SAFETY DATA SHEET

Handy Art Tie-Dye Blue 1oz & 16oz

Page 1

Revision Date: 10/29/2015

SECTION 1. IDENTIFICATION

Identification of the

company:

Manufactured For:

Handy Art, Inc. 365 Sunnyside Dr. Milton, WI 53563

Emergency tel. number: 608-868-6873

Chemical family: copper phthalocyanine dyestuff

anionic

Primary product use: Textile Dye

Primary product use: Colourant for leather

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture • Mixture

Chemical nature • copper phthalocyanine dyestuff

anionic

Hazardous components

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SECTION 4. FIRST AID MEASURES

General advice : Get medical advice/ attention if you feel unwell.

If inhaled : Move the victim to fresh air.

Give oxygen or artificial respiration if needed. Get immediate medical advice/ attention.

Never give anything by mouth to an unconscious person.

In case of skin contact : Wash thoroughly with soap and water for 15 minutes. If skin

irritation occurs, seek medical attention.

In case of eye contact : Flush eyes with water at least 15 minutes. Get medical

attention if eye irritation develops or persists.

If swallowed : IF SWALLOWED: Immediately call a POISON CENTER or

doctor/ physician.

Most important symptoms and effects, both acute and

delayed

: None known.

Notes to physician : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Product is compatible with standard fire-fighting agents.

Unsuitable extinguishing

media

: No restrictions

Specific hazards during

firefighting

Carbon oxides

Copper oxides

Nitrogen oxides (NOx)

Sulphur oxides

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a

potential dust explosion hazard.

Routine housekeeping should be instituted to ensure that

dusts do not accumulate on surfaces.

Further information : Prevent run off to sewers and bodies of water from fire fighting

involving this product as product contains Clean Water Act

priority pollutants.

Special protective equipment

for firefighters

: Self-contained breathing apparatus

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.

Wear proper protective equipment. Product contains heavy metals. Spills should be swept or shoveled up and collected for disposal. Clean-up by removal of contaminated soil or by flushing with a limited quantity of water if appropriate. Place material or contaminated soils in a suitable disposal container.

Environmental precautions

The product should not be allowed to enter drains, water

courses or the soil.

Methods and materials for containment and cleaning up

Pick up mechanically. Rinse away rest with water.

After processing, clean all equipment with the following:

Water

SECTION 7. HANDLING AND STORAGE

Advice on protection against

fire and explosion

: Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Avoid dust formation. Observe the usual precautionary measures required for chemicals with dust explosive

properties (Observe national regulations).

Advice on safe handling

Avoid dust formation. Keep away from sources of ignition.

Lead off electrostatic charges.

Avoid inhalation, ingestion and contact with skin and eyes.

Wash thoroughly after handling.

Technical

measures/Precautions

Store in a cool, dry, well-ventilated area. Keep container

sealed when not in use.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Engineering measures : Local ventilation recommended - mechanical ventilation may

be used.

Personal protective equipment

Respiratory protection : Use NIOSH/MSHA approved respirators following

manufacturer's recommendations where dust or fume may be

generated.

Hand protection

Remarks : Butyl Rubber, PVC Or Neoprene.

Eye protection : Safety glasses or chemical splash goggles.

Skin and body protection : Wear suitable protective equipment.

Protective measures : Observe the usual precautions for handling chemicals.

Hygiene measures : This preparation is classified as non-hazardous. However

the usual precautions for handling chemicals must be observed to avoid contact with the skin, eyes and respiratory tract. In case of contact with the product, wash the eye immediately with running water and the skin with water and

soap.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Particle size : not tested.

Colour : dark blue

Odour : none

Odour Threshold : not tested.

pH : 8-9

Concentration: 10 g/l (20 °C)

Melting point : Decomposition: no

Not applicable

Boiling point : (1,013 hPa)

Decomposition: no

Not applicable

Flash point : (1,013 hPa)

Not applicable

Evaporation rate : not tested.

