1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

PRODUCT CODE: BPD-B315
CHEMICAL FAMILY: WATER, PIGMENT, SURFACTANT
PRODUCT DESCRIPTION: SURFACTANT BASED AQUEOUS DISPERSION
PRODUCT NAME: SUNSPERSE® BLUE 15

USE DESCRIPTION
Aqueous pigment dispersions are unique, highly colored products incorporating high pigment loading with typically low levels of resin or surfactant. They are used primarily in the coloration of printing inks, paints, and coatings in water borne systems.

MANUFACTURER:
Sun Chemical Corporation
Dispersions Division
3922 Bach-Buxton Road
Amelia, Ohio 45102
U.S.A.

EMERGENCY TELEPHONE NUMBERS:
Transportation: (513) 753-9550
8:30 a.m. - 5:00 p.m.: Ext.242
or Ext.249

2. COMPOSITION/INFORMATION ON INGREDIENTS

PHTHALOCYANINE BLUE  C.A.S.#  147-14-8
Water  C.A.S.#  7732-18-5

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CAUTION!
Do not allow large amounts to enter sewers, lakes, streams, or other natural waterways. This product contains a surfactant which can cause foaming and may be toxic to aquatic life.

POTENTIAL HEALTH EFFECTS:
This dispersion is mildly irritating to the eyes. Avoid eye contact.
4. FIRST AID MEASURES

**EYE CONTACT**
Immediately flush eyes thoroughly with large amounts of water for at least fifteen minutes if contact occurs. Seek medical attention.

**SKIN CONTACT**
Wash skin with soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the unlikely event that irritation develops.

**INHALATION**
If exposed to excessive levels of vapors, remove to fresh air and seek medical attention if breathing is difficult or other symptoms develop.

**INGESTION**
Do not give anything by mouth to an unconscious person. Do not induce vomiting. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Nonflammable aqueous pigment dispersion.

**Extinguishing Media**
Carbon dioxide, dry chemical or foam recommended. Apply water spray to keep exposed containers cool.

**Special Fire-Fighting Procedures**
Self-contained breathing apparatus (SCBA) and full protective equipment recommended.

**Unusual Fire and Explosion Hazards**
Fire or excessive heat may produce hazardous decomposition products.

**General Hazard**
In the unlikely event that all of the water is evaporated, improper handling of any dry organic pigment product may lead to dust cloud formation which can be an explosion hazard.

**Flammability Data**
- Flash Point: Non-flammable material
- Flammability Limits: Not applicable
- Autoignition Temperature: Not applicable

**NFPA RATINGS**
- Health: 2
- Flammability: 1
- Reactivity: 0

**HMIS RATINGS**
- Health: 2
- Flammability: 1
- Reactivity: 0

6. ACCIDENTAL RELEASE MEASURES

**Small Spill**
Contain spill immediately. Inert materials such as dry sand or sawdust may be used to help absorb any spilled material. Scoop or shovel into appropriate waste containers for disposal purposes. Soap and water may be used as necessary.

**Large Spill**
Contain spilled material immediately. Use an inert material such as dry sand, sawdust, or earth to help absorb large spills. Scoop or shovel waste material into drums. Prevent runoff from entering into storm sewers, lakes, streams,
6. ACCIDENTAL RELEASE MEASURES (Continued)

or other natural waterways. Large spills may be toxic to aquatic life, and can
cause foaming and operational problems at wastewater treatment facilities.
Appropriate protective clothing should be worn to prevent employee exposure.

7. HANDLING AND STORAGE

Handling
Avoid employee exposure through the use of appropriate engineering controls,
adequate personal protective equipment, and good industrial hygiene practices.
Wash thoroughly after handling. Handle in well ventilated work space, and
do not allow contact with the skin or eyes.

Storage
Store in a moderately cool, dry, well-ventilated area away from direct
sources of heat. Avoid freezing(32°F). Empty containers may contain product
residues and should be handled accordingly. Position containers so that any
labelling information is visible. Keep containers closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls
The use of local exhaust ventilation is recommended to control emissions
near the source. Additional engineering controls should be used as necessary.

Personal Protection
Safety glasses with side shields, or goggles, are recommended. Impervious
clothing should be worn when gross contact is likely, such as when cleaning
up large spills. Respiratory protection is generally not required.
Wash at the end of each work shift. Any contaminated clothing should be
removed and laundered.

Exposure Limits
There are no ACGIH TLV’s or OSHA PEL’s established for this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Blue, opaque liquid
COLORANT: Pigment Blue 15
SPECIFIC GRAVITY: 1.08-1.20
SOLUBILITY IN WATER: Dispersible
BOILING POINT: 65-100°C
VOLATILE ORGANIC COMPOUNDS (VOC’s): Negligible(< 0.5%)
pH INFORMATION: 7.0-9.0
ODOR: Slight odor
10.  STABILITY AND REACTIVITY

GENERAL:
This product is a stable compound and hazardous polymerization will not occur. Since it contains water, do not allow it to freeze.

