Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

SAFETY DATA SHEET

NS SERIES: YELLOW

SECTION 1: IDENTIFICATION

1.1. Product identifier

Trade name: NS Series: Yellow

Product no.: ixNS-y

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

Relevant identified uses of the Industrial purposes, Printing inks substance or mixture: Restricted to professional users.

Uses advised against: None known.

1.3. Details of the supplier of the safety data sheet

Company and address: INKCUPS CORP.

310 ANDOVER ST. DANVERS, MA 01923

USA

978-646-8980

E-mail: compliance@inkcups.com

SDS date: 3/25/2024

SDS Version: 1.0

1.4. Emergency telephone number

CHEMTREC 800-424-9300 24hr

SECTION 2: HAZARD(S) IDENTIFICATION

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.

Skin Sens. 1; H317, May cause an allergic skin reaction.

Eye Irrit. 2; H319, Causes serious eye irritation.

Carc. 2; H351, Suspected of causing cancer.

Repr. 1B; H360, May damage fertility or the unborn child.

2.2. Label elements

Hazard pictogram(s):



Signal word: Danger

Hazard statement(s):

Causes skin irritation. (H315)

May cause an allergic skin reaction. (H317)

Causes serious eye irritation. (H319) Suspected of causing cancer. (H351)

May damage fertility or the unborn child. (H360)

Precautionary statement(s):

General: -

Prevention: Obtain special instructions before use. (P201)

Do not handle until all safety precautions have been read

and understood. (P202)

Avoid breathing mist/vapor. (P261)

Wash hands thoroughly after handling. (P264)

Contaminated work clothing should not be allowed out of

the workplace. (P272)

Wear face protection/protective gloves/protective clothing.

(P280)

Response: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing. (P305+P351+P338)

IF exposed or concerned: Get medical advice/attention.

(P308+P313)

If skin irritation or rash occurs: Get medical

advice/attention. (P333+P313)

If eye irritation persists: Get medical advice/attention.

(P337+P313)

Take off contaminated clothing and wash it before reuse.

(P362+P364)

Storage: Store in a well-ventilated place. (P403)

Disposal: Dispose of contents/container in accordance with local

regulation

(P501)

Additional labelling: Not applicable.

2.3. Other hazards

Additional warnings: This mixture/product does not contain any substances

known to fulfil the criteria for PBT and vPvB classification.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.



3.2. Mixtures

| Product/substance | Identifiers | % w/w | Classification | | | |
|---|-----------------------|--------|--|--|--|--|
| (5-ethyl-1,3-dioxan-5yl)methyl acrylate | CAS No.: 66492-51-1 | 40-60% | Skin Irrit. 2, H315 Skin Sens. 1B, H317 | | | |
| PROPRIETARY | CAS No.: Confidential | 25-40% | Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 | | | |
| hexamethylene diacrylate; hexane-1, 6-diol diacrylate | CAS No.: 13048-33-4 | 5-10% | Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 | | | |
| Propylidynetrimethanol, propoxylated, esters with acrylic acid | CAS No.: 53879-54-2 | 5-10% | Skin Irrit. 2, H315 Eye Irrit. 2, H319 | | | |
| diphenyl(2,4,6trimethylbenzoyl)phosphine oxide | CAS No.: 75980-60-8 | 5-10% | Skin Sens. 1B, H317 Repr. 1B, H360 | | | |
| 2-ethyl-2-[[(1oxoallyl)oxy]methyl]- 1,3propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate; | CAS No.: 15625-89-5 | 3-5% | Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Carc. 2, H351 | | | |
| 5-ethyl-1,3-dioxane-5methanol | CAS No.: 5187-23-5 | 1-3% | Eye Irrit. 2, H319 | | | |
| phenyl bis(2,4,6trimethylbenzoyl)phosphine oxide | CAS No.: 162881-26-7 | <1% | Skin Sens. 1A, H317 | | | |
| 2-phenoxyethyl acrylate | CAS No.: 48145-04-6 | <0.1% | Skin Sens. 1A, H317 Repr. 2, H361 | | | |

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

SECTION 4: FIRST-AID MEASURES

4.1. Description of first aid measures

General information:

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation: Upon breathing difficulties or irritation of the respiratory

tract: Bring the person into fresh air and stay with

him/her.

Skin contact: Remove contaminated clothing and shoes immediately.

Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or

thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact: If in eyes: Flush eyes immediately with plenty of water or

isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing

during transport.

Ingestion: If the person is conscious, rinse the mouth with water and

stay with the person. Never give the person anything to

drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid

inhalation of or choking on vomited material.

