

Sun Chemical Corporation
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SunChemical®

a member of the DIC group



SEAWAY PRINTING CO., INC.
1609 WESTERN AVENUE
GREEN BAY, WI 54303
USA

October 15, 2021

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SAFETY DATA SHEET

Section 1. Identification

Product code : MS576-K9/C229
GHS product identifier : SF MS 576 GREEN
Trade name :

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 : SKIN SENSITIZATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (brain) - Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : May cause an allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure. (brain)

Precautionary statements

Prevention : Wear protective gloves. Do not breathe vapor. Contaminated work clothing must not be allowed out of the workplace.

Response : Get medical attention if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.

Storage : Not applicable.

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

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

Ingredient name	CAS number	%
"aries" flushing vehicle	proprietary	5 - 10
manganese neodecanoate	27253-32-3	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.
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.
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	: No known significant effects or critical hazards.
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.

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.

Section 5. Fire-fighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen 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.
Remarks	:

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: 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).
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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	: Do not breathe vapor or mist. Put on appropriate personal protective equipment (see Section 8). 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. 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. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal
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Section 7. Handling and storage

Remarks:

- containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.
- : Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. (Soybean oil)

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
manganese neodecanoate	NIOSH REL (United States, 10/2016). Notes: as Mn STEL: 3 mg/m³, (as Mn) 15 minutes. Form: Fume TWA: 1 mg/m³, (as Mn) 10 hours. Form: Fume ACGIH TLV (United States, 3/2019). Notes: as Mn TWA: 0.02 mg/m³, (as Mn) 8 hours. Form: Respirable fraction OSHA PEL (United States, 5/2018). Notes: as Mn CEIL: 5 mg/m³, (as Mn) OSHA PEL 1989 (United States, 3/1989). Notes: as Mn CEIL: 5 mg/m³, (as Mn) ACGIH TLV (United States, 3/2019). TWA: 0.1 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction

Appropriate engineering controls

- : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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: safety glasses with side-shields.

Skin protection

Section 8. Exposure controls/personal 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.
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	: Green.
Odor	: Characteristic.
Odor threshold	: Not applicable.
pH	: Not tested
Melting point	: Not available.
Boiling point	: Lowest known value: 288°C (550°F)
Flash point	: Lowest known value: >93.3°C (200°F)
Evaporation rate	: Highest known value: <1 (Soybean oil) Weighted average: 0.9 compared 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	: 1.037 g/cm ³ (8.651 lbs/gal)
Solubility	: Not tested
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not applicable.
Viscosity	: Not tested

VOC

VOC % by W/W	: 0.0
VOC % by V/V	: 0.0
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.
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

The product has not been tested.

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)

Name	Category	Route of exposure	Target organs
manganese neodecanoate	Category 2	Oral Inhalation	brain brain

Aspiration hazard

Not available.

Section 11. Toxicological information

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
 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 : No specific data.
 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 : May cause damage to organs through prolonged or repeated exposure. 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

Route	ATE value
Oral	84499.8 mg/kg

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.

Section 12. Ecological information

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

Bioaccumulative potential

Not available.

Mobility in soil

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

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): 4-nonylphenol, branched 84852-15-3 < 0.0001 TSCA 8(a) PAIR: 4-nonylphenol, branched; 4-Methoxyphenol; Phosphoric Acid, Monobutyl Ester; Phosphoric Acid, Dibutyl Ester Clean Water Act (CWA) 307: C. I. Pigment Blue 15:3 Clean Water Act (CWA) 311: formaldehyde; phosphoric acid

SARA 313

	Product name	CAS number	%
Supplier notification	Manganese Compounds	27253-32-3	1 - 2.5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Toxics in Packaging (CONEG) : In compliance.

State regulations

Massachusetts	: The following components are listed: Paraffin Wax (8002-74-2)
New York	: None of the components are listed.
New Jersey	: The following components are listed: Paraffin Wax (8002-74-2), C.I. Pigment Blue 15:3 (147-14-8)
Pennsylvania	: The following components are listed: Soybean oil (8001-22-7), Linseed oil (8001-26-1), Paraffin Wax (8002-74-2), C.I. Pigment Blue 15:3 (147-14-8), manganese neodecanoate (27253-32-3)

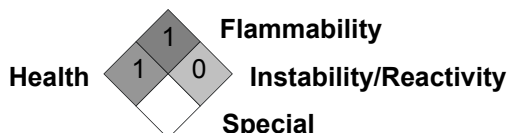
Canada inventory : Not determined.

International regulations

International lists	: Australia inventory (AICS): At least one component is not listed. China inventory (IECSC): At least one component is not listed. Japan inventory (ENCS): At least one component is not listed. Korea inventory: At least one component is not listed. Malaysia Inventory (EHS Register): 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): Not determined. Turkey inventory: Not determined. Europe Inventory: Please contact your supplier to get the information.
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Section 16. Other information

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



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Section 16. Other information

Date of issue/Date of revision : 10/14/2021

Date of previous issue : No previous validation

Version : 0.01

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.

FMA3704499

VOLATILE CHEMICALS REPORT

US EPA
Designate

A. Product Density:

1.)	1.037 g/cm ³ (8.651 lbs/gal)	=(Dc)s
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B. Nonvolatile Content:

1.)	100.0 Weight percent of nonvolatiles in product	=(Wn)s
2.)	99.9 Volume percent of nonvolatiles in product	=(Vn)s
3.)	8.65 Density, lb nonvolatiles/gal nonvolatiles	=(Dn)s

C. Volatiles:

1.)	0.0 Weight percent of total volatiles in product	=(Wv)s
2.)	10.2 Density, lb volatiles/gal volatiles	=(Dv)s

D. Water Content:

1.)	0.0 Weight percent of water in product	=(Ww)s
2.)	0.0 Volume percent of water in product	=(Vw)s

E. Volatile Organic Compounds, (VOCs):

1.)	0.0 Weight percent of organic volatiles in product	=(Wo)s
2.)	0.0 Volume percent of organic volatiles in product	=(Vo)s
3.)	5386.82 Density, lb organic volatiles/gal organic volatiles	=(Do)s
4.)	0.0 Weight percent of VOCs in total volatiles	=(Wo)v
5.)	0.0 Volume percent of VOCs in total volatiles	=(Vo)v

F. VOC Content in Product Expressed in Other Terms:

1.) a.)	0.0 lb VOC / gal Product	
1.) b.)	0 grams VOC / liter Product	
2.) a.)	0.0 lb VOC / gal Product less water & exempt solvent	
2.) b.)	0 grams VOC / liter Product less water & exempt solvent	
2.) c.)	0.0 Weight percent of organic volatiles (VOC) in Product less water & exempt solvents.	
3.)	0.0 lb VOC / gal total nonvolatiles	

G. Volatiles

Chemical name	CAS number	% by weight	Density (lb/gal)
Hazardous Air Pollutants VOCs (HAPs)			
Other VOCs (Non-HAPs)			
VOC's present at <0.10% (cumulative)		0.01	7.69

NOTE:

The US EPA definition of VOC does not include water, ammonia or other exempt substances. The VOC values reported are based on current formulations and supplier data.

This report also serves as a Certified Product Data Sheet (CPDS) as defined by 40 CFR 63 National Emissions Standard for HAPS, Subpart KK for the Printing Industry