Flammability (solid, gas) : no reaction up to 360 °C

Method: Sandoz Ignition test of deposited dust.

Vapour pressure :

Not applicable

Density : not tested.

Bulk density : approx. 500 kg/m3

Solubility(ies)

Water solubility : approx. 50 g/l soluble (90 °C)

approx. 10 g/l (25 °C)

Partition coefficient: n- : not determined

octanol/water

Auto-ignition temperature : not tested.

Decomposition temperature : 160 °C

Method: SANDOZ Radex isoperibolic decomposition test

Heating rate: 0 K/min open cup

200 °C

Heating rate: 0.75 K/min

Method: SANDOZ Radex dynamic decomposition test

open cup

Viscosity

Viscosity, dynamic : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : See section 10.3. "Possibility of hazardous reactions"

Chemical stability : Stable

Possibility of hazardous

reactions

: Risk of dust explosion.

Stable

Conditions to avoid : Strong oxidizing agents

Incompatible materials : not known

Hazardous decomposition

products

: When used and handled as intended, none.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact Skin contact Inhalation

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: SANDOZ internal test

Acute inhalation toxicity : Remarks: not tested.

Acute dermal toxicity : Remarks: not tested.

Skin corrosion/irritation

Product:

Species: Rabbit

Method: SANDOZ internal test

Result: No skin irritation

Serious eye damage/eye irritation

Product:

Species: Rabbit Result: No eye irritation

Method: SANDOZ internal test

Respiratory or skin sensitisation

Product:

Test Type: Mouse local lymphnode assay

Species: Mouse

Method: OECD Test Guideline 429

Result: non-sensitizing

Germ cell mutagenicity

Product:

Germ cell mutagenicity -

Assessment

: No information available.

Carcinogenicity

Product:

Carcinogenicity -

Assessment

: No information available.

IARC Not listed

OSHA Not listed

NTP Not listed

Reproductive toxicity

Product:

Assessment

Reproductive toxicity -

: No information available.

Repeated dose toxicity

Product:

Remarks: not tested.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 1,000 mg/l

Exposure time: 48 h Method: internal test

Toxicity to daphnia and other

aquatic invertebrates

Remarks: not tested.

Toxicity to algae

Remarks: not tested.

Toxicity to bacteria : IC50 (activated sludge): > 100 mg/l

End point: Bacteria toxicity (respiration inhibition)

Method: OECD Test Guideline 209

Persistence and degradability

Product:

Biodegradability : Biodegradation: < 10 %

Exposure time: 28 d

Method: OECD Test Guideline 302B

Chemical Oxygen Demand

(COD)

: 926 mg/g

Method: DIN 38409-H-41

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: not tested.

Mobility in soil no data available

Other adverse effects

Product:

Environmental fate and

pathways

: Remarks: no data available

Additional ecological

information

: Product does not contain any organic bound Halogens which

could lead to AOX-values.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource

: No -- Not as sold.

Conservation and Recovery

Authorization Act Waste from residues

: Small quantities may be treated in aerobic wastewater

treatment systems. Larger quantities may be incinerated or

landfilled after solidification in permitted systems.

Contaminated packaging : Consider recycling.

SECTION 14. TRANSPORT INFORMATION

DOT not restricted

IATA not restricted

IMDG not restricted

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This product contains the chemical or chemicals listed below

which are subject to the supplier notification requirements of

Section 313 of the Superfund Amendments and

Reauthorization Act of 1986 ("SARA") and the requirements of

40 CFR Part 372:

Copper (as an integral part 7440-50-8 5.6 %

of dye molecule)

Clean Water Act

Contains priority pollutant copper at concentrations greater than 0.1%.

SECTION 16. OTHER INFORMATION

Further information

Product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should therefor not be construed as garanteeing specific properties.

Revision Date: 10/29/2015

Handle with care. Organic dusts have the potential to be explosive with static spark or flame initiation.

