H086.

SB27471

XACT BLOOD TYPING



SAFETY DATA SHEET

in Date 14-Aug-2009 Participant (Participant) Revision Date (Participant) Revision Number 1 Product Name Calcium chloride C77-212; C77-500; C614-3; C614-10; C614-500 Cel No. : Dowflake; Calpus; Caltac (Anhydrous; Pellets; Certified; Deslocant; 4-20 Mesh and Finer)

Leboratory chemicals Uses advised against No information available Details of the supplier of the safety data sheet

Company Fisher Solardic One Reagont Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 Emergency Telephone Number CHEMTRECO, Inside the USA: 800-424-9300 CHEMTRECO, Qualde the USA: 001-703-527-3887

Cleasification
This chemical is considered hazardous by the 2012 CSHA Histard Communication Standard (29 CFR 1910.1200)

rlous Eye Damage/Eye Inflation

Category 2

Label Elements Signal Word Warning



nds and any exposed skin thoroughly siter handling

Page 1/7

Thermo Fleher Scientific - Calcium chlorida Revision Date 28-Feb-2014

dous Combustion Products Hydrogen chloride gas, Chlorine.

Protective Equipment and Proceetions for Phylighters
As in any lire, wear self-contained brestling apparatus pressure-demand, MSHANICSH (approved or equivalent) and toil protective

NFPA

Physical heards N/A Planting 0

Should not be released into the environment. See Section 12 for additional ecological into neation. mental Precavillane

vide for Containment end Clean. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formalien.

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on akin, or on clothing. Avoid ingestion and intellation. Avoid dust formation. Keep containers tightly closed in a dry, cool and well-ventilated place.

A Suprem county process production

Component Quales: Mexico GEL (TWA) Onterlo TWAEV
Colcum chlorele
TWA: 5 regint

Ensure that symmeth stations and safety showers are close to the workstation location. Ensure adequate verification, especially in confined areas.

Personal Protective Equipment

Wear appropriate protective eyeglesses or chemical safety guggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN105. Wear appropriate protective gloves and clothing to prevent skin exposure. Skin and body protection

Foliow the OSHA respirator regulations found in 28 CFR 1810.134 or European Standard EN 149. Use a NICOHMISHA or European Standard EN 149 approved respirator il exposure limits are exceeded or il irritation or other symptoms are experienced. Respiratory Protection Hygiene Messures Handle in accordance with good industrial hygiene and astety practice

MUNICIPALITY OF THE PROPERTY O

Bolid Beign odorieze No information availab 8-10 100 g/L eq.sol, 782°C / 1438.6°F

Thermo Fisher Scientific - Calcium chloride

Revision Date 28-Feb-2014

Inhalation
Call a POISON CENTER or doctor/physician il you leel unwall

Eyes

F IN EYES: Rinse cautiously with wazar for several minutes Remove contact tenses. It present and easy to do. Continue rinsing
it sys initiation persists: Get medical advice/sterriton.

IF IN EVES: Rinne cautiously with vesue to a the it yes inflation preferes: Get medical advice/attention. Store and the second preference of the second preference Store to see well-vertilated place. Keep container tightly closed Store to closed up. Disposed of contents/boortainer to an approved wester disposal plant.

Hazarda not otherwise classified (HNOC)
May form combustible dust concentrations in air

A Composition / Information in Ingredients

Plinae stomediately with plenty of water, also under the eyelide, for at least 15 minutes. Obtain mode of extension

Wash off immediately with planty of water for at least 15 minutes. Get medical attention if amendoms occur...

Move to fresh sir. If breathing is difficult, give coppen. Get medical essention II symptoms occur.

Do not induce vomiting. Obtain medical attention.

Notes to Physician Treat symptometically.

PERMIT DESCRIPTION Suitable Extinguishing Media Substance is nonlinermable; see agent most appropriate to extinguish surrounding line.

No information available Autoignition Tempe Explosion Limits

Upper No deta avallable No deta avallable Sensitivity to mechanical impact
Sensitivity to static electurage
No information available.

offic Hezards Arising from the Chemical -combustible, substance itself does not burn but may decompose upon heating to produce corresive and/or fools furnes.

