

SAFETY DATA SHEET

Published Date May-30-2019 Revision Date May-29-2019 Revision Number 2.5

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

Product identifier Product code Product name Product category

LWU7025NC UV Glass Primer Ink Product

Other means of identification Synonyms

Recommended use of the chemical and restrictions on useRecommended usePrinting operations

None

Details of the supplier of the safety data sheet

UNITED STATES Nazdar Company 8501 Hedge Lane Terrace Shawnee, KS 66227 Tel: +001-913-422-1888 Tel: +001-800-677-4657 Fax: +001-913-422-2294 www.nazdar.com UNITED KINGDOM Nazdar Limited Barton Road Heaton Mersey Stockport, England SK4 3EG Tel: +44 161 442 2111

Emergency telephone number

USA: Chemtrec: +001-800-424-9300 Outside USA: Chemtrec: +001-703-527-3887 24 Hour Emergency Phone Number

2. HAZARDS IDENTIFICATION

Classification

| Serious eye damage/eye irritation | Category 2 - (H319) |
|--|---------------------|
| Specific target organ toxicity (single exposure) | Category 3 - (H336) |
| Flammable liquids | Category 2 - (H225) |

Label elements



Danger

Hazard Statements

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

H225 - Highly flammable liquid and vapor

Precautionary Statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P235 - Keep cool

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Hazards not otherwise classified (HNOC)

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

| Component | CAS-No | Weight % | Trade Secret | Note |
|-------------------|---------|----------|-----------------|------|
| Isopropyl alcohol | 67-63-0 | 60 - 100 | * | |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

| General Advice Eye Contact | Show this safety data sheet to the doctor in attendance. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops and persists. |
|-------------------------------|---|
| Skin Contact | Wash off immediately with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation (redness, rash, blistering) develops, get medical attention. |
| Inhalation | Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately. |
| Ingestion | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. |

Most important symptoms and effects, both acute and delayed

None under normal use conditions.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions.

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. Cool containers / tanks with water spray. Sealed containers may rupture when heated.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Remove all sources of ignition. Ventilate the area. Avoid contact with eyes, skin and clothing. Avoid breathing dust or vapor. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

| Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Keep out of the reach of children. |
|--|
| • |

Incompatible Products

Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

| Component | ACGIH TLV |
|-------------------|---------------|
| Isopropyl alcohol | TWA: 200 ppm |
| 67-63-0 | STEL: 400 ppm |

| Component | OSHA PEL |
|-------------------|----------------------------|
| Isopropyl alcohol | TWA: 400 ppm |
| 67-63-0 | TWA: 980 mg/m ³ |

| Component | OSHA PEL (vacated) |
|-------------------|------------------------------|
| Isopropyl alcohol | TWA: 400 ppm |
| 67-63-0 | TWA: 980 mg/m ³ |
| | STEL: 500 ppm |
| | STEL: 1225 mg/m ³ |

| Component | Ontario TWAEV |
|-------------------|---------------|
| Isopropyl alcohol | TWA: 200 ppm |
| 67-63-0 | STEL: 400 ppm |

| Component | Mexico OEL (TWA) |
|-------------------|-------------------------------------|
| Isopropyl alcohol | TWA/VLE-PPT: 400 ppm |
| 67-63-0 | TWA/VLE-PPT: 980 mg/m ³ |
| | STEL/PPT-CT: 500 ppm |
| | STEL/PPT-CT: 1225 mg/m ³ |

Appropriate engineering controls

Engineering Measures

Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Users are

advised to consider national Occupational Exposure Limits or other equivalent values. In case of insufficient ventilation, wear suitable respiratory equipment.

