

SAFETY DATA SHEET (SDS)

Revision Date: 08/12/2020

This SDS Sheet covers the following Jacquard products:

Item Number:	Item Name:
JAC9410	Indigo Tie Dye Kit

These products contain the following components:

Item Number:	Item Name:	SDS Page Reference:
JAC1698 / JAC2698 / JAC3698	Indigo Dye	Indigo Dye Pages 1-8
CHM1007 / CHM2007 / CHM3007	Soda Ash	Soda Ash Pages 1-10
CHM1025	Sodium Hydrosulfite	Sodium Hydrosulfite Pages 1-10



Dharma Trading Co.
FIBER ART SUPPLIES & CLOTHING BUSINESS SINCE 1969

SAFETY DATA SHEET (SDS)


Indigo Dye - Pg 1

Revision Date: 08/12/2020

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	INDIGO DYE	
Product Number/Code:	JAC1698, JAC2698, JAC3698	
Recommended Use:	Dye for fabric	
Synonym(s):	Indigo blue, Indigotin	
Restrictions on use:	None known	
Emergency Number:	ChemTel, Inc. - Contract #MIS9128344	
	North America: 1-800-255-3924	International: 1-813-248-0585

SECTION 2 - HAZARD(S) IDENTIFICATION

This product is not considered to be or contain hazardous chemicals based on evaluations made by our company under the OSHA Hazard Communication Standard, reference 29 CFR 1910.1200.		
Toxicological Data on Ingredients:		
Hazard Classification	Not hazardous	
Physical Hazards:	Not classified	
Health Hazards:	Specific Target Organ Toxicity (repeated exposure)	Category 2
Environmental Hazards:	Not classified	
Label Elements		
Pictogram:		
Signal Words:	Warning	
Hazard Statements-EU:	H373 May cause damage to organs through prolonged or repeated exposure.	
Precautionary Statements-EU:		
Prevention:	P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.	
Response:	P314 Get medical advice/ attention if you feel unwell.	
Storage:	See section 7	
Disposal:	P501 Dispose of contents/ container to an approved waste disposal plant.	
Hazard(s) not otherwise classified:	None known	

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical identity	Content in percent (%)*	CAS #	EC #
Indigo (Synonyms: Indigo blue, Indigotin)	90-100%	482-89-3	207-586-9

SECTION 4 - FIRST AID MEASURES

Description of first aid measures:	
General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
In the event of skin contact:	Wash off with soap and plenty of water. Consult a physician.
In the event of eye contact:	Flush eyes with water as a precaution.
In the event of swallowing:	Consult a physician.
In the event of exposure by inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Most important symptoms and effects, acute and delayed:	The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.
Indication of any immediate medical attention and special treatment needed:	No data available

SECTION 5 - FIREFIGHTING MEASURES

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture:	Carbon oxides, nitrogen oxides (NO _x)
Advice for fire fighters:	Wear self contained breathing apparatus for fire fighting if necessary.
Further information:	No data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
Methods and material for containment and clean up:	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
Environmental procedures:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Reference to other sections:	For disposal see section 13.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling:	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.
Conditions for safe storage including any incompatibilities:	Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.
Specific end use(s):	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:	
Occupational exposure limits:	Contains no substances with occupational exposure limit values.
Appropriate engineering controls:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Individual protection measures, such as personal protective equipment:	
Eye/face protection:	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Hand protection:	<p>Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.</p> <p>Full contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)</p> <p>Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)</p> <p><i>Data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN 374</i></p> <p>If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.</p>
Body protection:	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Environmental exposure controls:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Respiratory protection:	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

General information:	
Appearance and physical state:	Flakes/powder
Color:	Dark Violet
Type of Odor:	Odorless
Odor threshold:	No data available
Important health, safety and environmental information:	
Initial Boiling Point and Boiling Range:	No data available
Melting Point/Freezing Point:	> 300°C (> 572°F) - lit.
Flammability Classification:	No data available
Flash Point:	> 220°C (> 428°F)
Auto-ignition Temperature:	> 300°C (> 572°F)
Decomposition Temperature:	No data available
Flammability Limits (lower/upper):	No data available
Evaporation rate:	No data available
Vapor Pressure:	No data available
Vapor Density (Air=1):	No data available
Octanol/Water Partition Coefficient (log Pow):	log Pow: 2.7 at 23°C (73°F)
Specific Gravity:	No data available
Bulk Density:	No data available
Water Solubility:	Partially soluble
pH:	No data available
Viscosity:	No data available
Explosive Properties:	No data available
Oxidizing Properties:	No data available
Molecular Formula:	$C_{16}H_{10}N_2O_2$
Molecular Weight:	262.26 g/mol
Relative Density:	1.35 g/cm ₃ at 20°C (68°F)