Page 2/7

Thermo Fisher Scientific - Calcium chloride

Revision Date 26-Feb-2014

Boilling Point/Range
Pauls Point
Pauls Pauls
No information available
No information available
Pauls Pauls Pauls
Upper
Lower
No data available
No information available
Vapor Pressure
No information available
No information available.
No information available.
Soluble in water

No data availlable
No data availlable
No triormation availlable
No Information availlable
Ca CIZ

None triown, based on information available Stable under recommended storage conditions. Hygroscopic.

Incompetible products. Exposure to malet air or water, Excess heat. Avoid dust formation **Conditions to Avoid** constitute Materials Strong caldizing agents, Metals

rardous Decomposition Product : Hydrogen chloride gas, Chlorine Hezardous Reactions None under normal processing.

A POLICE III WELL TO Textended to the marties of the Angelon Comments of the C

 Component Information
 LOW One
 Low Dense
 LCID Inhaming

 Catalogue
 1000 mg/kg (Ref.)
 2000 mg/kg (Ref.)
 Not be lated

No information available. Toxicalogically Symmyletic Products

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

Severe eye intent Sensitization No information available.

The table below indicates whether each agency has listed any ingredient as a corolnogen

Companient CAB-No IARC NTP ACIEN DEMA Mexico Celcum chloride 10043-52-4 Not teled Not balled Rock lated Not balled Not balled Not balled



Page 5/7

Thirmso Fisher Scientific - Culcium elderides Revision Date 25-Feb-2014
WHINS Hazard Claus DSS Tools naturials



NED GAMO

Proposed by Proposed (Mary

Emel: EMISOS.RA@thermolisher.co

 Creefien Date
 14-Aug-2009

 Revision Date
 28-Feb-2014

 Print Date
 28-Feb-2014

Print Date
Revision Summery
This discusses him been epideted to comply with the LIS CENA Healton 2012 Standard
suplainty the correct lightesten maker 20 CFR 1910,1900 to sign with the Clotally
Hemoretical Options of Close

Discioline:
The information provided on this Beleist Disci Sheet is correct to the best of our incoverage, bifurmation and belief at the dec of he politication. The information given is designed only an a guide for such handling, see, processing, storage, transportation, disposed and research and not he considered are a servenity or quality specification. The information relates only to the specific meterial designated and may not be waited for each meterial used in consideration with any other material or any process, mixes appetited in the text.

End of SDS

Captions (Sharke)

Lapsand

2. - Livenit

6. - Indications a conductance that is the early-set of a livenities (big Cameand oratior randor TBCA.

F. - Indications a conductance that is the early-set of a livenities (big Galle sealed TBCA.

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F. - Indication a conductance that is the sealed of the sealed of the conductor in the conductor i

Thermo Fisher Scientific - Calcium chloride

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SAFETY DATA SHEET

Crestion Date 24-Feb-2014 Revision Date 24-Feb-2014 Revision Number 1 Product Name Magnesium Sulfate Heptshydrate BP213-1 Cat No. : No information available. Laboratory chamicals Uses advised against Details of the supplier of the safety data about

Company Fisher Scientific One Respect La Emergency Telephone Number CHEMTREC®, Inside the USA: 800-494-9900 CHEMTREC®, Quiside the USA: 001-709-527-9967

salfication selfication ender 2012 OSHA Hazard Communication Standard (29 CFR 1810.1200)

Second on available date, the classification orderic are not met

Label Elements None required.

Houseds not otherwise classified (HHOC) None identified

Page 1/7

Thermo Fisher Scientific - Magnesium Sulfeta Heptahydrate

West personal promotes to be promote surplement. Ensure adequate vention on Anad dust formation. Anad contact with elder and systs. Do not breating dust. Keep containers tightly closed in a dry, cool and well-ventilated place. Exposure Guidelines This product does not contain any hazantous meterials with occupational exposure finits established by the region specific regulatory bodies. Ensure adequate verifiation, especially in contined areas. Ensure that eyewesh stations and safety showers are close to the workstation location. Engineering Massures

Personal Protective Equipment

Eyerlace Protection Wear appropriate protective eyegianess or charrical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Wear appropriate protective gloves and slothing to prevent skin exposure.