Individual protection measures, such as personal protective equipment

| Eye/Face Protection | Wear safety glasses with side shields (or goggles). If splashes are likely to occur:. Wear suitable face shield. Ensure that eyewash stations and safety showers are close to the workstation location. |
|-------------------------------|---|
| Skin Protection | Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. |
| Hand Protection | Chemical resistant protective gloves. Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding >480 minutes of permeation time): eg. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers. Taking into account the varying conditions, the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Due to different glove types, the manufacturer's directions for use should be observed. Replace gloves immediately when torn or any change in appearance is noticed such as dimension, color, flexibility. |
| Respiratory Protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. |
| General Hygiene Consideration | s Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking or smoking. Wash contaminated clothing before reuse. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Information on basic physical and chemical properties | | | | |
|---|--------------------|-------------------|--------------------------|--|
| Physical State | Liquid | Appearance | Water-white | |
| Odor | Characteristic | Odor Threshold | No information available | |
| Broporty | Values | Remarks • Method | | |
| Property | values | No data available | | |
| pH Malifica Daint (Encaring Daint | | | | |
| Melting Point / Freezing Point | | No data available | | |
| Boiling Point / Boiling Range | > 149 °C / 300 °F | | | |
| Flash Point | 12 °C / 53 °F | Tag closed cup | | |
| Evaporation rate | | No data available | | |
| Flammability Limit in Air | | | | |
| Upper flammability limit | | No data available | | |
| Lower flammability limit | | No data available | | |
| Vapor Pressure | | No data available | | |
| Vapor Density | | No data available | | |
| Specific Gravity | 0.79 | | | |
| Water Solubility | 0.10 | No data available | | |
| Solubility in other solvents | | No data available | | |
| Partition coefficient: n-octanol/wate | | No data available | | |
| | | No data available | | |
| Autoignition Temperature | | | | |
| Decomposition temperature | | No data available | | |
| Kinematic viscosity | | No data available | | |
| Dynamic viscosity | | No data available | | |
| Explosive Properties | No data available | | | |
| Oxidizing Properties | No data available | | | |
| | ino dala avaliable | | | |

Other Information

| Photochemically Reactive | No |
|-----------------------------|------|
| Weight Per Gallon (lbs/gal) | 6.57 |

| VOC by weight % | VOC by volume % | VOC lbs/gal | VOC grams/liter |
|-----------------|--------------------------|--------------|-----------------|
| (less water) | (less water) | (less water) | (less water) |
| 99.13 | No information available | 6.51 | 780.28 |

10. STABILITY AND REACTIVITY

Reactivity

No information available.

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO2). Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Inhalation | Specific test data for the substance or mixture is not available. |
|--------------|---|
| Eye Contact | Specific test data for the substance or mixture is not available. |
| Skin Contact | Specific test data for the substance or mixture is not available. |
| Ingestion | Specific test data for the substance or mixture is not available. |

| Component | Oral LD50 |
|------------------------------|--------------------|
| Isopropyl alcohol 67-63-0 | = 1870 mg/kg (Rat) |
| | |
| Common on t | Downed L DE0 |

| Component | Dermai LD50 |
|-------------------|-----------------------|
| Isopropyl alcohol | = 4059 mg/kg (Rabbit) |
| 67-63-0 | |
| | |

| Component | Inhalation LC50 |
|------------------------------|-----------------------|
| Isopropyl alcohol 67-63-0 | = 72600 mg/m³(Rat)4 h |
| | |

Information on toxicological effects

Symptoms

Specific test data for the substance or mixture is not available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin corrosion/irritation | Specific test data for the substance or mixture is not available. |
|---------------------------|--|
| Eye damage/irritation | Specific test data for the substance or mixture is not available. Causes serious eye irritation. |
| | (based on components). |
| Irritation | Specific test data for the substance or mixture is not available. |
| Corrosivity | Specific test data for the substance or mixture is not available. |
| Sensitization | Specific test data for the substance or mixture is not available. |

| Mutagenic Effects Carcinogenic effects Reproductive Effects STOT - single exposure | Specific test data for the substance or mixture is not available. Specific test data for the substance or mixture is not available. Specific test data for the substance or mixture is not available. Specific test data for the substance or mixture is not available. May cause drowsiness or dizziness. (based on components). |
|---|---|
| STOT - repeated exposure Chronic Toxicity Aspiration hazard Carcinogenicity | Specific test data for the substance or mixture is not available. Specific test data for the substance or mixture is not available Specific test data for the substance or mixture is not available. This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP. |

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral) 10,526.00 mg/kg 31,579.00 mg/kg mg/l ATEmix (dermal) ATEmix (inhalation-dust/mist) 52.74 mg/l ATEmix (inhalation-vapor) 316.00 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Specific test data for the substance or mixture is not available.

