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a member of the DIC group

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USA

October 09, 2023

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SAFETY DATA SHEET

Section 1. Identification

Product code : 91666294/WVLH26/CD02

GHS product identifier : PROCESS YELLOW LED

Trade name : SUNWAVE LUMINA
WVLH26 PROCESS YELLOW LED

Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Printing ink; Printing ink related material; Colorant

Manufacturer / Distributor : Sun Chemical Corporation
North American Inks
135 West Lake Street
Northlake, IL 60164
US: +1 708 236 3798

Emergency telephone number (with hours of operation) : +1 (800) 424-9300 (U.S.) (24 hours)
+1 (703) 527-3887 (International) (24 hours)

Other information : +1 708 236 3798

e-mail address of person responsible for this SDS : regulatory.affairs@sunchemical.com

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response : Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or 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 or attention.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 2. Hazards identification

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

Ingredient name	CAS number	%
2-Propenoic acid, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl) oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-prope	29570-58-9	25 - 50
Trimethylolpropane Ethoxy Triacrylate	28961-43-5	5 - 10
2-propenoic acid, 2-[[2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]butoxy]methyl] -2-ethyl-1,3-propanediyl ester	1393932-71-2	5 - 10
1,3-propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with oxirane, 4-(dimethylamino)benzoate	2067275-86-7	2.5 - 5
Propoxylated Glyceryl Triacrylate	52408-84-1	1 - 2.5
Photoinitiator	162881-26-7	1 - 2.5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Remove contact lenses, if present and easy to do. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention. In case of accidental eye contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of the eyes.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. In case of accidental skin contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of skin.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
phosphorus oxides
halogenated compounds
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Use only in well-ventilated areas. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Always keep in containers made from the same material as the original one. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Comply with the health and safety at work laws.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep container tightly closed. Keep away from sources of ignition - No smoking. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination. Do not reuse container. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls/personal protection

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Yellow.

Odor : Characteristic.

Odor threshold : Not applicable.

pH : Not tested

Melting point : Not available.

Boiling point : Lowest known value: 430°C (809°F)

Flash point : Lowest known value: >93.3°C (200°F)

Evaporation rate : Highest known value: <1 (Trimethylolpropane Ethoxy Triacrylate) Weighted average: 0.9compared with butyl acetate

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not tested

Vapor pressure : Not available.

Vapor density : Not tested

Density : 1.121 g/cm³ (9.359 lbs/gal)

Solubility : Not tested

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not tested

Decomposition temperature : Not applicable.

Viscosity : Not tested

VOC

VOC % by W/W : 0.1

VOC % by V/V : 0.1

VOC Lbs./Gallon : 0.0

VOC Lbs./Gallon without Water and exempt solvents : 0.0

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Section 10. Stability and reactivity

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Trimethylolpropane Ethoxy Triacrylate	LD50 Dermal	Rabbit	>13 g/kg	-

Conclusion/Summary : Procedure used to derive the classification: Calculation method.

Irritation/Corrosion

The product has not been tested.

Sensitization

The product has not been tested.

Mutagenicity

The product has not been tested.

Conclusion/Summary : Procedure used to derive the classification: Calculation method.

Carcinogenicity

The product has not been tested.

Conclusion/Summary : Procedure used to derive the classification: Calculation method.

Reproductive toxicity

The product has not been tested.

Conclusion/Summary : Procedure used to derive the classification: Calculation method.

Teratogenicity

The product has not been tested.

Conclusion/Summary : Procedure used to derive the classification: Calculation method.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Section 11. Toxicological information

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

The product has not been tested.

Conclusion/Summary : Procedure used to derive the classification: Calculation method.

Persistence and degradability

The product has not been tested.

Conclusion/Summary : Procedure used to derive the classification: Calculation method.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Trimethylolpropane Ethoxy Triacrylate	2.89	-	low
Propoxylated Glyceryl Triacrylate	2.52	-	low
Photoinitiator	5.77	-	high

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Section 12. Ecological information

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : 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. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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 Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number					
UN proper shipping name					
Transport hazard class(es)	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

TSCA 8(b) inventory : Listed

U.S. Federal regulations : **TSCA 5(a)2 final significant new use rule (SNUR):**

2,4-diethyl-9H-thioxanthen-9-one	82799-44-8	40 CFR 721.9664	P-96-1315	5 -10
1,3-propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with oxirane, 4-(dimethylamino)benzoate	2067275-86-7	40 CFR 721.11488	P 19-55	2.5 - 5

TSCA 6 final risk management: Polychlorinated Biphenyls: Inadvertently generated impurities

TSCA 8(a) PAIR: 4-Methoxyphenol

TSCA 12(b) one-time export: 2,4-diethyl-9H-thioxanthen-9-one; 1,3-propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with oxirane, 4-(dimethylamino)benzoate

Clean Water Act (CWA) 307: Copper Dimethyldithiocarbamate; toluene; Polychlorinated Biphenyls: Inadvertently generated impurities; 3,3'-dichlorobenzidine

Section 15. Regulatory information

Clean Water Act (CWA) 311: metaphosphoric acid, hexasodium salt; toluene; cyclohexane; Polychlorinated Biphenyls: Inadvertently generated impurities

SARA 313

	Product name	CAS number	%
Supplier notification	None identified.		

Toxics in Packaging (CONEG) : In compliance.

State regulations

Massachusetts : The following components are listed: magnesium carbonate (546-93-0), Talc , not containing asbestiform fibres (14807-96-6)

New York : None of the components are listed.

New Jersey : The following components are listed: Calcium Resinate (9007-13-0), magnesium carbonate (546-93-0), Talc , not containing asbestiform fibres (14807-96-6)

Pennsylvania : The following components are listed: Talc , not containing asbestiform fibres (14807-96-6)

Canada inventory (DSL) : Not determined.

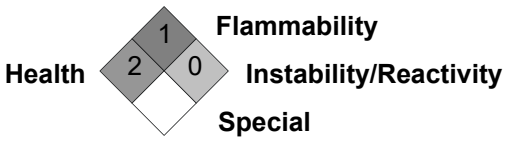
International regulations

International lists : **Australia inventory (AIIC):** At least one component is not listed.
China inventory (IECSC): At least one component is not listed.
Japan inventory (CSCL): At least one component is not listed.
Korea inventory: At least one component is not listed.
New Zealand Inventory of Chemicals (NZIoC): At least one component is not listed.
Philippines inventory (PICCS): At least one component is not listed.
Taiwan Chemical Substances Inventory (TCSI): At least one component is not listed.
Turkey inventory: Not determined.

Europe Inventory: Please contact your supplier to get the information.

Section 16. Other information

National Fire Protection Association (U.S.A.)



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History

Date of issue/Date of revision : 9/28/2023

Date of previous issue : 9/18/2023

Version : 1.02

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

WVLH26