Bidn and body pretection

Follow the OSHA respirator regulations tound in 29 CFR 1910.134 or European Standard EN 148, Use a MCSHM/SHA or European Standard EN 148 approved respirator il exposure limits are exceeded or Il initiation or other symptoms are experienced. Respiratory Protection

Hygima Massures Hendle in accordance with good industrial hygiene and safety precise

建筑设施设施设施

Physical State Appearance Odor Odor Threshold Solid White adortees No information available. 5-8.2 5% aq. sol. 1124°C No information available. No data available
No data available
<0.1 remitg @ 20 °C
No information available
1.678
No information No information available No data available No information available > 150°C No information No Information evaluable Mg O4 S . 7 H2 O 246.46

THE REPORT OF THE PARTY OF THE None known, based on information available.

Thermo Fieher Scientific - Magnesium Sulfete Heptahydrate

Revision Date 24-Feb-2014

Plane immediately with planty of water, also under the eyelide, for at least 15 minutes. Get medical attention 3 symptoms occur...

Wash off Immediately with soap and planty of water while removing all conteminated clothos and shows. Get madical attention if symptoms occur...

Move to fresh air. If breething is difficult, give oxygen. Get medical attention If symptoms occur.

Do no Induce vamiling, Obtain medical attention.

Noise to Physician Treat symptometically.

Electronic Control of the Control of

Suitable Extinguishing Media Substance is nonlammeble; use agent most appropriate to solinguish surrounding lire.

No information available. itabia Extinguishing Medin Plack Point No information available

olgoition Tempera icelon Limita Upper Lower No information available

Sensitivity to mechanical No information available. Sensitivity to static discharge No information available.

Specific Nearest Arteing from the Chemical Non-combustible, substance itself does not burn but may decompose upon heating to produce convolve endor toxic turner.

Hezerdous Combustion Products Sulfur oxides, Magnesium oxides.

Prutactive Equipment and Precedions for Feelighters
As in any fire, was self-contained breathing appendixs pressure-demend, MSHANICSH (approved or equivalent) and full protective

HFPA Flamewhilty Instability Physical leasers 0 1 NO.

Parsonal Precautione

Use personal protective equipment. Ensure adequate ventilation. Avoid dust termation.

Environmental Precautions

Avoid release to the emérorment. See Section 12 for additional contegical information. Skethode for Containment and Claim. Avoid dust femation. Sweep up or vocuum up splitige and collect in suitable container by disposal.

7. Hendling and etorage

Page 2/7

ermo Fleher Scientific - Magnesium Bullete ptahydrete

Revision Date 24-Feb-2014

Stuble under normal conditions. Hygroscopic.

Conditions to Avoid Avoid dust formation. Excess heat. Exposure to moist air or water

matthis Materials None known

erdous Decomposition Products Softer celdes, Magnesium exides Hazardous polymerization does not occur zardous Reactions None under normal processing

Acute Texicity

No acute training information is available for this product. Based on ATE data, the classification otheris are not met. ATE > 2000 ing/liq. Based on ATE data, the classification otheris are not met. ATE > 5000 ing/liq. Based on ATE data, the classification otheris are not met. ATE > 5 mgA. Product Inform Onel LDS0

Dermal LD60 Met LC50

No information available.

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

Irritation No Information available. No information available.