SECTION 10 - STABILITY AND REACTIVITY

Reactivity:	No data available
Stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No data available
Conditions to avoid:	No data available
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Other decomposition products: no data available In event of fire: see section 5

SECTION II - TOXICOLOGICAL INFORMATION

Information on toxicological effects:	
Acute toxicity (list all possible routes of exposure)	
Acute Oral Toxicity:	No data available
Acute Dermal Toxicity:	No data available
Acute Inhalation Toxicity:	No data available
Skin Corrosion/Irritation:	Skin (rabbit) - result: no skin irritation
Serious Eye Damage / Eye Irritation:	N/A
Respiratory or Skin Sensitization:	No data available
Germ Cell Mutagenicity:	Chromosome aberration test in vitro Fibroblast - result: negative Mouse (male) - result: negative
Carcinogenicity (IARC, ACGIH, NTP, OSHA):	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP or OSHA.
Reproductive Toxicity:	No data available
Specific Target Organ Toxicity - single exposure (STOT-se):	No data available
Specific Target Organ Toxicity - repeated exposure (STOT-re):	No data available
Aspiration Hazard:	No data available
Potential Health Effects:	
Skin Contact:	No data available
Eye Contact:	No data available
Ingestion:	No data available
Inhalation:	No data available
Chronic Health Effects:	No data available
Additional Data:	RTECS: DU2988400 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.



SECTION 12 - ECOLOGICAL INFORMATION

Toxicity:	
Acute/prolonged toxicity to fish:	Static test LC50 - Leuciscus idus (Golden orfe) - > 10,000 mg/l - 96 h
Acute/prolonged toxicity to aquatic invertebrates:	Static test EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h
Acute/prolonged toxicity to aquatic plants:	Static test EC50 - Desmodemus subspicatus (green algae) - > 100 mg/l - 72 h
Persistence and degradability:	Biodegradability Aerobic - Exposure time 28 d Result: 0 % - Not readily biodegradable. (OECD Test Guideline 301C)
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT and vPvB assessment (EC reg. 453/2010):	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effects:	No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods:	
Disposal:	Dispose of in accordance with local regulations.
Container Disposal:	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

General Information:	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).
UN number:	Not relevant
UN proper shipping name:	Not relevant
Transport hazard class:	Not relevant
Packing group:	Not relevant
Environmental Hazards:	
Environmentally hazardous substance:	No
Special precautions for user:	Not relevant

SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:	
Hazard categories	
SARA 302 Components:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components:	This material does NOT contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards:	No SARA Hazards
Massachusetts Right to Know Components:	No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right to Know Components:	Indigo: (CAS# 482-89-3)
New Jersey Right to Know Components:	Indigo: (CAS# 482-89-3)
California Prop. 65 Components:	This product does NOT contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

SECTION 16 - OTHER INFORMATION

HMIS Hazard ID:	
Health:	0
Flammability:	0
Reactivity:	0
NFPA Rating:	
Health Hazard:	0
Fire Hazard:	0
Reactivity Hazard:	0
Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect	

Disclaimer:

The information contained in this SDS is based on data from sources considered to be reliable but Dharma Trading Co. does not guarantee the accuracy or completeness thereof. Dharma Trading Co. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

Revision Date: 08/12/2020

National Chemical Inventories:	
All components of this product are listed on the following chemical substance inventories: TSCA (USA)	
DSL	(Canada)
EINECS	(Europe)
ENCS	(Japan) ECL
	(Korea)
AICS	(Australia) NZIoC
	(New Zealand)
PICCS	(Philippines)
IECSC	(China)

Abbreviations:	
ACGIH	American Conference of Governmental Industrial Hygienists
ADR	International carriage of Dangerous goods by Road
AICS	Australian Inventory of Chemical Substances
ATE	Acute Toxicity Estimate
BfR	Bundesinstitut für Risikobewertung recommendations for food contact materials
BCF	Bioconcentration Factor
BOD5	5-day Biochemical Oxygen Demand
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CLP	Classification, Labeling and Packaging regulation
COD	Chemical Oxygen Demand DOT Department of Transportation DSL Domestic Substances List
EINECS	European Inventory of Existing Chemical Substances
ECL	Existing Chemicals List (Korea)
ENCS	Existing and New Chemical Substances Inventory (Japan)
EN 689	Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy.
ERG	Emergency Response Guide
GHS	Globally Harmonized System
HMIS	Hazardous Materials Information System IARC International Agency for Research on Cancer IATA International Air Transport Association
ICAO	International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods
LD50	Lethal Dose to 50% of test animal population
MAK	Maximale Arbeitsplatz Konzentration
NTP	National Toxicology Program
OEL	Occupational Exposure Limit
OSHA	Occupational Safety & Health Administration
PBT	Persistent, Bioaccumulative and Toxic vPvB Very Persistent and Very Bioaccumulative PEL Permissible exposure limit
PICCS	Philippine Inventory of Commercial Chemical Substances
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemical Substances
RID	International carriage of dangerous goods by Rail SARA Superfund Amendments and Reauthorization Act STEL Short Term Exposure Limit
SVHC	Substance of Very High Concern
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
VOC	Volatile Organic Compound
WGK	Wassergefährdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System

