Safety Data Sheet

Issue Date: 03-Feb-2021

Revision Date: 03-Feb-2021

Version 1

1. IDENTIFICATION

	2. HAZARDS IDENTIFICATION
Emergency telephone number Emergency Telephone	INFOTRAC: 1-800-535-5053
Manufacturer Address Universal Stenciling & Marking Sys 205 15th Avenue S.E. St. Petersburg, FL 33701 PH: 727-894-3027	
<u>Recommended use of the chemi</u> Recommended Use <u>Details of the supplier of the safe</u>	Printing ink.
UN/ID No	UN1210
Other means of identification SDS # Product Code	USM-004 IU-D5NL4, IU-D5NLQT, IU-D5NLQTH, IU-D5NLGL
<u>Product identifier</u> Product Name	Type D NL Yellow

Appearance Yellow liquid

Physical state Liquid

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Flammable liquids	Category 2

Signal Word Danger

Hazard statements

Harmful if swallowed Harmful if inhaled Causes skin irritation Causes serious eye irritation Suspected of causing cancer Highly flammable liquid and vapor



Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment Use only non-sparking tools Take precautionary measures against static discharge Use explosion-proof equipment

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 If eye irritation persists: Get medical advice/attention IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse If skin irritation occurs: Get medical advice/attention IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth In case of fire: Use CO2, dry chemical, or foam for extinction **Precautionary Statements - Storage**

Store locked up Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Ethylene Glycol Monobutyl Ether	111-76-2	37-40
Ethanol	64-17-5	19-27
Titanium dioxide	13463-67-7	15-17
Methylisobutyl ketone	108-10-1	0.1-1
Solvent naphtha (petroleum), light aliphatic	64742-89-8	<1
Heptane	142-82-5	<1
Toluene	108-88-3	Trace
Acetaldehyde	75-07-0	Trace

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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	Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Ingestion	Call a poison center or doctor/physician if you feel unwell. Rinse mouth.
Most important symptoms ar	nd effects, both acute and delayed
Symptoms	May be harmful in contact with skin. Harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer.
Indication of any immediate medical attention and special treatment needed	
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use CO2, dry chemical, or foam for extinction.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor.

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.

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required.	
Environmental precautions		
Environmental precautions	See Section 12 for additional Ecological Information.	
Methods and material for containment and cleaning up		
Methods for Containment	Prevent further leakage or spillage if safe to do so.	
Methods for Clean-Up	Keep in suitable, closed containers for disposal.	
	7. HANDLING AND STORAGE	

Precautions for safe handling

Advice on Safe Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Use explosion proof equipment.
Conditions for safe storage, incl	uding any incompatibilities

Storage Conditions

Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible Materials

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene Glycol Monobutyl Ether 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust	IDLH: 5000 mg/m ³ TWA: 2.4 mg/m ³ CIB 63 fine TWA: 0.3 mg/m ³ CIB 63 ultrafine, including engineered nanoscale
Methylisobutyl ketone 108-10-1	STEL: 75 ppm TWA: 20 ppm	TWA: 100 ppm TWA: 410 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 205 mg/m ³ (vacated) STEL: 75 ppm (vacated) STEL: 300 mg/m ³	IDLH: 500 ppm TWA: 50 ppm TWA: 205 mg/m ³ STEL: 75 ppm STEL: 300 mg/m ³
Heptane 142-82-5	STEL: 500 ppm TWA: 400 ppm	TWA: 500 ppm TWA: 2000 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 1600 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 2000 mg/m ³	IDLH: 750 ppm Ceiling: 440 ppm 15 min Ceiling: 1800 mg/m ³ 15 min TWA: 85 ppm TWA: 350 mg/m ³
Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m ³ Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³
Acetaldehyde 75-07-0	Ceiling: 25 ppm	TWA: 200 ppm TWA: 360 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 180 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 270 mg/m ³	IDLH: 2000 ppm

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

9. PHYSICAL AND CHEMICAL PROPERTIES		
General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.		
Respiratory Protection	Refer to 29 CFR 1910.134 for respiratory protection requirements.	
Skin and Body Protection	Refer to 29 CFR 1910.138 for appropriate skin and body protection.	
Eye/Face Protection	Refer to 29 CFR 1910.133 for eye and face protection regulations.	