Revision Date : 10/29/2015

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US / EN

SAFETY DATA SHEET

Handy Art Tie-Dye Red 1oz & 16oz

Page 1

Revision Date: 07/09/2015

SECTION 1. IDENTIFICATION

Identification of the

company:

Manufactured For: Handy Art, Inc.

365 Sunnyside Dr. Milton, WI 53563

Emergency tel. number: 608-868-6873

Chemical family: azo dyestuff

reactive

Primary product use: Textile Dye

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

• azo dyestuff

reactive

Hazardous components

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)., None under Title III of SARA

SECTION 4. FIRST AID MEASURES

General advice : Get medical advice/ attention if you feel unwell.

If inhaled : Remove person to fresh air. If signs/symptoms continue, get

medical attention.

In case of skin contact : Wash thoroughly with soap and water for 15 minutes. If skin

irritation occurs, seek medical attention.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

Get medical attention immediately if irritation develops and

persists.

If swallowed : IF SWALLOWED: Immediately call a POISON CENTER or

doctor/ physician.

Most important symptoms and effects, both acute and

delayed

: The possible symptoms known are those derived from the

labelling (see section 2).

No additional symptoms are known.

Notes to physician : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : all

Unsuitable extinguishing

media

: No restrictions

Specific hazards during

firefighting

: Carbon oxides

Nitrogen oxides (NOx)

Sulphur oxides

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a

potential dust explosion hazard.

Routine housekeeping should be instituted to ensure that

dusts do not accumulate on surfaces.

Further information : Exercise caution when fighting any chemical fire. Use NIOSH

approved self-contained breathing apparatus and full

protective clothing.

for firefighters

Special protective equipment : Self-contained breathing apparatus

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Wear suitable protective equipment.

Small spills may be flushed to the sewer or swept up. Larger spills should be collected by shovelling into appropriate waste collection containers. Clean-up by flushing with water if desired or removal of contaminated soil. Utilize recommended

clothing and equipment.

Environmental precautions : The product should not be allowed to enter drains, water

courses or the soil.

Methods and materials for containment and cleaning up

: Pick up mechanically. Rinse away rest with water.

After processing, clean all equipment with the following:

Water

SECTION 7. HANDLING AND STORAGE

Advice on protection against

fire and explosion

: Potential dust explosion hazard.

Advice on safe handling : Handle with due care. Avoid ingestion, inhalation, eye, and

skin contact. The reactive dye in this product has not been shown to cause allergic respiratory reactions, however, since certain other reactive dyes have caused allergic reactions, a physician should be called if symptoms such as skin rash, runny nose, difficulty in breathing, dizziness or fainting are experienced. Keep container closed when not in use. For

industrial use only.

Technical

measures/Precautions

Store in original container. Keep container closed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Engineering measures : Local ventilation recommended - mechanical ventilation may

be used.

Personal protective equipment

Respiratory protection : Use NIOSH approved respiratory protection where exposure

levels exceed regulatory limits for hazardous components

and/or for particulate matter.

Hand protection

Remarks : Butyl Rubber, PVC Or Neoprene.

Eye protection : Safety glasses or chemical splash goggles.

Skin and body protection : Wear suitable protective equipment.

Protective measures : Observe the usual precautions for handling chemicals.

Hygiene measures : Do not breathe dust.

Recently several cases of allergy of the respiratory tract have come to light which have been traced to the sensitizing effect of certain reactive dyes inhaled in dust form. It cannot be ruled out with certainty that the handling of other reactive dyes may also involve a risk of this type, if these dyes are not handled with the care and cleanliness required for all substances in dust form. At present, no recognized test is

available for detecting this risk.

For this reason, dust formation must be avoided when handling reactive dyes. If no suitable ventilation or exhaust ventilation equipment is available, dust masks should be worn. Also contact with the skin should be avoided by wearing suitable clothing and protective gloves. Should asthmatic symptoms occur in spite of these measures, a physician must be consulted. Sensitized persons should be transferred to another workplace.