SAFETY DATA SHEET (SDS)


Soda Ash - Pg 1

Revision Date: 06/12/2018

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	SODA ASH	
Product Number/Code:	CHM1007, CHM2007, CHM3007	
Recommended Use:	Dye fixer	
Synonym(s):	Soda Ash, Soda Ash Dense, Sodium Carbonate	
Restrictions on use:	No further relevant information available.	
Emergency Number:	ChemTel, Inc. - Contract #MIS9128344	
	North America: 1-800-255-3924	International: 1-813-248-0585

SECTION 2 - HAZARD(S) IDENTIFICATION

This product is not considered to be or contain hazardous chemicals based on evaluations made by our company under the OSHA Hazard Communication Standard, reference 29 CFR 1910.1200.		
Toxicological Data on Ingredients:		
Hazard Classification	GHS07	
Physical Hazards:	Eye Irritant	Category 2A
Label Elements		
Pictogram:		
Signal Words:	Warning	
Hazard Statements-EU:	H319 Keep out of reach of children.	
Precautionary Statements-EU:		
Prevention:	P280 Wear eye protection/face protection. P264 Wash thoroughly after handling.	
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.	
Storage:	See section 7	
Disposal:	See section 13	
Hazard(s) not otherwise classified:	There are no other hazards not otherwise classified that have been identified.	
Results of PBT and vPvB assessment:	PBT: Not applicable vPvB: Not applicable	

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical identity (Substances)	Content in percent (%)*	CAS #	EC Number	Index Number
Sodium Carbonate Trade name: Soda Ash Dense	100%	497-19-8	207-838-8	011-005-00-2

SECTION 4 - FIRST AID MEASURES

Description of first aid measures:	
General information:	No special measures required.
In the event of skin contact:	Brush off loose particles from skin. Immediately rinse with water. If skin irritation continues, consult a doctor.
In the event of eye contact:	Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
In the event of swallowing:	Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help.
In the event of exposure by inhalation:	Supply fresh air; consult doctor in case of complaints.
Most important symptoms and effects, acute and delayed:	Slight irritant effect on skin and mucous membranes. Irritant to eyes. Gastric or intestinal disorders when ingested. Coughing.
Indication of any immediate medical attention and special treatment needed:	No further relevant information available.
Danger:	No further relevant information available.

SECTION 5 - FIREFIGHTING MEASURES

Extinguishing media:	Use fire fighting measures that suit the environment. None
Special hazards arising from the substance or mixture :	Formation of toxic gases is possible during heating or in case of fire.
Advice for fire fighters:	Wear self-contained respiratory protective device. Wear fully protective suit.
Additional information:	No further relevant information available.



SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Use respiratory protective device against the effects of fumes/dust/aerosol. Ensure adequate ventilation. Wear protective equipment. Keep unprotected persons away.
Methods and material for containment and clean up:	Pick up mechanically. Dispose contaminated material as waste according to section 13. Send for recovery or disposal in suitable receptacles.
Environmental procedures:	Do not allow to enter sewers/ surface or ground water. Damp down dust with water spray.
Reference to other sections:	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling:	Prevent formation of dust. Any deposit of dust which cannot be avoided must be regularly removed.
Conditions for safe storage including any incompatibilities:	Requirements to be met by storerooms and receptacles: Protect from humidity and water. Information about storage in one common storage facility: Store away from foodstuffs. Do not store together with acids. Further information about storage conditions: Store in cool, dry conditions in well-sealed receptacles.
Specific end use(s):	No further relevant information available.



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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:	
Components with limit values that require monitoring at the workplace:	The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information:	The lists that were valid during the creation were used as basis.
Exposure controls:	
General protective and hygienic measures:	<p>The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed.</p> <p>Avoid contact with the eyes.</p> <p>Avoid close or long term contact with the skin. Do not inhale dust / smoke / mist.</p> <p>Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.</p>
Appropriate engineering controls:	No further relevant information available.
Hand protection:	<p>- Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.</p> <p>- Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.</p> <p>- Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.</p>
Eye protection:	Safety glasses
Body protection:	Not required under normal conditions of use. Protection may be required for spills.
Respiratory protection:	Not required under normal conditions of use. Use suitable respiratory protective device in case of insufficient ventilation. For spills, respiratory protection may be advisable.
Limitation and supervision of exposure into the environment:	No further relevant information available.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

