

# SAFETY DATA SHEET

This safety data sheet complies with the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issue Date 08-Mar-2018

Revision Date 08-Mar-2018

Version 1

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product Name IJ4500 - Cyan

Contains Proprietary Acrylic Ester Derivative, Acrylic Acid Ester, Multifunctional Amine Acrylate, Morpholine, 4-(1-oxo-2-propenyl)-, phenylbis(2,4,6-trimethylbenzoyl)-phosphine oxide, Diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Digital Printing

Uses advised against No information available

### 1.3. Details of the supplier of the safety data sheet

For further information, please contact

Contact Point Regulatory Department

### 1.4. Emergency telephone number

Emergency Telephone During normal opening times: +27 21 763 6990  
24 Hours: +27 83 326 0774

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

|                                                    |                     |
|----------------------------------------------------|---------------------|
| Acute toxicity - Oral                              | Category 4 - (H302) |
| Skin corrosion/irritation                          | Category 1 - (H314) |
| Serious eye damage/eye irritation                  | Category 1 - (H318) |
| Skin sensitization                                 | Category 1 - (H317) |
| Specific target organ toxicity (single exposure)   | Category 3 - (H335) |
| Specific target organ toxicity (repeated exposure) | Category 2 - (H373) |
| Chronic aquatic toxicity                           | Category 3 - (H412) |

Classification according to Directive 67/548/EEC or 1999/45/EC

Full text of R-phrases: see section 16

### 2.2. Label elements

#### Product identifier

Contains Proprietary Acrylic Ester Derivative, Acrylic Acid Ester, Multifunctional Amine Acrylate, Morpholine, 4-(1-oxo-2-propenyl)-, phenylbis(2,4,6-trimethylbenzoyl)-phosphine oxide, Diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide



Signal word

Danger

**Hazard statements**

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H335 - May cause respiratory irritation

H373 - May cause damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long lasting effects

Contains 2-phenoxyethyl acrylate, Oxybis(methyl-2,1-ethanediyl diacrylate, Propoxylated neopentyl glycol, 1,6-Hexanediol diacrylate EUH208 - May produce an allergic reaction

**Precautionary Statements - EU (§28, 1272/2008)**

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

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

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

P310 - Immediately call a POISON CENTER or doctor

P314 - Get medical advice/attention if you feel unwell

P501 - Dispose of contents/container to industrial incineration plant

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

**2.3. Other hazards**

No information available

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

| Chemical Name                                     | EC No     | CAS No      | Weight-% | Classification according to Directive 67/548/EEC or 1999/45/EC | Classification according to Regulation (EC) No. 1272/2008 [CLP]                                                       | REACH Registration Number |
|---------------------------------------------------|-----------|-------------|----------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------|
| Proprietary Acrylic Ester Derivative              | Listed    | -           | <65      | Xi; R36/37/38. N; R51/53.                                      | STOT SE 3 (H335)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410) | No data available         |
| Morpholine, 4-(1-oxo-2-propenyl)-                 | 418-140-1 | 5117-12-4   | <30      | Xn; R22-48/22<br>Xi; R41<br>R43                                | Acute Tox. 4 (H302)<br>Eye Dam. 1 (H318)<br>Skin Sens. 1 (H317)<br>STOT RE 2 (H373)                                   | No data available         |
| phenylbis(2,4,6-trimethylbenzoyl)-phosphine oxide | 423-340-5 | 162881-26-7 | <10      | R43<br>R53                                                     | Skin Sens. 1 (H317)<br>Aquatic Chronic 4 (H413)                                                                       | No data available         |
| Acrylic Acid Ester                                | Listed    | -           | <10      | Xn; R22 - C; R34 - R43 - R52/53                                | Acute Tox. 4 (H302)<br>Skin Corr. 1A (H314)<br>Skin Sens. 1 (H317)<br>Aquatic Chronic 3 (H412)                        | No data available         |
| Multifunctional Amine Acrylate                    | -         | 67906-98-3  | <10      | Xi; R36/38                                                     | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)                                                                           | No data available         |
| Diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide  | 278-355-8 | 75980-60-8  | <5       | Repr.Cat.3; R62<br>R43<br>N; 51/53                             | Skin Sens. 1 (H317)<br>Repr. 2 (H361)<br>Aquatic Chronic 2 (H411)                                                     | No data available         |