Although no cases of sensitization due to handling solutions of reactive dyes have become known, the above statements and recommendations also apply correspondingly to aerosols

with reactive dye solutions.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Particle size : not tested.

Colour : dark brown

Odour : none

Odour Threshold : not tested.

pH : 5.5 - 6

Concentration: 100 g/l (20 °C)

Melting point : Not applicable

Boiling point : Not applicable

Flash point : Not applicable

Evaporation rate : not tested.

Flammability (solid, gas) : not determined

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Combustion number: n.b. not tested.

Vapour pressure

Not applicable

Relative vapour density : Not applicable

Density : not tested.

Bulk density : 600 kg/m3

Solubility(ies)

Water solubility : > 100 g/l soluble (25 °C)

Partition coefficient: n-

octanol/water

: not determined

Auto-ignition temperature : not tested.

Decomposition temperature : not tested.

Viscosity

Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : See section 10.3. "Possibility of hazardous reactions"

Chemical stability : Stable

Possibility of hazardous

reactions

: When used and handled as intended, none.

Stable

Conditions to avoid : Strong oxidizing agents

Incompatible materials : not known

Hazardous decomposition

products

: No decomposition if used as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

None known.

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Skin corrosion/irritation

Product:

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Product:

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitisation

Product:

Remarks: not tested.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: not tested.

Germ cell mutagenicity -

Assessment

: No information available.

Carcinogenicity

Product:

Carcinogenicity - Assessment

: No information available.

IARC Not listed

OSHA Not listed

NTP Not listed

Reproductive toxicity

Product:

Reproductive toxicity - Assessment

: No information available.

Repeated dose toxicity

Product:

Remarks: not tested.

Experience with human exposure

Product:

General Information : The possible symptoms known are those derived from the

labelling (see section 2).

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

Remarks: not tested.

Toxicity to algae

Remarks: not tested.

Toxicity to bacteria : IC50: > 1,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Persistence and degradability

Product:

Biodegradability : Dissolved organic carbon (DOC)

Result: Not biodegradable

Biodegradation: approximately 8 % (Dissolved organic carbon

(DOC))

: 6.6 mg/g

Exposure time: 28 d

Method: OECD Test Guideline 302B

Biochemical Oxygen

Demand (BOD) Incubation time: 5 d

Method: Standard methods 5210

Chemical Oxygen Demand

: 644 mg/g

(COD)

Method: DIN 38409-H-41

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: not tested.

Mobility in soil no data available

Other adverse effects

Product:

Environmental fate and

pathways

: Remarks: no data available

Additional ecological

information

: Product does not contain any organic bound Halogens which

could lead to AOX-values.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource : No -- Not as sold.

Conservation and Recovery

Authorization Act

Waste from residues : Small quantities may be treated in aerobic wastewater

treatment systems. Larger quantities may be incinerated or

landfilled after solidification in permitted systems.

Contaminated packaging : Consider recycling.

SECTION 14. TRANSPORT INFORMATION

DOTnot restrictedIATAnot restrictedIMDGnot restricted

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This product does not contain any toxic chemical listed under

Section 313 of the Emergency Planning and Community

Right-To-Know Act of 1986.

Clean Water Act

Contains no known priority pollutants at concentrations greater than 0.1%.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

Revision Date: 07/09/2015

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

Product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should therefor not be construed as garanteeing specific properties.

None known.

Revision Date : 07/09/2015

This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications.

US / USA

SAFETY DATA SHEET

Handy Art Tie-Dye Yellow 1oz & 16oz

Page 1

Revision Date: 07/09/2015

SECTION 1. IDENTIFICATION

Identification of the

company:

Manufactured For: Handy Art, Inc. 365 Sunnyside Dr. Milton, WI 53563

P: 608-868-6873

Emergency tel. number: 608-868-6873

Chemical family: azo dyestuff

reactive

Primary product use: Textile Dye

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

• azo dyestuff

reactive

Hazardous components

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)., None under Title III of SARA

SECTION 4. FIRST AID MEASURES

General advice : Get medical advice/ attention if you feel unwell.