General information:	
Appearance and physical state:	Granulate
Color:	White
Type of Odor:	Odorless
Odor threshold:	Not determined.
Important health, safety and environmental information:	
Melting Point/Melting range:	851.1 °C (1564 °F)
Boiling Point and Boiling Range:	Undetermined.
Flammability Classification:	Product is not flammable.
Flash Point:	Not applicable.
Auto-ignition Temperature:	Not determined.
Decomposition Temperature:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion Limits (lower/upper):	Not determined.
Evaporation rate:	Not applicable.
Vapor Pressure:	Not applicable.
Partition Coefficient (n-octanol/water):	Not determined.
Density:	At 20 °C (68 °F): 2.53 g/cm ³ (21.113 lbs/gal)
Relative density:	Not determined.
Water Solubility:	Soluble.
pH:	Value at 20 °C (68 °F): 11.3 - 11.6 (1% solution)
Viscosity:	Dynamic: Not applicable. Kinematic: Not applicable.
Relative density:	Not determined.
Other information:	No further relevant information available.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity:	
Chemical Stability:	
Thermal decomposition/conditions to be avoided:	No decomposition is used and stored according to specifications.
Possibility of hazardous reactions:	Strong exothermic reaction with acids. Reacts with halogenated compounds.
Incompatible materials:	No further relevant information available.
Conditions to avoid:	Avoid acids.
Hazardous decomposition products:	Carbon monoxide and carbon dioxide

SECTION II - TOXICOLOGICAL INFORMATION

Information on toxicological effects:	
Acute toxicity (list all possible routes of exposure)	
Acute Oral Toxicity:	LD50 - 4,090 mg/kg (rat)
Skin Corrosion/irritation:	Slight irritant effect on skin and mucous membranes.
Serious Eye Damage / Eye Irritation:	Irritating effect.
Respiratory or Skin Sensitization:	No sensitizing effects known.
Subacute to chronic toxicity:	No further relevant information available.
Additional toxicological information:	The product shows the following dangers according to internally approved calculation methods for preparations: irritant.
Carcinogenic categories:	
IARC (International Agency for Research on Cancer)	Substance is not listed.
NTP (National Toxicology Program)	Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration)	Substance is not listed.
Possible routes of exposure:	Inhalation, eye contact, skin contact.
Acute effects (Acute toxicity, irritation and corrosivity):	Irritating to eyes.
Repeated dose toxicity:	No further relevant information available.



SECTION 12 - ECOLOGICAL INFORMATION

Toxicity:	
Aquatic toxicity:	No further relevant information available.
Persistence and degradability:	No further relevant information available.
Bioaccumulative potential:	No further relevant information available.
Mobility in soil:	No further relevant information available.
Ecotoxic effects:	After neutralization a reduction of the harming action may be recognized.
General notes:	<p>Water hazard class I (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.</p> <p>Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.</p>
Results of PBT and vPvB assessment:	PBT: Not applicable. vPvB: Not applicable.
Other adverse effects:	No further relevant information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods:	
Disposal:	Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
Uncleaned packagings:	Disposal must be made according to official regulations.



SECTION 14 - TRANSPORT INFORMATION

UN-Number (DOT,ADN, IMDG, IATA):	Not Regulated
UN proper shipping name (DOT,ADN, IMDG, IATA):	Not Regulated
Transport hazard class(es) (DOT,ADR,ADN, IMDG, IATA):	Not Regulated
Packing group (DOT, IMDG, IATA):	Not Regulated
Environmental hazards:	No
Marine pollutant:	No
Special precautions for user:	Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
UN "Model Regulation":	---

SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:	
Hazard categories	
United States (USA)	
SARA Section 355 (Extremely hazardous substances):	Substance is not listed.
SARA Section 313 (Specific toxic chemical listings):	Substance is not listed.
TSCA (Toxic Substances Control Act):	Substance is listed.
Proposition 65 (California) Chemicals known to cause cancer:	Substance is not listed.
Chemicals known to cause reproductive toxicity for females:	Substance is not listed.
Chemicals known to cause reproductive toxicity for males:	Substance is not listed.
Chemicals known to cause developmental toxicity:	Substance is not listed.
EPA (Environmental Protection Agency):	Substance is not listed.
IARC (International Agency for Research on Cancer):	Substance is not listed.
TLV (Threshold Limit Value established by ACGIH)	Substance is not listed.
NIOSH-Ca (National Institute for Occupational Safety and Health):	Substance is not listed.
Other regulations, limitations and prohibitive regulations:	This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the informa- tion required by the Controlled Products Regulations.
Chemical safety assessment:	A Chemical Safety Assessment has not been carried out.