|                                                           |           |             |     |                    |                                                                                                |                   |
|-----------------------------------------------------------|-----------|-------------|-----|--------------------|------------------------------------------------------------------------------------------------|-------------------|
| 2-Benzyl-2-dimethylamino-1-(4-morpholinphenyl)butan-1-one | 404-360-3 | 119313-12-1 | <5  | N; R50-53          | Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410)                                             | No data available |
| 2-phenoxyethyl acrylate                                   | 256-360-6 | 48145-04-6  | <1  | -                  | Eye Dam. 1 (H318)<br>Skin Sens. 1 (H317)<br>Aquatic Chronic 2 (H411)                           | No data available |
| Propoxylated neopentyl glycol                             | -         | 84170-74-1  | <10 | Xi; R36/37/38      | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Skin Sens. 1 (H317)<br>STOT SE 3 (H335)         | No data available |
| Oxybis(methyl-2,1-ethanediyl diacrylate                   | 260-754-3 | 57472-68-1  | <10 | Xi; R41, 38<br>R43 | Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318)<br>Skin Sens. 1 (H317)                               | No data available |
| 1,6-Hexanediol diacrylate                                 | 235-921-9 | 13048-33-4  | <10 | Xi; R36/38<br>R43  | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Skin Sens. 1 (H317)<br>Aquatic Chronic 3 (H412) | No data available |

**Full text of R-phrases: see section 16**

**Full text of H- and EUH-phrases: see section 16**

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|                     |                                                                                                                      |
|---------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Remove to fresh air.                                                                                                 |
| <b>Skin contact</b> | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.                |
| <b>Eye contact</b>  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| <b>Ingestion</b>    | Clean mouth with water and drink afterwards plenty of water.                                                         |

### 4.2. Most important symptoms and effects, both acute and delayed

|                 |                           |
|-----------------|---------------------------|
| <b>Symptoms</b> | No information available. |
|-----------------|---------------------------|

### 4.3. Indication of any immediate medical attention and special treatment needed

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

## Section 5: FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

No information available

### **5.2. Special hazards arising from the substance or mixture**

Thermal decomposition can lead to release of irritating and toxic gases and vapors

### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

## **Section 6: ACCIDENTAL RELEASE MEASURES**

### **6.1. Personal precautions, protective equipment and emergency procedures**

#### **Personal precautions**

Ensure adequate ventilation, especially in confined areas.

#### **For emergency responders**

Use personal protection recommended in Section 8.

### **6.2. Environmental precautions**

Collect spillage.

### **6.3. Methods and material for containment and cleaning up**

#### **Methods for containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

### **6.4. Reference to other sections**

See section 8 for more information. See section 13 for more information.

## **Section 7: HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Ensure adequate ventilation, especially in confined areas.

#### **General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice.

### **7.2. Conditions for safe storage, including any incompatibilities**

#### **Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place.

#### **Incompatible materials**

None known based on information supplied.

### **7.3. Specific end use(s)**

#### **Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

## **Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1. Control parameters**

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

## **8.2. Exposure controls**

**Engineering Controls** Ensure adequate ventilation, especially in confined areas.

### **Personal protective equipment**

**Eye/face protection** Tight sealing safety goggles.  
**Skin and body protection** Suitable protective clothing.

**Environmental exposure controls** No information available.

## **Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties**

|                       |        |                       |                          |
|-----------------------|--------|-----------------------|--------------------------|
| <b>Physical state</b> | liquid | <b>Odor</b>           | Characteristic           |
| <b>Appearance</b>     | Liquid | <b>Odor threshold</b> | No information available |
| <b>Color</b>          | Cyan   |                       |                          |