If inhaled : Remove person to fresh air. If signs/symptoms continue, get

medical attention.

In case of skin contact : Wash thoroughly with soap and water for 15 minutes. If skin

irritation occurs, seek medical attention.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

Get medical attention immediately if irritation develops and

persists.

If swallowed : IF SWALLOWED: Immediately call a POISON CENTER or

doctor/ physician.

Most important symptoms and effects, both acute and

delayed

: The possible symptoms known are those derived from the

labelling (see section 2).

No additional symptoms are known.

Notes to physician : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : all

Unsuitable extinguishing

media

: No restrictions

Specific hazards during

firefighting

: Carbon oxides

Hydrogen chloride

Nitrogen oxides (NOx)

Sulphur oxides

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a

potential dust explosion hazard.

Routine housekeeping should be instituted to ensure that

dusts do not accumulate on surfaces.

Further information : Exercise caution when fighting any chemical fire. Use NIOSH

approved self-contained breathing apparatus and full

protective clothing.

for firefighters

Special protective equipment : Self-contained breathing apparatus

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, : Wear suitable protective equipment. protective equipment and emergency procedures

Small spills may be flushed to the sewer or swept up. Larger spills should be collected by shovelling into appropriate waste collection containers. Clean-up by flushing with water if desired or removal of contaminated soil. Utilize recommended clothing and equipment.

Environmental precautions

: The product should not be allowed to enter drains, water

courses or the soil.

Methods and materials for containment and cleaning up

: Wash with plenty of water.

After processing, clean all equipment with the following:

Water

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion

: Potential dust explosion hazard.

Advice on safe handling

: Handle with due care. Avoid ingestion, inhalation, eye, and skin contact. The reactive dye in this product has not been shown to cause allergic respiratory reactions, however, since certain other reactive dyes have caused allergic reactions, a physician should be called if symptoms such as skin rash, runny nose, difficulty in breathing, dizziness or fainting are experienced. Keep container closed when not in use. For industrial use only.

Avoid dust formation.

Routine housekeeping should be instituted to ensure that

dusts do not accumulate on surfaces.

Take measures to prevent the build up of electrostatic charge.

Store in a dry place.

Technical

measures/Precautions

: Store in original container. Keep container closed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Engineering measures : Local ventilation recommended - mechanical ventilation may

be used.

Personal protective equipment

Respiratory protection : Use NIOSH approved respiratory protection where exposure

levels exceed regulatory limits for hazardous components

and/or for particulate matter.

Hand protection

Remarks : Butyl Rubber, PVC Or Neoprene.

Eye protection : Safety glasses or chemical splash goggles.

Skin and body protection : Wear suitable protective equipment.

Protective measures : Observe the usual precautions for handling chemicals.

Hygiene measures : Do not breathe dust.

> CDG products are dye preparations, which have proved dust-free under the strictest procedures for testing the dusting behaviour of dyestuffs. Sensitisation of the respiratory tract caused by some powder reactive dyes on

inhalation should therefore be largely excluded.

Nevertheless, if feeling unwell as a result of inhaling it is

recommended that a doctor be consulted.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : CDG

Particle size: not tested.

Colour : yellow

Odour : none

Odour Threshold : not tested.

рΗ

Concentration: 100 g/I (20 °C)

Melting point : Decomposition: no

Not applicable

Boiling point : (1,013 hPa)

Decomposition: no

Not applicable

Flash point (1,013 hPa)

Not applicable

Evaporation rate : not tested.