SECTION 16 - OTHER INFORMATION

HMIS Hazard ID:	
Health:	
Flammability:	
Reactivity:	
Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect	

Disclaimer:

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Revision Date: 06/12/2018

National Chemical Inventories:	
All components of this product are listed on the following chemical substance inventories: TSCA (USA)	
DSL	(Canada)
EINECS	(Europe)
ENCS	(Japan) ECL
	(Korea)
AICS	(Australia) NZIoC
	(New Zealand)
PICCS	(Philippines)
IECSC	(China)



Abbreviations:	
ACGIH	American Conference of Governmental Industrial Hygienists
ADR	International carriage of Dangerous goods by Road
AICS	Australian Inventory of Chemical Substances
ATE	Acute Toxicity Estimate
BfR	Bundesinstitut für Risikobewertung recommendations for food contact materials
BCF	Bioconcentration Factor
BOD5	5-day Biochemical Oxygen Demand
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CLP	Classification, Labeling and Packaging regulation
COD	Chemical Oxygen Demand DOT Department of Transportation DSL Domestic Substances List
EINECS	European Inventory of Existing Chemical Substances
ECL	Existing Chemicals List (Korea)
ENCS	Existing and New Chemical Substances Inventory (Japan)
EN 689	Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy.
ERG	Emergency Response Guide
GHS	Globally Harmonized System
HMIS	Hazardous Materials Information System IARC International Agency for Research on Cancer IATA International Air Transport Association
ICAO	International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods
LD50	Lethal Dose to 50% of test animal population
MAK	Maximale Arbeitsplatz Konzentration
NTP	National Toxicology Program
OEL	Occupational Exposure Limit
OSHA	Occupational Safety & Health Administration
PBT	Persistent, Bioaccumulative and Toxic vPvB Very Persistent and Very Bioaccumulative PEL Permissible exposure limit
PICCS	Philippine Inventory of Commercial Chemical Substances
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemical Substances
RID	International carriage of dangerous goods by Rail SARA Superfund Amendments and Reauthorization Act STEL Short Term Exposure Limit
SVHC	Substance of Very High Concern
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
VOC	Volatile Organic Compound
WGK	Wassergefährdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System

SAFETY DATA SHEET (SDS)


Sodium Hydrosulfite / Color Remover / iDye Color Remover - Pg 1

Revision Date: 03/26/2018

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	SODIUM HYDROSULFITE / COLOR REMOVER / IDYE COLOR REMOVER	
Product Number/Code:	CHM1025, CHM1300, CHM2300, JID1400	
Recommended Use:	Reducing agent, Oxygen scavenger, Antichlor, Dye auxiliary, Color Remover, Fabric Whitener	
Description:	Inorganic salt	
Synonym(s):	Sodium Dithionite Sodium hydrosulfite Sodium dithionite Sodium hyp-sulfite Sodium sulfoxylate, Dithionous acid, Disodium salt, Hydro	
Restrictions on use:	None known	
Emergency Number:	ChemTel, Inc. - Contract #MIS9128344	
	North America: 1-800-255-3924	International: 1-813-248-0585

SECTION 2 - HAZARD(S) IDENTIFICATION

GHS Classification according to OSHA 29 CFR 1910.1200 and EU EC/1272/2008		
Toxicological Data on Ingredients:		
Hazard Classification		
Physical Hazards:	Self-heating substance	Category 1
Health Hazards:	Acute oral toxicity	Category 5
	Eye irritation	Category 2
Environmental Hazards:	Aquatic toxicity	Category 3
Label Elements		
Pictogram:		
Signal Words:	Danger, Warning	
Hazard Statements-EU:	H251 Self-heating; may catch fire. H303 May be harmful if swallowed. H319 Causes serious eye irritation. H402 Harmful to aquatic life. EUH031 Contact with acids liberates toxic gas.	

Precautionary Statements-EU:	
Prevention:	P235 + P410 Keep cool. Protect from sunlight. P264 Wash hands and skin contact areas thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves / eye protection / face protection.
Response:	P305 + P351 + P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical attention.
Storage:	P407 Maintain air gap between stacks/pallets. P420 Store away from other materials.
Disposal:	P501 Dispose of contents/container through a waste management company authorized by the local government.
Hazard(s) not otherwise classified:	This product is classified as hazardous as defined within the GHS OSHA Hazard Communication Standard 29CFR1910.1200.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical identity	Content in percent (%)*	CAS #	EINECS No.
Sodium hydrosulfite	70%	7775-14-6	231-890-0
GHS/CLP: Self-heating subs. 1 - H251; Acute tox. 4 - H302; Eye irrit. 2 - H319; Aquatic acute 3 - H402			
Sodium carbonate	30%	497-19-8	207-838-8
GHS/CLP: Eye irrit. 2 - H319			