The table below indicates whether each agency has listed any ingredient as a caroling

Component CAS-No IARC STP ACGS CIDEA Bission
Inspression sultans
10034-86-8 Not feeled Prof feeled Mit feeled Not feeled And feeled

No Information available. Reproductive Effects No Information available. Developmental Effects Taratogenicity No information available STOT - single exposure Hone Inown. None known. Application Necessal No information availab No in armedon available Symptoms / effects, both scute and delayed

Endocrine Diaruptor Information

The trainstaglizal properties have not been fully investigated.. See actual entry in RTECS for complists information. Other Adverse Effects

No ini smatten available

FLINN SCIENTIFIC, INC. Safety Data Sheet (SDS)

8DS #: 395.20

Revision Date: March 25. 3014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Hydrochloric Acid Solution, 0.1M - 2.4M

Firm Scientific, Inc. P.O. Box 219. Butavia, IL 60510 (800) 452-1261 CHEMTREC Emergency Phone Number: (800) 424-9300

Manual Word DANGER

SECTION 2 - HAZARDS IDENTIFICATION

Hazard class: Skin corresion or infanton (Cenegary 1), Custon severe skin burns and eye damage (H314). Do not breathe saint, vapors or spray (P260).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract initation (Catagory 3), May c supplementy initiation (H336).

Hazzed class: Acute texticity, oral (Category 5). May be harmful if swallowed (H303).



Industrial ex (IARC-1).

SECTION 3 - COMPOSITION	INFORMATION	ON INGREDIENTS
-------------------------	-------------	----------------

margent Name	CAS Number	Formula	Personale Weight	Concentration
drocklorie acid der	7647-01-0 7732-18-5	HC1	36.46 18.00	2-10% 90-98%
	7732-18-5	И ₂ О	18.00	1

SECTION 4 - FIRST AID MEASURES

SECTION 4 — FIRST AND MEASURES

Call a POISON CENTER or physician if you fied surveil (P312).

If inablest: Exent we victim to first he is and keep set real in a position constitutible for breathing (P304-P340). If in eyes: Rinne candiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305-P331) explositely call a POISON CENTER or physician (P310). He so that (or had): Insuedicity surveive all contembased citothing. Rinne dain with water (P305-P316-P333). What contaminated citothing before reuse (P343). If availlanced: Einst too D-NOT induce vousing (P304-P330-P331).

SECTION 5 — PREFINITING MEASURES

Neuflexemble, noncombustible solution. In case of fire: Use a tri-class dry chemical fire extinguisher

NFPA Con

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Vestible area and contain the upill with sand or other inert absorbest material, acutesline with sedion bicarbonate or calcium hydroxide, and deposit in a scaled hag or container. See Sections 8 and 13 for further information.

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Past 1 or 2

FLINN SCIENTIFIC, INC. Safety Data Sheet

Hydrochloric Acid Solution, 6.194 - 2.466

Revision Date: March 25, 2014

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Cuernical Stompe Pettern: Inocqueix PP. Store with acids, except ultric acid. Store in a deflicated acid enhines; if an acid cubines is not available, store in Flinn Saf-Cube⁷⁶. Keep o (P233). Use only in a bood or well-vestibated area (P271).

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Was practive to expressions seem towards. Extraoresis. Proc IEE. 1809.
Was practively glowe, practive dealing, and eye proteodion (P289). Wash bands throughly often handling (P264). Use only in a band or well-resultand sum (P27).

Exposure guidelines: (no concentrated HC1) Ceiling 5 ppm (OSHA); Ceiling 2 ppm (ACGHH; IDLH 50 ppm (OSHA). Invitation threshold in -5 spect on any fertilation is sign of exposure (per OSHA).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

SECTION 10 - STABILITY AND REACTIVITY

Avoid contact with strong exiditors, bases, novines, and alkali surtals. Curvoles sertal including stainless storf. Shell life Good, if need preparty.

SECTION 11 - TOXICOLOGICAL INFOFMATION

Acute effects: Eye and skin corrosion. Respiratory irritation

ORL-RBT LD_m: 900 mg/kg (as concentrated HC1) BRL-RAT LC_m: 3124 ppss/1hour (as concentrated H SKN-RBT LD_m: N.A.

Chronic effects: Corresive to teeth.
Target organs: Respiratory tract, teeth. klm. eyes.

 ${\sf N.A.} \sim {\sf Not available, not all health neg rete of this substance have been fully investigated.}$

SECTION 12 -- ECOLOGICAL IN TRIMATION Does not bindegrade in sail, may be ox, ic to aquatic life.