Flammability (solid, gas) : not determined

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Combustion number: BZ2 Short flaring up without spreading (20 °C)

Method: VDI 2263, ESCIS, Vol. 1

BZ2 Short flaring up without spreading (100 °C)

Method: VDI 2263, ESCIS, Vol. 1

Vapour pressure

Not applicable

Relative vapour density : Not applicable

Density : not tested.

Bulk density : approximately 700 kg/m3

Solubility(ies)

Water solubility : approximately 200 g/l soluble (20 °C)

Partition coefficient: n-

octanol/water

: not determined

Auto-ignition temperature : not tested.

Decomposition temperature : 150 °C

Method: isoperibolic decomposition test

170 °C

Method: dynamic decomposition test

Viscosity

Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

Impact sensitivity : Not impact sensitive.

39 J

at 5 kg, 0.8 m

Method: Lütolf test method

SECTION 10. STABILITY AND REACTIVITY

Reactivity : See section 10.3. "Possibility of hazardous reactions"

Chemical stability : Stable

Possibility of hazardous

reactions

: none Stable

Conditions to avoid : Strong oxidizing agents

Incompatible materials : not known

Hazardous decomposition

products

: When used and handled as intended, none.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact Skin contact

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Remarks: The product has not been tested. The information is derived from the properties of the individual components.

Acute inhalation toxicity : Remarks: not tested.

Skin corrosion/irritation

Product:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation Remarks: 1999/45/EC

Serious eye damage/eye irritation

Product:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

Remarks: 1999/45/EC

Respiratory or skin sensitisation

Product:

Test Type: Skin Species: Guinea pig

Method: OECD Test Guideline 406

Result: None

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: not tested.

Germ cell mutagenicity -

: No information available.

Assessment

Carcinogenicity

Product:

Carcinogenicity -

: No information available.

Assessment

IARC Not listed

OSHA Not listed

NTP Not listed

Reproductive toxicity

Product:

Reproductive toxicity -

Assessment

: No information available.

Repeated dose toxicity

Product:

Remarks: not tested.

Experience with human exposure

Product:

General Information : The possible symptoms known are those derived from the

labelling (see section 2).

Further information

Product:

Remarks: The classification was made by the conventional (calculation) method of the CLP

Regulation (EC) No 1272/2008.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203 Remarks: Based on the components.

Toxicity to bacteria : IC50 (activated sludge): > 100 mg/l

End point: Bacteria toxicity (respiration inhibition)

Method: OECD Test Guideline 209 Remarks: Based on the components.

Persistence and degradability

Product:

Biodegradability : Test Type: aerobic

Dissolved organic carbon (DOC) Result: Not biodegradable Biodegradation: < 10 % (Dissolved organic carbon (DOC))

Exposure time: 28 d

Method: OECD Test Guideline 302B

Remarks: Calculated from the degradation rates of the

components.

Chemical Oxygen Demand

(COD)

: 622 mg/g

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: not tested.

Mobility in soil no data available

Other adverse effects

Product:

Environmental fate and

pathways

: Remarks: no data available

Results of PBT and vPvB

assessment

: Remarks: no data available

Additional ecological

information

: Product contains organic halogen, may contribute to AOX

value

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource

Conservation and Recovery

Authorization Act

Waste from residues

: No -- Not as sold.

: Small quantities may be treated in aerobic wastewater

treatment systems. Larger quantities may be incinerated or

landfilled after solidification in permitted systems.

Contaminated packaging : Consider recycling.

SECTION 14. TRANSPORT INFORMATION

DOTnot restrictedIATAnot restrictedIMDGnot restricted

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This product does not contain any toxic chemical listed under

Section 313 of the Emergency Planning and Community

Right-To-Know Act of 1986.

Clean Water Act

Contains no known priority pollutants at concentrations greater than 0.1%.

The components of this product are reported in the following inventories:

TSCA : One or more components of this product are not listed on the

TSCA Inventory. The components, however, are covered by

Low Volume Exemptions.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

Product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should therefor not be construed as garanteeing specific properties.