SECTION 4 - FIRST AID MEASURES

Description of first aid measures:	
In the event of skin contact:	Wash immediately with plenty of soap and water for at least 15 minutes; get medical attention.
In the event of eye contact:	Flush eyes immediately with plenty of water for at least 15 minutes; get medical attention if irritation persists.
In the event of swallowing:	Do not induce vomiting unless under direction of physician; give several glasses of water or milk to drink immediately. Get medical attention.
In the event of exposure by inhalation:	May be harmful if inhaled; may cause respiratory tract irritation. Move person to fresh air. If not breathing, administer artificial respiration; if breathing is difficult, give oxygen; keep victim warm. Get medical attention.
Most important symptoms and effects, acute and delayed:	May be harmful if swallowed; serious eye irritation.
Indication of any immediate medical attention and special treatment needed	Eye wash stations and emergency showers should be available.

SECTION 5 - FIREFIGHTING MEASURES

Extinguishing media:	Carbon dioxide, dry chemical. Do not use water (if water must be used, use in flooding amounts).
Special hazards arising from the substance or mixture :	Product heats spontaneously when in contact with moisture. Combustion products may include but are not limited to: oxides of sulfur, hydrogen sulfide, metallic oxides. Closed containers may rupture violently when heated. Material may reignite after fire is extinguished; apply sufficient water to completely dissolve the material. Contain runoff.
Advice for fire fighters:	Use protective fire fighting clothing and positive pressure self-contained breathing apparatus to protect against potential harmful and/or irritating fumes. Do not use high pressure water jet which may cause dusting.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Isolate area; use appropriate personal protection equipment; keep unnecessary and unprotected personnel from entering the involved area.
Methods and material for containment and clean up:	Where possible recover uncontaminated material for reuse. Mix waste material together with some soda ash and collect into appropriate disposal container. Flush the spill area with plenty of water; collect contaminated waters for appropriate disposal. Dispose of in accordance with applicable local and federal environmental control laws and regulations.
Environmental procedures:	Prevent contamination of soil and water.
Reference to other sections:	For more information on exposure controls, personal protection and disposal, review data in section 8 and section 13 of this SDS.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling:	Ensure adequate ventilation of workplace and storage areas. Avoid contact with eyes, skin and clothing; wear proper personal protective equipment to control exposure to product; avoid breathing dusts. Wash thoroughly after handling.
Conditions for safe storage including any incompatibilities:	Store in a cool, dry area away from excessive heat. Keep away from food and feedstuffs; keep away from incompatible materials. Avoid contact with moisture; keep container tightly closed.



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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:	
Occupational exposure limits:	Occupational exposure limits: None established. Treat as a nuisance dust: particulates not otherwise regulated; OSHA PEL: 15 mg/m ³ (total dust); 5 mg/m ³ (respirable fraction). Note: Exposure limit for the decomposition product, Sulfur dioxide: WEL(TWA): 1 ppm (2.5 mg/m ³)
Recommended monitoring procedures:	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference can be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents for the determination of hazardous substances.
Exposure controls:	Follow good industrial workplace practices; do not eat, drink or smoke while handling; wash hands before breaks and at end of work-shift; follow recommendations in this SDS.
Appropriate engineering controls:	Ensure adequate ventilation through local exhaust.
Individual protection measures, such as personal protective equipment:	
Eye/face protection:	Wear safety glasses with side shields or chemical safety goggles. Refer to OSHA 29CFR1910.133 and European Standard EN166.
Skin protection:	Wear suitable protective clothing as necessary to minimize skin contact. Refer to OSHA 29CFR1910.132 and 1910.136 for OSHA approved standards on protective clothing and footwear.
Hand protection:	Wear nitrile rubber or other suitable protective gloves; refer to European Standard EN374. Some options include: nitrile rubber (0.4 mm coating thickness); butyl rubber (0.7 mm coating thickness). Gloves selected should have a breakthrough rating of at least >30 minutes.
Other protective equipment:	The type and degree of personal protective equipment appropriate will depend on the specific work operation.
Environmental exposure controls:	Emissions from process and ventilation equipment should be monitored to ensure compliance with all applicable environmental control regulations.
Respiratory protection:	Respiratory protection is not required under normal conditions of use. Where protection from nuisance levels of dusts is desired a NIOSH approved dust mask may be used, e.g., particle filter with medium efficiency for solid particles (EN143 or 149, Type P2 or FFP2). Respirator use should follow the guidelines of an established respiratory protection program in compliance with 29CFR1910.134 (also see Canadian CSA Standard Z94.4-93, European Standard CR 529).

