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MN
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SunChemical[®]
a member of the DIC group 

RECOGNITION SYSTEMS INC.
30 HARBOR PARK DRIVE
PORT WASHINGTON, NY 11050
USA

April 17, 2018

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SAFETY DATA SHEET

Section 1. Identification

Product code : PD-511
GHS product identifier : StarDot Violet

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

Identified uses

Colorant; Printing ink related material; Printing ink.

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

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

| Ingredient name | CAS number | % |
|----------------------------------|------------|---------|
| C.I. Pigment Violet 3 | 67989-22-4 | 10 - 20 |
| Neodecanoic Acid, Manganese Salt | 27253-32-3 | 1 - 2.5 |

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

Section 3. Composition/information on ingredients

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** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, 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
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 5. Fire-fighting measures

Remarks :

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- 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. 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. 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** : Put on appropriate personal protective equipment (see Section 8).
- 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 original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

- Remarks:** : 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 |
|----------------------------------|---|
| Neodecanoic Acid, Manganese Salt | <p>ACGIH TLV (United States, 3/2016). TWA: 0.1 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction</p> <p>ACGIH TLV (United States, 3/2016). Notes: as Mn TWA: 0.02 mg/m³, (as Mn) 8 hours. Form: Respirable fraction</p> <p>OSHA PEL (United States, 6/2016). Notes: as Mn CEIL: 5 mg/m³, (as Mn)</p> <p>OSHA PEL 1989 (United States, 3/1989). Notes: as Mn CEIL: 5 mg/m³, (as Mn)</p> |

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. 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

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.

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 | : Violet. |
| 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) |
| VOC % (w/w) | : 0.14 |
| 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 | : 1.103 g/cm ³ (9.204 lbs/gal) |
| Solubility | : Not tested |
| Partition coefficient: n-octanol/water | : Not applicable. |
| Auto-ignition temperature | : Not applicable. |
| Decomposition temperature | : Not applicable. |
| Viscosity | : Not tested |

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

Conclusion/Summary : No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Eyes : No known significant effects or critical hazards.

Respiratory : No known significant effects or critical hazards.

Section 11. Toxicological information

Sensitization

Conclusion/Summary

- Skin** : No known significant effects or critical hazards.
Respiratory : No known significant effects or critical hazards.

Mutagenicity

- Conclusion/Summary** : No known significant effects or critical hazards.

Carcinogenicity

- Conclusion/Summary** : No known significant effects or critical hazards.

Reproductive toxicity

- Conclusion/Summary** :

Teratogenicity

- Conclusion/Summary** : No known significant effects or critical hazards.

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** : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
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 : No specific data.
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** : No known significant effects or critical hazards.
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.

Section 11. Toxicological information

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|-------|---------------|
| Oral | 21860.2 mg/kg |

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

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. 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 | - | - | - | - | - |

Section 14. Transport information

| 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 8(a) PAIR:** 4-nonylphenol, branched
Clean Water Act (CWA) 311: formaldehyde

SARA 313

| | Product name | CAS number | % |
|-----------------------|---------------------|------------|------|
| Supplier notification | Manganese Compounds | 27253-32-3 | 1.76 |

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.

Canada inventory : At least one component is not listed in DSL but all such components are listed in NDSL.

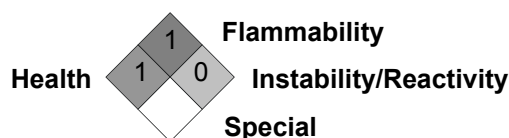
International regulations

International lists :

- Australia inventory (AICS):** At least one component is not listed.
- China inventory (IECSC):** All components are listed or exempted.
- Japan inventory (ENCS):** At least one component is not listed.
- Korea inventory:** All components are listed or exempted.
- Malaysia Inventory (EHS Register):** Not determined.
- New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- 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.

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

: 8/30/2017

Section 16. Other information

Date of issue/Date of revision

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.

PD-511

VOLATILE COMPONENT INFORMATION

| | US EPA Designate |
|--|---------------------|
| A. Product Density: | |
| 1.) 1.103 g/cm ³ (9.204 lbs/gal) | =(Dc)s |
| B. Nonvolatile Content: | |
| 1.) 99.9 Weight percent of nonvolatiles in product | =(Wn)s |
| 2.) 99.8 Volume percent of nonvolatiles in product | =(Vn)s |
| 3.) 9.2 Density, lb nonvolatiles/gal nonvolatiles | =(Dn)s |
| C. Volatiles: | |
| 1.) 0.1 Weight percent of total volatiles in product | =(Wv)s |
| 2.) 7.4 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.) 0.1 Weight percent of organic volatiles in product | =(Wo)s |
| 2.) 0.2 Volume percent of organic volatiles in product | =(Vo)s |
| 3.) 7.4 Density, lb organic volatiles/gal organic volatiles | =(Do)s |
| 4.) 100.0 Weight percent of VOCs in total volatiles | =(Wo)v |
| 5.) 100.0 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.) 1.54 grams VOC / liter Product | |
| 2.) a.) 0.0 lb VOC / gal Product less water & exempt solvent | |
| 2.) b.) 1.54 grams VOC / liter Product less water & exempt solvent | |
| 2.) c.) 0.1 Weight percent of organic volatiles (VOC) in Product less water & exempt solvents. | |
| 3.) 0.0 lb VOC / gal total nonvolatiles | |

G. Volatiles

| Ingredient | CAS number | % by weight | Density (lb/gal) |
|---|------------|-------------|------------------|
| 1.) Hazardous Air Pollutants VOCs (HAPs) | | 0.0 | |
| 2.) Other VOCs (Non-HAPs) | | | |
| Soybean oil, Me ester | 67784-80-9 | 0.1 | 7.26 |
| VOC's present at <0.10% (cumulative) | | 0.0 | 7.87 |
| 3.) Water | 7732-18-5 | 0.0 | |
| 4.) Ammonia (reported as CAS# 7664-41-7; includes CAS# 1336-21-6) | 7664-41-7 | 0.0 | 5.99 |
| 5.) Other Non-VOC, Non-HAP Volatiles | | 0.0 | |

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