Burns: Not applicable.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire extinguishing water to enter the sewage system and nearby surface waters. If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Sulphur oxides

Carbon oxides (CO / CO2)



5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

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.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material: Keep only in original packaging.

Storage temperature: 5 - 30°C

Incompatible materials: No specific requirements

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No substances are listed with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations: Smoking, drinking and consumption of food is not allowed

in the work area.

Exposure scenarios: There are no exposure scenarios implemented for this

product.

Exposure limits: Occupational exposure limits have not been defined for

the substances in this product.

Appropriate technical measures: Apply standard precautions during use of the product.

Avoid inhalation of vapors.

Hygiene measures: Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental Keep damming materials near the workplace. If possible,

exposure: collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally: Use only protective equipment with a recognized

certification mark, e.g. the UL mark.

Respiratory Equipment:

Respiratory protection is not needed in the event of adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Approved organic vapor respirator

Skin protection:

| Dedicated work clothing should be worn. | R |
|---|---|
|---|---|

Hand protection:

The glove material must be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and degradation.



Eye protection:

| Туре | Standards | |
|--|-----------|--|
| In the likelihood of direct or incidental exposure, use face protection. | EN166 | |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:LiquidColor:BrownOdor:Faint

Odor threshold (ppm): Testing not relevant or not possible due to the nature of

the product.

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

pH: Not applicable Density (g/cm^3) : 1.07 (25 °C)

Kinematic viscosity: No data available

Particle characteristics: Does not apply to liquids.

Phase changes

Melting point (°F): Testing not relevant or not possible due to the nature of

the product.

Softening point/range (waxes and

pastes) (°F):

Does not apply to liquids.

Boiling point (°F): No data available

Vapor pressure: Testing not relevant or not possible due to the nature of

the product.

Relative vapor density: Testing not relevant or not possible due to the nature of

the product.

the product.

Decomposition temperature (°F): Testing not relevant or not possible due to the nature of

Data on fire and explosion hazards

Flash point (°F): Not applicable

Flammability (°F): Testing not relevant or not possible due to the nature of

the product.

Auto-ignition temperature (°F): Testing not relevant or not possible due to the nature of

the product.

Explosion limits (% v/v): Testing not relevant or not possible due to the nature of

the product.

Solubility

Solubility in water: No data available

n-octanol/water coefficient (LogKow): Testing not relevant or not possible due to the nature of

the product.

Solubility in fat (g/L): Testing not relevant or not possible due to the nature of

the product.

9.2. Other information

Sensitivity to shock: No

Other physical and chemical

parameters:

No data available.

Oxidizing properties: Testing not relevant or not possible due to the nature of

the product.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".



10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

No specific requirements

10.6. Hazardous decomposition product

The product is not degraded when used as specified in section 1.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product/substance hexamethylene diacrylate; hexane-1, 6-diol diacrylate

Species: Rat
Route of exposure: Oral
Test: LD50

Result: >5000 mg/kg

Product/substance hexamethylene diacrylate; hexane-1, 6-diol diacrylate

Species: Rabbit
Route of exposure: Dermal
Test: LD50
Result: 3650 mg/kg

Product/substance Propylidynetrimethanol, propoxylated, esters with acrylic acid

Species: Rat
Route of exposure: Oral
Test: LD50

Result: >2000 mg/kg

Skin corrosion/irritation

Product/substance hexamethylene diacrylate; hexane-1, 6-diol diacrylate

Result: Adverse effect observed (Irritating)

Product/substance Propylidynetrimethanol, propoxylated, esters with acrylic acid

Result: No adverse effect observed (Not irritating)

Causes skin irritation.

Serious eye damage/irritation

Product/substance hexamethylene diacrylate; hexane-1, 6-diol diacrylate

Result: Adverse effect observed (Highly Irritating)

Product/substance Propylidynetrimethanol, propoxylated, esters with acrylic acid

Result: No adverse effect observed (Not irritating)

Causes serious eye irritation.

Respiratory sensitization

Based on available data, the classification criteria are not met.