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

General information:	
Appearance and physical state:	Crystalline powder
Color:	White
Type of Odor:	Slight characteristic sulfurous odor
Odor threshold:	Not determined
Important health, safety and environmental information:	
Initial Boiling Point and Boiling Range:	Not applicable
Melting Point/Freezing Point:	Decomposes at 52°C (126°F)
Flammability Classification:	Self-heating substance
Flash Point:	Not applicable
Auto-ignition Temperature:	250°C (482°F)
Decomposition Temperature:	70-151°C (158-304°F)
Flammability Limits (lower/upper):	No data available
Evaporation rate:	Not applicable
Vapor Pressure:	No data available
Vapor Density (Air=1):	No data available
Evaporation Rate (BuAc=1):	Not applicable
Octanol/Water Partition Coefficient (log Pow):	< -4.7
Specific Gravity:	2.2
Bulk Density:	No data available
Water Solubility:	250 g/l @ 20°C
pH:	approx. 6 - 8
Viscosity:	Not applicable
Explosive Properties:	No data available
Oxidizing Properties:	No data available
Molecular Formula:	Na ₂ O ₄ S ₂
Molecular Weight:	174.11
Relative Density:	No data available
Solubility(ies):	No data available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity:	Self-heating material; may catch fire if exposed to heat; moisture sensitive.
Stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Sodium hydrosulfite reacts with acids to release sulfur dioxide.
Conditions to avoid:	Avoid exposure to moisture as material decomposes and may generate heat spontaneously. Avoid ignition sources, combustible materials; avoid temperatures above 50°C (122°F). Upon contact with moisture, Sodium hydrosulfite is oxidized to sulfite, bisulfite and bisulfate salts; under strongly acidic conditions it may liberate toxic sulfur dioxide gas.
Incompatible materials:	Strong oxidizing agents, acids, strong caustics, low flash point materials.
Hazardous decomposition products:	Decomposition products include but are not limited to oxides of sulfur, hydrogen sulfide, metallic oxides. Product decomposes in water to release sulfur dioxide, sodium sulfite, sodium thiosulfite, sodium oxide.

SECTION II - TOXICOLOGICAL INFORMATION

Information on toxicological effects:	
Acute toxicity (list all possible routes of exposure)	
Acute Oral Toxicity:	LD50(rat): 2830 mg/kg
Acute Dermal Toxicity:	LD50(rabbit): >5,000 mg/kg
Acute Inhalation Toxicity:	EC50(rat)(4-hr): >5.5 mg/l The estimated lethal dose for Sodium hydrosulfite is 30 g (approx. 1 ounce).
Skin Corrosion/irritation (rabbit):	Slightly irritating.
Serious Eye Damage / Eye Irritation (rabbit):	Strongly irritating.
Respiratory or Skin Sensitization:	Non-sensitizing.
Germ Cell Mutagenicity:	No data available.
Carcinogenicity:	Not listed by OSHA/NTP/IARC.
Reproductive Toxicity:	No data available.
Specific Target Organ Toxicity - single exposure (STOT-se):	No data available.
Specific Target Organ Toxicity - repeated exposure (STOT-re):	No data available.
Aspiration Hazard:	Not applicable.
Potential Health Effects:	
Skin Contact:	May cause slight to moderate irritation; prolonged or repeated exposure may result in dermatitis.
Eye Contact:	May cause moderate to severe irritation; possible corneal damage.
Ingestion:	May cause irritation of the digestive tract; may cause gastric disturbances; may cause nausea and vomiting; harmful if swallowed; may be fatal if swallowed in sufficient quantity.
Inhalation:	May cause irritation of the respiratory tract; may cause breathing difficulty and pulmonary edema; may cause respiratory sensitization; degradation products such as sulfur dioxide are extremely irritating; can cause hypersensitivity reactions in individuals with asthma.
Chronic Health Effects:	No data available.
Additional Data:	Sodium hydrosulfite: RTECS No. JP2100000 Sodium carbonate: RTECS No. VZ4050000

SECTION 12 - ECOLOGICAL INFORMATION

Toxicity:	
Acute/prolonged toxicity to fish:	LC50 (Leuciscus idus)(96-hr): 83 mg/l
Acute/prolonged toxicity to aquatic invertebrates:	EC50 (Daphnia magna)(48-hr): 121 mg/l
Acute/prolonged toxicity to aquatic plants:	EC50 (Scenedesmus subspicatus/algae)(72-hr): 216 mg/l
Toxicity to bacteria, to soil dwelling organisms and to terrestrial plants:	EC50 (Microtox)(17-hr): 107 mg/l
Chronic toxicity to aquatic organisms:	No data available.
General effect:	Harmful to aquatic life.
Persistence and degradability:	Since this product is an inorganic salt it does not biodegrade; however, it is expected to degrade by dissociation in the environment.
Bioaccumulative potential:	Not expected to bioaccumulate.
Mobility in soil:	This product is water soluble and, along with its breakdown products, is expected to be mobile.
Results of PBT and vPvB assessment (EC reg. 453/2010):	This material is not identified as being persistent bioaccumulative and toxic.
German WGK classification:	WGK = 1 (self-assessment).
Other adverse effects:	No other adverse effects are identified.
Additional information:	This material is not expected to cause significant environmental impact; should not be allowed to enter sewers, watercourses or soils; the product is a reducing agent which reacts readily with oxygen and can cause anaerobic conditions in watercourses.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods:	
Disposal:	Dispose of in compliance with all applicable federal, state and local environmental control laws and regulations. The waste material should be evaluated according to RCRA guidelines to determine possible classification as D001 (ignitability) or D003 (reactivity). Waste characterization and compliance with applicable laws are the responsibility solely of the waste generator.
Container Disposal:	Containers should be drained of all residual product prior to disposal.