Information on basic physical and chemical properties

Physical state Appearance Color	Liquid Yellow liquid Yellow	Odor Odor Threshold	Not determined Not determined
Property_	Values	Remarks • Method	
pH	Not determined		
Melting point / freezing point	Not determined		
Boiling point / boiling range	Not determined		
Flash point	17.8 °C / 64 °F		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Liquid-Not applicable		
Flammability Limit in Air			
Upper flammability or explosive	Not determined		
limits			
Lower flammability or explosive	Not determined		
limits	Not data wain ad		
Vapor Pressure	Not determined Not determined		
Vapor Density	Not determined		
Relative Density Water Solubility	Not determined		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
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.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Avoid contact with eyes.
Skin Contact	May be harmful in contact with skin.

Inhalation Harmful if inhaled.

Ingestion Harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene Glycol Monobutyl Ether 111-76-2	= 470 mg/kg (Rat)	= 435 mg/kg (Rabbit)	= 486 ppm (Rat)4 h = 450 ppm (Rat)4 h
Ethanol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat)4 h
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Pigment Yellow 14 5468-75-7	> 5 g/kg (Rat)	-	-
Methylisobutyl ketone 108-10-1	= 2080 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	2000 - 4000 ppm (Rat)4 h
Heptane 142-82-5	-	= 3000 mg/kg (Rabbit)	= 103 g/m³(Rat)4 h
Solvent naphtha (petroleum), light aliphatic 64742-89-8	-	= 3000 mg/kg (Rabbit)	-
Acetaldehyde 75-07-0	= 660 mg/kg (Rat)	= 3540 mg/kg (Rabbit)	= 13000 ppm (Rat)4 h
Toluene 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat)4 h

Symptoms related to the physical, chemical and toxicological characteristics

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

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.

Carcinogenicity

Suspected of causing cancer. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage. Titanium dioxide is a possible

carcinogen when it appears as a respirable dust. Group 3 IARC components are "not classifiable as human carcinogens".

Chemical name	ACGIH	IARC	NTP	OSHA
Ethylene Glycol Monobutyl Ether 111-76-2	A3	Group 3		
Ethanol 64-17-5	A3	Group 1	Known	Х
Titanium dioxide 13463-67-7		Group 2B		Х
Methylisobutyl ketone 108-10-1	A3	Group 2B		Х
Acetaldehyde 75-07-0	A2	Group 1 Group 2B	Reasonably Anticipated	Х
Toluene 108-88-3		Group 3		

Legend 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 Group 2B - Possibly Carcinogenic to Humans Group 3 IARC components are "not classifiable as human carcinogens" NTP (National Toxicology Program) Known - Known Carcinogen Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50	1,083.30 mg/kg
Dermal LD50	2,725.00 mg/kg
ATEmix (inhalation-dust/mist)	3.63 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ethylene Glycol Monobutyl Ether		2950: 96 h Lepomis macrochirus	1000: 48 h Daphnia magna mg/L
111-76-2		mg/L LC50 1490: 96 h Lepomis	EC50 1698 - 1940: 24 h Daphnia
		macrochirus mg/L LC50 static	magna mg/L EC50
Ethanol		13400 - 15100: 96 h Pimephales	10800: 24 h Daphnia magna mg/L
64-17-5		promelas mg/L LC50 flow-through	EC50 2: 48 h Daphnia magna mg/L
		12.0 - 16.0: 96 h Oncorhynchus	EC50 Static 9268 - 14221: 48 h
		mykiss mL/L LC50 static 100: 96 h	Daphnia magna mg/L LC50
		Pimephales promelas mg/L LC50	
		static	
Methylisobutyl ketone	400: 96 h Pseudokirchneriella	496 - 514: 96 h Pimephales	170: 48 h Daphnia magna mg/L
108-10-1	subcapitata mg/L EC50	promelas mg/L LC50 flow-through	EC50
Heptane		375.0: 96 h Cichlid fish mg/L LC50	10: 24 h Daphnia magna mg/L
142-82-5			EC50
Solvent naphtha (petroleum), light	4700: 72 h Pseudokirchneriella		
aliphatic	subcapitata mg/L EC50		
64742-89-8			
Chemical name	Algae/aquatic plants	Fish	Crustacea
Acetaldehyde	237 - 249: 120 h Nitzschia linearis	28.0 - 34.0: 96 h Pimephales	3.64 - 6.15: 48 h Daphnia magna

75-07-0	mg/L EC50	promelas mg/L LC50 flow-through 39.8 - 46.8: 96 h Pimephales promelas mg/L LC50 static 53: 96 h Lepomis macrochirus mg/L LC50 static 1.8 - 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static	mg/L EC50 Static 48.3: 48 h Daphnia magna mg/L EC50
Toluene 108-88-3	12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 433: 96 h Pseudokirchneriella subcapitata mg/L EC50	12.6: 96 h Pimephales promelas mg/L LC50 static 15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static 54: 96 h Oryzias latipes mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static	11.5: 48 h Daphnia magna mg/L EC50 5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static

Persistence/Degradability Not determined.