The Drimarene CDG products are dye preparations which are dust free under the conditions of the Heubach test. Sensitization of the respiratory tract due to dust inhalation that exists with some powder reactive dyes should therefore be largely excluded. If feeling sick due to inhalation of the product, consult a physician. A Low Volume Exemption has been granted by EPA for the manufacture of this product. Its manufacture is subject to the restrictions of 40 CFR 723.50.

Handle with care. Organic dusts have the potential to be explosive with static spark or flame initiation.

Revision Date : 07/09/2015

Revision Date: 07/09/2015

This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications.

US / USA

SAFETY DATA SHEET

Sodium Carbonate, Anhydrous

SDS #: 497-19-8

Revision date: 2015-04-30

Format: NA Version 5.01



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Soda Ash

Other means of identification

Product Code(s) 497-19-8

Synonyms Sodium carbonate, anhydrous; Carbonic acid, disodium salt; Disodium carbonate

Chemical Family Alkali salt

Recommended use of the chemical and restrictions on use

Recommended Use: Glass manufacture, Personal care, Detergent, Water treatment chemical, Chemical

processing

Restrictions on Use: See section 16 for more information

Manufacturer Address

Tronox Alkali Wyoming Corporation

1735 Market Street Philadelphia, PA 19103

Tel: +1 877-362-2248 or +1 215-299-6904

www.tronox.com

Emergency telephone number

1 307 / 872 2452 (Plant - Green River, WY) 1 303/ 389-1409 (Medical - U.S. - Call Collect)

For leak, fire, spill or accident emergencies, call:

1 800 / 424 9300 (CHEMTREC - U.S.A.)

1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

Serious eye damage/eye irritation Category 2

SDS #: 497-19-8

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Version 5.01

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Warning

Hazard Statements

H319 - Causes serious eye irritation



Precautionary Statements - Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear eye protection/ face protection

Precautionary Statements - Response

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

P337 + P313 - If eye irritation persists: Get medical advice/ attention

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical FamilyAlkali salt.FormulaNa2CO3

Chemical name	CAS-No	Weight %
Sodium carbonate	497-19-8	100

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician.

Skin Contact Wash off with warm water and soap. Get medical attention if irritation develops and persists.

Remove and wash contaminated clothing before re-use.

Inhalation Remove person to fresh air. If signs/symptoms continue, get medical attention.

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Ingestion Never give anything by mouth to an unconscious person Get medical attention if symptoms

occur

Most important symptoms and effects, both acute and delayed

Causes serious eye damage / eye irritation.

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

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing MediaUse extinguishing agent suitable for type of surrounding fire.

Specific Hazards Arising from the

Chemical

Non-combustible, substance itself does not burn but may decompose upon heating to

produce corrosive and/or toxic fumes

Hazardous Combustion Products Fumes of sodium oxide. Carbon oxides (COx).

Explosion data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge Not sensitive. Not sensitive.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Avoid dust formation. Sweep up to prevent slipping hazard.

Other For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product

and Company Identification" above.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment Prevent large quantities of this product from contacting vegetation or waterways. Cover with

plastic sheet to prevent spreading. Pick up and transfer to properly labeled containers. Keep

in suitable and closed containers for disposal.

Methods for cleaning up Pick up and transfer to properly labeled containers. Keep in suitable and closed containers

for disposal. Dispose of waste as indicated in Section 13.

7. HANDLING AND STORAGE

HandlingUse air conveying/mechanical systems for bulk transfer to storage. Provide appropriate

exhaust ventilation at places where dust is formed. In case of insufficient ventilation, wear

suitable respiratory equipment if release of airborne dust is expected.

Storage Store in original container. Keep in properly labeled containers. Keep container tightly closed.

Incompatible products Aluminium. Powdered aluminum. Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies Local nuisance dust standards apply

Sodium Carbonate, Anhydrous

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Appropriate engineering controls

Engineering measures Where reasonably practicable this should be achieved by the use of local exhaust ventilation

and good general extraction.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles.