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Component | Algae/aquatic plants |
|-------------------|--|
| Isopropyl alcohol | 72h EC50 Desmodesmus subspicatus: > 1000 mg/L |
| 67-63-0 | 96h EC50 Desmodesmus subspicatus: > 1000 mg/L |
| | |
| Component | Fish |
| Isopropyl alcohol | 96h LC50 Pimephales promelas: = 9640 mg/L (flow-through) |
| 67-63-0 | 96h LC50 Lepomis macrochirus: > 1400000 µg/L |

| Component | Crustacea |
|-------------------|--------------------------------------|
| Isopropyl alcohol | 48h EC50 Daphnia magna: = 13299 mg/L |
| 67-63-0 | |

96h LC50 Pimephales promelas: = 11130 mg/L (static)

Persistence and Degradability

No information available.

Bioaccumulation

No information available

| Component | Partition coefficient |
|-------------------|-----------------------|
| Isopropyl alcohol | 0.05 |
| 67-63-0 | |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| Waste Disposal Methods | Contain and dispose of waste according to local regulations. | |
|--|--|--|
| Contaminated Packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. | |
| | 14. TRANSPORT INFORMATION | |
| Note: | This information is not intended to convey all specific transportation requirements relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation information can be found in the specific regulations for your mode of transportation. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. | |
| <u>DOT</u> UN/ID no. Proper Shipping Name Hazard Class Packing Group | UN1210 Printing Ink Related Material 3 II | |
| ICAO / IATA / IMDG / IMO UN/ID no. Proper Shipping Name Hazard Class Packing Group | UN1210 Printing Ink Related Material 3 II | |

15. REGULATORY INFORMATION

International Inventories

All components are listed on the TSCA Inventory. For further information, please contact:. Supplier (manufacturer/importer/downstream user/distributor).

U.S. Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

| Component | CAS-No | Weight % |
|-----------|---------|----------|
| Methanol | 67-56-1 | < 1 |

U.S. State Regulations

| Component | Massachusetts Right To Know |
|------------------------------|--------------------------------|
| Isopropyl alcohol 67-63-0 | x |
| Component | Minnesota |
| Isopropyl alcohol | Right To Know X |
| 67-63-0 | |
| Component | New Jersey Right To Know |
| Isopropyl alcohol | X |

| 67-63-0 | |
|------------------------------|---------------|
| | |
| Component | Pennsylvania |
| | Right To Know |
| Isopropyl alcohol 67-63-0 | X |
| 67-63-0 | |

California Prop. 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm

| Component | California Prop. 65 | | | |
|-----------|---------------------|--|--|--|
| Methanol | Developmental | | | |

<u>Canada</u>

| Component | NPRI - National Pollutant Release Inventory |
|-------------------|---|
| Isopropyl alcohol | Part 5, Individual Substances; Part 4 Substance |
| 67-63-0 | |

| 16. OTHER INFORMATION | | | | | | | | |
|--|---------------|-------------------|-----------------|--------------------------|--|--|--|--|
| HMIS: | Health 2 * | Flammability 3 | Reactivity 0 | Personal Protection X | | | | |
| Key or legend to abbreviations and acronyms used in the safety data sheet | | | | | | | | |
| Legend- Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTIONTWATWA (time-weighted average)STELSTEL (Short Term Exposure Limit)CeilingMaximum limit value | | | | | | | | |
| ACGIH: (American Conference of Governmental Industrial Hygienists) A1 - Known Human Carcinogen 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 NTP: (National Toxicity Program) Known - Known Carcinogen Reasonably Anticipated to be a Human Carcinogen OSHA: (Occupational Safety & Health Administration) X - Present | | | | | | | | |

Revision Date May-29-2019

Pursuant to NOM-018-STPS-2015

This information within is considered correct but is not exhaustive and will be used for guidance only, which is based on the current knowledge of the substance or mixture and is applicable to the appropriate safety precautions for the 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