<u>Bioaccumulation</u> There is no data for this product.

Mobility

Chemical name	Partition coefficient
Ethylene Glycol Monobutyl Ether 111-76-2	0.81
Ethanol 64-17-5	-0.32
Methylisobutyl ketone 108-10-1	1.19
Heptane 142-82-5	4.66
Toluene 108-88-3	2.7
Acetaldehyde 75-07-0	0.5

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.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methylisobutyl ketone		Included in waste stream:		U161
108-10-1		F039		
Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes

Acetaldehyde 75-07-0			U001
Toluene 108-88-3	U220	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149,	U220
		K151	

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Toluene			Toxic waste	
108-88-3			waste number F025	
			Waste description:	
			Condensed light ends, spent	
			filters and filter aids, and	
			spent desiccant wastes from	
			the production of certain	
			chlorinated aliphatic	
			hydrocarbons, by free radical	
			catalyzed processes. These	
			chlorinated aliphatic	
			hydrocarbons are those	
			having carbon chain lengths	
		ranging from one to and		
			including five, with varying	
			amounts and positions of	
			chlorine substitution.	

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Ethanol	Toxic
64-17-5	Ignitable
Heptane	Toxic
142-82-5	Ignitable
Toluene	Toxic
108-88-3	Ignitable
Acetaldehyde	Toxic
75-07-0	Ignitable

14. TRANSPORT INFORMATION

<u>Note</u>

DOT

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

UN/ID No UN1210 **Proper Shipping Name** Printing ink Hazard class 3 П **Packing Group** IATA UN number UN1210 **Proper Shipping Name** Printing ink Transport hazard class(es) 3 **Packing Group** Ш

IMDG	
UN number	UN1210
Proper Shipping Name	Printing ink
Transport hazard class(es)	3
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Ethylene Glycol Monobutyl Ether	Х	ACTIVE	х	Х	х	X	Х	х	X
Ethanol	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Titanium dioxide	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Pigment Yellow 14	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Methylisobutyl ketone	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Heptane	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Solvent naphtha (petroleum), light aliphatic	Х	ACTIVE	х	Х		X	Х	Х	X
Acetaldehyde	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Toluene	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - 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

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methylisobutyl ketone	5000 lb		RQ 5000 lb final RQ
108-10-1			RQ 2270 kg final RQ
Acetaldehyde	1000 lb		RQ 1000 lb final RQ
75-07-0			RQ 454 kg final RQ
Toluene	1000 lb 1 lb		RQ 1000 lb final RQ
108-88-3			RQ 454 kg final RQ RQ 1 lb final
			RQ
			RQ 0.454 kg final RQ

SARA 313

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ethylene Glycol Monobutyl Ether - 111-76-2	111-76-2	37-40	1.0
Methylisobutyl ketone - 108-10-1	108-10-1	0.1-1	1.0
Acetaldehyde - 75-07-0	75-07-0	Trace	0.1
Toluene - 108-88-3	108-88-3	Trace	1.0

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene	1000 lb	Х	Х	Х
Acetaldehyde	1000 lb			Х

US State Regulations

Special Hazards

Personal Protection

Not determined

Not determined

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Ethanol - 64-17-5	Carcinogen Developmental
Titanium dioxide - 13463-67-7	Carcinogen
Methylisobutyl ketone - 108-10-1	Carcinogen Developmental
Toluene - 108-88-3	Developmental
Acetaldehyde - 75-07-0	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethylene Glycol Monobutyl Ether 111-76-2	Х	X	Х
Ethanol 64-17-5	Х	X	Х
Titanium dioxide 13463-67-7	Х	X	Х
Methylisobutyl ketone 108-10-1	Х	X	Х
Heptane 142-82-5	Х	X	Х
Acetaldehyde 75-07-0	Х	X	Х
Toluene 108-88-3	Х	X	Х

16. OTHER INFORMATION

Instability

Not determined

Not determined

Physical hazards

Health Hazards	Flammability
Not determined Health Hazards	Not determined Flammability Not determined
Not determined	Not determined
	Not determined

Issue Date:	03-Feb-2021
Revision Date:	03-Feb-2021
Revision Note:	New format

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