea Freight (IMO) Classification:	
14.3	Substance Classification Number:	
14.4	Class:	
14.5	Packing Group:	
14.6	Proper Shipping Name: PGR (if applicable)	
14.7	ADR/RID CLASSIFICATION: Class: Item Number:	
14.8	ICAO/IATA CLASSIFICATION: Class: Sub-Risk: Packing Group: Proper Shipping Name:	3 N/A III Flammable Liquid - N.O.S. Glycols, Aliphatic Glycol Ethers, N-Amino Ethanol

15. REGULATORY INFORMATION

15.1	Precautionary Label Information:	Flammable Liquid - 3 (DOT)
15.2	Symbols:	Red Diamond Shape Flammable Sticker
15.3	Risk Phases:	Listed on the accompanying MSDS
15.4	Safety Phases:	Listed on the accompanying MSDS

16. OTHER INFORMATION

16.1	Regulatory Information:	Refer to section 15
16.2	Training necessary:	(Information Provided by Individual Company)
16.3	Reissue date / Reason for reissue:	N/A
16.4	Intended Use of Product:	Cleaning Compound
16.5	Limitations on Use of Product:	N/A

N/A = Not Applicable
N/E = Not Established