SECTION 13 - DISPOSAL CONSIDERATIONS

Please review all federal, state and local regula ions that may apply before proceeding. Firm Suggested Disposal Method \$24b is one option.

SECTION 14 - TRANSPORT INFORMATION

ng name: Hydrochloric seid. Hazard class: S. Correstve. UN namber: UN1789.

SECTION 15 — REGULATORY INFORMATION
TSCA-listed. FINECS-listed (231-595-7), RCRA code D002.

Connuit your copy of the Filter Science Cale Revision Date: Much 25, 2014

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Peas 2 or 2



SAFETY DATA SHEET

Creation Date 25-May-2010

Revision Date 05-Sep-2014

Revision Number 1

Froduct Name Thomas AC150330000; AC150330025; AC150330050; AC150331000; AC150335000

5-Mathyl-2-(1-mathylethyl)phenol

Laboratory chemicals.

No Information available data sheet.

Company Fisher Scientific One Reagent Lans Fair Lawn, NJ 07410 Tel: (201) 796-7100

Entity / Business Name Acros Organics One Reagent Lave Fair Laver, NJ 07410

Emergency Telephone Number For Information US call: 001-800-ACROS-01 / Europec call: -32 14 37 52 11 Fureignory Number US:001-201-795-7100 / Europe: -32 14 57 58 89 CHEMITREC T-EI, No.US:001-800-424-9300 / Europe::001-703-527-3867

Clear Bradion.
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (50 CFR 1910.1200)

Sien Correaton/initation Serious Eye Damage/Eye Imitation Specific target organ toxicity (single exposure) Target Organs - Respiratory system.

Label Elem

Signal Word Danger

Hazard Stetaments Harmfull It swellowed Causes severe skin burns and eye dan May cause respiratory irritation



Page 1/7

285 °C / 545 °F

o Heazards Artising from the Chemical at disparsed in at may place. Consolve Material. Thermal decomposition can lead to release of britishing gases and vapors object and empty container away from heat and sources of lyrifion.

HEPA.

thotal Tily

Personal Precedions

Use personal protective equipment. Evecusis personnel to sale aveas. Ensure adequate ventilistion. Avoid dust formation. Do not get in eyes, on sixt, or on clothing.

Should not be released into the environment. See Suction 12 for additional ecological information.

est and Clean Remove all sources of lightfon. Sweep up or vacuum up apliage and collect in suitable container for disposal. Avoid dust formation.

Hearding

Use only under a chemical turne hood. West personal protective equipment. Do not get in eyes, on also, or an alcoholage, Avoid dust formation. Do not breasthe vaporablest. Do not great.

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrolives area

This product does not contain any hazardous materials with occupational exposure limits established by the region peculic regulatory bodies.

Personal Protective Equipment. Eye/face Protection

Use only under a chemical turns hood. Ensure that eyewash stations and salety showers are close to the workstation location.

Wear appropriate protective eyeglesses or chemical safety goggles as described by OSHAN sye and face protection regulations in 39 CFR 1910.133 or European Standard EN166.
Wear appropriate protective gloves and clothing to prever size exposure. Follow the OSHA Registers regulations found in 29 CFR 1910.134 or European Standard EN 148 approved respirator it exposures Standard excepted of or Intelligence Standard EN 148 approved EN 148 approved to EN 148 approved EN 148

Physical Binth Aggregation United White Characteristic Characteris

Revision Date 05-Sep-2014

utionary Statements

Phosastonery of the Prevention
Thewardson and any exposed skin thoroughly after handling
Do not set, of with or smalls when using this product
Do not health dust/furne/pashrist/vapors/pray
West protection dust/furne/pashrist/vapors/pray
Use only audicions or in a well-versibated area
Comments

ORE UNIT AMERICAN CONTROL OF THE ORIGINAL ORIGINAL ORIGINAL OF THE ORIGINAL ORIGINA

senti IF CIN SKIN (or heir): Take off immediately all contaminated clothing. Rines skin with water/shower Wash contaminated clothing before rause

Eyes
If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, it present and easy to do. Continue rinsing

Do NOT induce vomiting Shore locked up Shore locked up Shore in a well-vanifiese place. Keep container tightly closed Disposed Disposed Disposed of contents/container to an approved waste disposal plant Hazarda not otherwise classified (HBNCQ). Tools to aquatic tills with long lasting effects May form combuetible dust concentrations in air

Component	CA8-He	Weight %
Thermol	89.85-6	>85

Plines immediately with plenty of water, also under the systics, for at least 15 minutes. Interestiate medical attention is required. Eye Contact

Wash off immediately with plenty of water for at least 15 minutes. Immediate readical attention is required.