SECTION 14 - TRANSPORT INFORMATION

DOT:	
DOT Proper Shipping Description:	UN1384 Sodium Dithionite Mixture
Hazard Class:	4.2 PG II
Placard:	Spontaneously Combustible
ERG No.:	135
Marine Pollutant:	No
IMDG:	
UN number:	UN1384
UN proper shipping name:	Sodium Dithionite Mixture
Hazard Class:	4.2 PG II
Placard:	Spontaneously Combustible
EMS No.:	F-A, S-J
Marine Pollutant:	No
IATA:	
UN No.:	UN1384 Sodium Dithionite Mixture
Hazard Class:	4.2 PG II
Placard:	Spontaneously Combustible
EMS No.:	F-A, S-J



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SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:	
Hazard categories	
SARA Title III Section 311/312 (40CFR370):	Acute health hazard, fire hazard, reactive hazard.
SARA Title III Section 313 (40CFR372):	No reportable components.
CERCLA Status (40CFR302):	No Reportable Quantity components.
TSCA Inventory Status:	Reported/included.
Canadian WHMIS Classification:	B6, D2B, F.
Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity:	None known to be in the product at levels requiring a warning.
REACH Annex XIV (SVHC):	No listed components.
REACH Annex XVII (Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles)	No listed components.
REACH registration / per-registration:	This material has been registered, per-registered or is otherwise exempted from registration under the Registration, Evaluation and Authorization of Chemical Substances.
Chemical safety assessment:	No data available.

SECTION 16 - OTHER INFORMATION

HMIS Hazard ID:	
Health:	2
Flammability:	2
Reactivity:	2 (water-reactive)
(Personal protective equipment selection is best assigned by the user after performing a hazard assessment on the product as it is to be used in the specific work process.)	
Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect	

Disclaimer:

The information contained in this SDS is based on data from sources considered to be reliable but Dharma Trading Co. does not guarantee the accuracy or completeness thereof. Dharma Trading Co. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

Revision Date: 03/26/2018

National Chemical Inventories:	
All components of this product are listed on the following chemical substance inventories: TSCA (USA)	
DSL	(Canada)
EINECS	(Europe)
ENCS	(Japan) ECL
	(Korea)
AICS	(Australia) NZIoC
	(New Zealand)
PICCS	(Philippines)
IECSC	(China)

Abbreviations:	
ACGIH	American Conference of Governmental Industrial Hygienists
ADR	International carriage of Dangerous goods by Road
AICS	Australian Inventory of Chemical Substances
ATE	Acute Toxicity Estimate
BfR	Bundesinstitut für Risikobewertung recommendations for food contact materials
BCF	Bioconcentration Factor
BOD5	5-day Biochemical Oxygen Demand
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CLP	Classification, Labeling and Packaging regulation
COD	Chemical Oxygen Demand DOT Department of Transportation DSL Domestic Substances List
EINECS	European Inventory of Existing Chemical Substances
ECL	Existing Chemicals List (Korea)
ENCS	Existing and New Chemical Substances Inventory (Japan)
EN 689	Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy.
ERG	Emergency Response Guide
GHS	Globally Harmonized System
HMIS	Hazardous Materials Information System IARC International Agency for Research on Cancer IATA International Air Transport Association
ICAO	International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods
LD50	Lethal Dose to 50% of test animal population
MAK	Maximale Arbeitsplatz Konzentration
NTP	National Toxicology Program
OEL	Occupational Exposure Limit
OSHA	Occupational Safety & Health Administration
PBT	Persistent, Bioaccumulative and Toxic vPvB Very Persistent and Very Bioaccumulative PEL Permissible exposure limit
PICCS	Philippine Inventory of Commercial Chemical Substances
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemical Substances
RID	International carriage of dangerous goods by Rail SARA Superfund Amendments and Reauthorization Act STEL Short Term Exposure Limit
SVHC	Substance of Very High Concern
TLV	Threshold Limit Value
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