INCOMPATABILITY:
Avoid strong oxidizing agents such as peroxides, chlorates, perchlorates, nitrates, and permanganates. Oxidizing materials may vigorously evolve oxygen in large amounts.

HAZARDOUS DECOMPOSITION PRODUCTS:
When involved in a fire, burning organic pigment products may evolve noxious gases which are toxic. These compounds may include carbon monoxide, carbon dioxide, nitrous oxides, or hydrogen chloride, depending on the pigment type used in the dispersion. All of the water must be driven off first in order for this to occur.

11.  TOXICOLOGICAL INFORMATION

GENERAL
Based upon industry-wide experience over many years of manufacturing, aqueous dispersion products in general are considered to have a low level of toxicity. This product contains small amounts of a surfactant that is classified as an irritant. Overexposure to the liquid may result in irritation. There are no established TLV’s or PEL’s for this product.

ACUTE (SHORT-TERM) TOXICITY
Eye irritation studies on similarly formulated dispersions, using FHSA’s test method under 16 CFR 1500.42, indicate this material may be a mild eye irritant. Skin irritation studies were negative. The pigment portion of this product has a reported acute oral LD₅₀ value of 5 gm/kg or greater in rats.

CHRONIC (LONG-TERM) TOXICITY
No known published data is available for this product, but it is not expected to pose a chronic health risk under conditions of normal use.

MUTAGENICITY
No known published data is available, but it is not expected to pose a mutagenic risk under conditions of normal use.

ROUTES OF POTENTIAL EXPOSURE
Ingestion/ Inhalation / Skin or Eye Contact

12.  ECOLOGICAL INFORMATION

This product has not been evaluated for its ecotoxicity. However, based upon degradation studies of similarly formulated aqueous dispersions, it can be concluded that the ingredients are almost completely degraded, except for the pigment. The biodegradation of colorants under aerobic conditions is expected to be limited and there is no evidence to suggest they create any significant ecological problems when released into the
12. ECOLOGICAL INFORMATION (Continued)

environment. Since pigments are generally insoluble compounds, they are believed to have minimal bioaccumulation and bioavailability characteristics. Due to the surfactant, spills of large concentrations may be toxic to aquatic wildlife if they reach waterways. No long-term effects are predicted due to the rapid breakdown of the surfactant.

Analogous dispersions tested as follows:

Rainbow trout LC$_{50}$(24 hrs.): 720 mg/l
LC$_{50}$(96 hrs.): 420 mg/l
Wastewater bacteria EC$_{50}$(3 hrs.): >10,000 mg/l

Only slightly dangerous to fish, invertebrates, and algae. (WGK 1)

13. DISPOSAL CONSIDERATIONS

General
This product must be disposed of in accordance with all applicable federal, state and local regulations.

Waste Management
Incineration or landfilling are recommended disposal techniques. Contact your state or local environmental agency for specific rules.

This product is not identified as a RCRA hazardous waste under 40 CFR 261, and is not regulated under CERCLA (Superfund).

14. TRANSPORT INFORMATION

D.O.T. SHIPPING NAME (49 CFR 172.101-102): Not regulated
D.O.T. HAZARD CLASS (49 CFR 172.101-102): None
D.O.T. LABEL: None
D.O.T. PLACARD: None
BILL OF LADING DESCRIPTION: Pigments NOI Liquid
CERCLA SUBSTANCE (49 CFR): Not regulated
REPORTABLE QUANTITY (RQ): None

INTERNATIONAL
UN/NA NUMBER: Not regulated or classified
IMDG/IACO CLASSIFICATION: Not regulated or classified
IATA CLASSIFICATION: Not regulated or classified
15. REGULATORY INFORMATION

OSHA Hazard Communication Standard Status
This product is considered to be a hazardous substance under OSHA’s Hazard Communication Standard 29 CFR 1910.1200. It may be mildly irritating to the eyes.

Toxic Substances Control Act (TSCA) Status
All of the ingredients of this material have been reported to the U.S. EPA and are included in the TSCA chemical inventory.

CERCLA Reportable Quantity (RQ)
NONE (Not regulated)

SARA Title III
Section 302 (EHS).................: NONE
Section 311/312 (Acute).........: YES
Section 313........................: Call For Details

RCRA
Not regulated as a hazardous waste under RCRA.

Canadian WHMIS
This material may be a controlled product under WHMIS, due to eye irritation.

EINECS (European Economic Community)
All components of this product are in compliance with the EINECS inventory.
EINECS No.: 205-685-1
EINECS No.: 231-791-2

CONEG Status
This product is certified to be in full compliance with CONEG Model Legislation for packaging and packaging ink components.

16. OTHER INFORMATION

For more information contact Product Safety at

SUN CHEMICAL CORPORATION
COLORS GROUP
PRODUCT SAFETY DEPARTMENT
(513) 681-5950 EXTENSION 323

MR. JAMES M. WENKER

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Sun Chemical Corporation assumes no responsibility for personal injury or property damage caused by the material. Users assume all risks associated with the use of the material.