Skin and Body Protection Wear suitable protective clothing. Protective shoes or boots.

Hand Protection Nitrile rubber, Neoprene gloves

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

General information These recommendations apply to the product as supplied

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Granules
Physical State Solid
Color White
Odor odorless
Odor threshold Not applicable

pH 11.4 (1% solution in water)

Melting point/freezing point 851 °C

Boiling Point/Range No information available

Flash point Not applicable

Evaporation Rate No information available

Flammability (solid, gas)

Non-combustible, substance itself does not burn but may decompose upon heating to

produce corrosive and/or toxic fumes

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
No information available

Specific gravity 2.52

Water solubility212.5 g/L @ 20 °CSolubility in other solventsNo information availablePartition coefficientNo information availableAutoignition temperatureNo information available

Decomposition temperature 400 °C

Viscosity, kinematicNo information availableViscosity, dynamicNo information available

Explosive properties
Oxidizing properties
Molecular weight
Non-oxidizing
105.99

Bulk density 0.86 - 1.12 g/cm³ (Dense grades) 0.70 - 0.90 g/cm³ (Light Grades)

K_{st} 0 bar m/s

10. STABILITY AND REACTIVITY

Reactivity None under normal use conditions.

Chemical Stability Stable. Decomposes by reaction with strong acid.

Possibility of Hazardous Reactions None under normal processing.

Sodium Carbonate, Anhydrous

SDS #: 497-19-8

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Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Exposure to air or moisture over prolonged periods.

Incompatible materials Aluminium. Powdered aluminum. Acids.

Hazardous Decomposition Products Sodium oxides. Carbon oxides (COx).

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral 2,800 mg/kg (rat) **LD50 Dermal** > 2,000 mg/kg (rabbit)

LC50 Inhalation 2.3 mg/L (rat)

Eye Contact Irritating to eyes. **Skin Contact** Non-irritating

Sensitization Patch test on human volunteers did not demonstrate sensitization properties.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity No known effect.

Mutagenicity No information available

Carcinogenicity Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available.
No information available.
No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Sodium carbonate (497-19-8)							
Active Ingredient(s)	Duration	Species	Value	Units			
Sodium Carbonate	96 h LC50	Bluegill sunfish	300	mg/L			
Sodium Carbonate	48 h EC50	Ceriodaphnia	200-227	mg/L			

Persistence and degradability Biodegradability does not pertain to inorganic substances.

Bioaccumulation Does not bioaccumulate.

Mobility Dissociates into ions.

Other Adverse Effects None known.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40)

CFR 261). Dispose of in accordance with local regulations.

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evision date: 2015-04-30 Version 5.01

Contaminated Packaging Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT NOT REGULATED

TDGNOT REGULATEDICAO/IATANOT REGULATEDIMDG/IMONOT REGULATED

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

International Inventories

Component	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Sodium carbonate 497-19-8 (100)	Х	Х	Х	Χ	Х	X	Х	Х

Mexico - Grade

Moderate risk, Grade 2

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WHMIS Hazard Class

D2B - Toxic materials, Eye irritation

Class E: Corrosive to aluminum. Not corrosive to animal skin or carbon steel.





16. OTHER INFORMATION

NFPA	Health Hazards 2	2	Flammability 0	Instability 0	Special Hazards -
HMIS	Health Hazards 2	2	Flammability 0	Physical hazard 0	Personal Protection X

NFPA/HMIS Ratings Legend

Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Product Certifications

This product meets the chemical testing specifications defined in the Food Chemicals Codex (FCC), 8th Edition.

This product is certified to NSF/ANSI Standard 60 for use in drinking water treatment at the specified maximum use limit. The MUL (maximum use level) for sodium carbonate, anhydrous is 150 mg/L under NSF/ANSI Standard 60.







American Water Works Association

Revision date: 2015-04-30 Revision note Minor change

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End of Safety Data Sheet