Skin sensitization

Product/substance hexamethylene diacrylate; hexane-1, 6-diol diacrylate

Result: Adverse effect observed (sensitizing)

Product/substance Propylidynetrimethanol, propoxylated, esters with acrylic acid

Result: No adverse effect observed (not sensitizing)

Germ cell mutagenicity

Product/substance Propylidynetrimethanol, propoxylated, esters with acrylic acid

Test method: OECD 471 Species: Bacteria

Conclusion: No adverse effect observed

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

Product/substance Propylidynetrimethanol, propoxylated, esters with acrylic acid

Species: Rat Test: NOAEL

Result: >=500 mg/kg bw/day

May damage fertility or the unborn child.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Other information

2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate has been classified by IARC as a group 2B carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Product/substance hexamethylene diacrylate; hexane-1,6-diol diacrylate

Species: Fish, Oryzias latipes

Duration: 96 hours
Test: LC50
Result: 0.38 mg/L

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

Product/substance hexamethylene diacrylate; hexane-1,6-diol diacrylate

Species: Crustacean, Daphnia magna

Duration: 48 hours
Test: EC50
Result: 2.7 mg/L

12.2. Persistence and degradability

Product/substance hexamethylene diacrylate; hexane-1,6-diol diacrylate

Conclusion: Readily biodegradable

12.3. Bioaccumulative potential

Product/substance hexamethylene diacrylate; hexane-1,6-diol diacrylate

Log/Kow: 2.81 @ 25C

Conclusion: -

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

| | 14.1 UN / ID | 14.2 UN proper shipping name | 14.3 Hazard class(es) | 14.4 PG* | 14.5 Env** | Other information: |
|-----|-----------------|--|--|-------------|---------------|---|
| DOT | | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5ethyl-1,3-dioxan-5-yl)methyl acrylate, hexamethylene diacrylate; hexane-1,6-diol diacrylate) | Transport hazard class: 9 Label: 9 Classification code: M6 | III | No | Limited quantities: 5L Tunnel restriction code: (-) See below for additional information. |

| IMDG | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5ethyl-1,3-dioxan-5-yl)methyl acrylate, hexamethylene diacrylate; hexane-1,6-diol diacrylate) | Transport hazard class: 9 Label: 9 Classification code: M6 | III | No | Limited quantities: 5L EmS: F-A S-F See below for additional information. |
|------|--------|---|--|-----|----|--|
| IATA | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5ethyl-1,3-dioxan-5-yl)methyl acrylate, hexamethylene diacrylate; hexane-1,6-diol diacrylate) | Transport hazard class: 9 Label: 9 Classification code: M6 | III | No | See below for additional information. |

^{*} Packing group

Additional information

Although this product is environmentally hazardous, the environmentally hazardous substance mark has been omitted as the product is supplied in packaging with a maximum quantity of 5 L / 5 kg.

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DOT / See § 172.101 Hazardous Materials Table for any information on special provisions, requirements, or warnings in connection with transport. See § 172.602, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport. IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15: REGULATORY INFORMATION

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

^{**} Environmental hazards

15.2. U.S. Federal regulations

TSCA (the non-confidential portion): (5-ethyl-1,3-dioxan-5-yl)methyl acrylate is listed

Propylidynetrimethanol, propoxylated, esters with acrylic

acid is listed

PROPRIETARY is listed

hexamethylene diacrylate; hexane-1,6-diol diacrylate is

listed

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide is listed phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide is

listed

2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate;

trimethylolpropane triacrylate is listed 5-ethyl-1,3-dioxane-5-methanol is listed

2-phenoxyethyl acrylate is listed

Clean Air Act:

None of the components are listed

EPCRA Section 302:

None of the components are listed

EPCRA Section 304:

None of the components are listed

EPCRA section 313:

None of the components are listed

CERCLA:

None of the components are listed

State regulations

California / Prop. 65:

Massachusetts / Right To Know Act:

None of the components are listed

15.4. Restrictions for application

Restricted to professional users.

15.5. Demands for specific education

No specific requirements.

15.6. Additional information

Not applicable.

15.7. Chemical safety assessment

No

15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H319, Causes serious eye irritation.

H351, Suspected of causing cancer.

H360, May damage fertility or the unborn child.

H361, Suspected of damaging fertility or the unborn child.

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

ADN = European Provisions concerning the International Carriage of Dangerous Goods by

Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

DOT = Department of Transportation

EINECS = European Inventory of Existing Commercial chemical Substances

EPCRA = Emergency Planning and Community Right-To-Know Act

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HCIS = Hazardous Chemical Information System

HNOC = Hazards Not Otherwise Classified

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

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)

NFPA = National Fire Protection Association

NIOSH = National Institute for Occupational Safety and Health

OECD = Organization for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

PBT = Persistent, Bioaccumulative and Toxic

RCRA = Resource Conservation and Recovery Act

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SARA = Superfund Amendments and Reauthorization Act SCL

= A specific concentration limit.

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TSCA = The Toxic Substances Control Act

TWA = Time weighted average UN

= United Nations



UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification. Country-language: US-en