| <b>Property</b>                       | <b>Values</b>       | <b>Remarks • Method</b>  |
|---------------------------------------|---------------------|--------------------------|
| <b>pH</b>                             |                     | No information available |
| <b>Melting point / freezing point</b> |                     | No information available |
| <b>Boiling point / boiling range</b>  | 200 °C / 392 °F     | No information available |
| <b>Flash point</b>                    | 100 °C / 212 °F     | No information available |
| <b>Evaporation rate</b>               |                     | No information available |
| <b>Flammability (solid, gas)</b>      |                     | No information available |
| <b>Flammability Limit in Air</b>      |                     |                          |
| <b>Upper flammability limit:</b>      |                     | No information available |
| <b>Lower flammability limit:</b>      |                     | No information available |
| <b>Vapor pressure</b>                 |                     | No information available |
| <b>Vapor density</b>                  |                     | No information available |
| <b>Relative density</b>               |                     | No information available |
| <b>Water solubility</b>               | Immiscible in water | No information available |
| <b>Solubility(ies)</b>                |                     | No information available |
| <b>Partition coefficient</b>          |                     | No information available |
| <b>Autoignition temperature</b>       |                     | No information available |
| <b>Decomposition temperature</b>      |                     | No information available |
| <b>Kinematic viscosity</b>            |                     | No information available |
| <b>Dynamic viscosity</b>              |                     | No information available |
| <b>Explosive properties</b>           | Not an explosive    |                          |
| <b>Oxidizing properties</b>           | Not applicable      |                          |

### **9.2. Other information**

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening point</b>  | No information available |
| <b>Molecular weight</b> | No information available |
| <b>VOC Content (%)</b>  | No information available |
| <b>Density</b>          | No information available |
| <b>Bulk density</b>     | No information available |

## **Section 10: STABILITY AND REACTIVITY**

### **10.1. Reactivity**

No data available.

### **10.2. Chemical stability**

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

**10.3. Possibility of hazardous reactions****Possibility of Hazardous Reactions**

None under normal processing.

**10.4. Conditions to avoid**

None known.

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

None under normal use conditions.

**Section 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****Acute toxicity****Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

**Inhalation** No data available.**Eye contact** No data available.**Skin contact** No data available.**Ingestion** No data available.**The following values are calculated based on chapter 3.1 of the GHS document****ATEmix (oral)** 1,382.00**Unknown acute toxicity**

94.739 % of the mixture consists of ingredient(s) of unknown toxicity.

13.319 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

18.319 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

94.739 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

94.739 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

91.839 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

| Chemical Name                                    | Oral LD50            | Dermal LD50             | Inhalation LC50 |
|--------------------------------------------------|----------------------|-------------------------|-----------------|
| Proprietary Acrylic Ester Derivative             | = 4890 mg/kg ( Rat ) | > 5 g/kg ( Rabbit )     |                 |
| Diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide | >5000 mg/kg          | >2000 mg/kg             |                 |
| 2-phenoxyethyl acrylate                          | = 4660 µL/kg ( Rat ) | = 2540 µL/kg ( Rabbit ) |                 |
| Oxybis(methyl-2,1-ethanediyl diacrylate          | = 4600 mg/kg ( Rat ) | > 2 g/kg ( Rabbit )     |                 |
| 1,6-Hexanediol diacrylate                        | = 5 g/kg ( Rat )     | = 3600 µL/kg ( Rabbit ) |                 |

**Skin corrosion/irritation** No information available.**Serious eye damage/eye irritation** No information available.**Sensitization** No information available.**Germ cell mutagenicity** No information available.

|                                 |                           |
|---------------------------------|---------------------------|
| <b>Carcinogenicity</b>          | No information available. |
| <b>Reproductive toxicity</b>    | No information available. |
| <b>STOT - single exposure</b>   | No information available. |
| <b>STOT - repeated exposure</b> | No information available. |
| <b>Aspiration hazard</b>        | No information available. |

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Unknown aquatic toxicity 27.50080001 % of the mixture consists of component(s) of unknown hazards to the aquatic environment  
27.50080001 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name                        | Algae/aquatic plants      | Fish | Crustacea |
|--------------------------------------|---------------------------|------|-----------|
| Proprietary Acrylic Ester Derivative | 72 hours: 4.2 mg/l, Algae | -    | -         |

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

No information available.

### 12.4. Mobility in soil

#### **Mobility in soil**

No information available.

### 12.5. Results of PBT and vPvB assessment

No information available.

### 12.6. Other adverse effects

No information available

## Section 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

|                                            |                                                                                                     |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Waste from residues/unused products</b> | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| <b>Contaminated packaging</b>              | Improper disposal or reuse of this container may be dangerous and illegal.                          |

## Section 14: TRANSPORT INFORMATION

**IMDG**

|                                                                               |                                                                                                                                                                       |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14.1 UN/ID no                                                                 | UN3082                                                                                                                                                                |
| 14.2 Proper Shipping Name                                                     | Environmentally hazardous substance, liquid, n.o.s.                                                                                                                   |
| 14.3 Hazard Class                                                             | 9                                                                                                                                                                     |
| 14.4 Packing Group                                                            | III                                                                                                                                                                   |
| Description                                                                   | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Isobornyl acrylate monomer, diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide), 9, III, Marine Pollutant |
| 14.5 Marine pollutant                                                         | Not applicable                                                                                                                                                        |
| 14.6 Special Provisions                                                       | 274, 335                                                                                                                                                              |
| EmS-No                                                                        | F-A, S-F                                                                                                                                                              |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | No information available                                                                                                                                              |

**RID**

|                           |                                 |
|---------------------------|---------------------------------|
| 14.1 UN/ID no             | UN3082                          |
| 14.2 Proper Shipping Name | Not regulated                   |
| 14.3 Hazard Class         | 9                               |
| 14.4 Packing Group        | III                             |
| Description               | &UN3082, & (<TNR00012>), 9, III |
| 14.5 Environmental hazard | Not applicable                  |
| 14.6 Special Provisions   | None                            |
| Classification code       | M6                              |

**ADR**

|                           |                                      |
|---------------------------|--------------------------------------|
| 14.1 UN/ID no             | UN3082                               |
| 14.2 Proper Shipping Name | Not regulated                        |
| 14.3 Hazard Class         | 9                                    |
| Labels                    | 9                                    |
| 14.4 Packing Group        | III                                  |
| Description               | &UN3082, & (<TNA00012>), 9, III, (E) |
| 14.5 Environmental hazard | Not applicable                       |
| 14.6 Special Provisions   | 274, 335, 601, 375                   |
| Classification code       | M6                                   |
| Tunnel restriction code   | (E)                                  |

**IATA**

|                           |                                                                                                                                                     |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 14.1 UN/ID no             | UN3082                                                                                                                                              |
| 14.2 Proper Shipping Name | Environmentally hazardous substance, liquid, n.o.s.                                                                                                 |
| 14.3 Hazard Class         | 9                                                                                                                                                   |
| 14.4 Packing Group        | III                                                                                                                                                 |
| Description               | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Isobornyl acrylate monomer, diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide), 9, III |
| 14.5 Environmental hazard | Not applicable                                                                                                                                      |
| 14.6 Special Provisions   | A97, A158, A197                                                                                                                                     |
| ERG Code                  | 9L                                                                                                                                                  |

## Section 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

#### Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

**International Inventories****15.2. Chemical safety assessment**

No information available

**Section 16: OTHER INFORMATION****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of R-phrases referred to under sections 2 and 3**

No information available

**Full text of H-Statements referred to under section 3**

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H317 - May cause an allergic skin reaction

H412 - Harmful to aquatic life with long lasting effects

H413 - May cause long lasting harmful effects to aquatic life

H318 - Causes serious eye damage

H411 - Toxic to aquatic life with long lasting effects

H302 - Harmful if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure if inhaled

H335 - May cause respiratory irritation

H314 - Causes severe skin burns and eye damage

H361 - Suspected of damaging fertility or the unborn child if inhaled

**Legend**

SVHC: Substances of Very High Concern for Authorization:

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

Issue Date 08-Mar-2018

Revision Date 08-Mar-2018

Revision Note Not applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

End of Safety Data Sheet