Mr. re to fresh air. Il bresthing le difficult, give oxygen. Do not use mouth-to-mouth res recitation il vicitti ingested or inhaled the aubstance; incluse artificial respiration with a res biratory medical device. Immediate medical attention is required.

Do not induce voreiting. Call a physician or Poleon Control Center Immediately.

Causes burns by all exposure routes. Product is a corrosive material. Use of gettric lierage or emesis is contrainfactated, Possible perforation of intensation or eseptingual shot be investigated; regestion causes severe swelfing, severe derivage to the difficults fissue and darger of perforation. Treat symptomerisating?

Sultable Extingulating Media COs, dy chemical, dy sand, alcohol-resistant foam.

Flash Point

102 °C / 215.8 °F No information available

vision Date 05-Bap-2014

48 - 52 °C / 118.4 - 125.6 °F 232 °C / 448.6 °F 102 °C / 215.6 °F No information evaluable No information evaluable

No data avealable
No data avealable
No data avealable
2.8 mbar @ 50 °C
5.2
0.980
No information avealable
205 °C / 545 °F
No information avealable
4.3 mm3/s at 50 °C (time
114.0 150.22

None known, based on information available

In remoutible products. Expass heat, Avoid dust formation.

Str ang oxidizing agents, Strong bases te Ca bon monovide (CO), Carbon dioxide (COs)

No information evallable. None under normal processing.

Andr Toricity.

No soute toxicity information is available for this product

No Information available

media a chrypic effects from abort and knowlern encourer.

Causes burns by all exposure routes

No information evallable

The table below indicates whether each agency has listed any ingredient as a carcin MANC NTP ACSIM COMA Recision

Not hated Asst Select Next select Mit tutted Mit based

Not reutagenic in AMES Test

No information available. No information available.

STOT - single exposure STOT - repeated exposure Respiratory system None known

hymal											-Bep-2014
ymptoms / offscis,both as slayed		Possible	perforation	olvo material on ol atomeci overe decreg	h or eacp	shague	should t	in investi	gated: in	gestion o	d. Inves
industrie Disruptor Inform	utton	No Intern	nation ser	elistin							
ther Adverso Effects		See acts	al entry is	RTECS for	complete	intere	nefor.				
referribly.	andrag such	tence(s)	-	dinardes	and other	-	A 200	·张哲		Control of	
Comment I	Frankum	ner Alapse		Constructor 6	-	_	Month		-	Shillandon a Si	
Thyreal	Not 1	mind.	LC	Frankreder F 80: 8.2-4.2 mg	pfL/Bills		Net heb		ECS	Water 7: 1,7-3.2	
relationce and Degradable	ity	No Inform	section av	manhains oro	-	-	_		_	-	-
Cu	Thermal		=	-		_		Ing Proc.			
anda Diaposal Bulboda		Chemica hezardos	weste p	Chemical w	ust deter	mine w	nether a	NO CONNU	d chemic it local, n	egional, a	affed as a
		Chemica hezardos	weste g	enerators mu	ust deter mete gen duttone to	ersions rotates	must all re comple	NO CONNU	d chemic it local, n	el la clas egional, s	affed as a
σι		Chemica hezardo nadonal		Chemical waste regul	ust deter mete gen duttone to	ersions rotates	must all re comple	NO CONNU	d chemic it local, n	el la clas egional, s	affed as a
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DT. UN-No Proper Shipping Namo Hazard Class		Chemica hazardo redonel i		Chemical was waste required	uat determinate generalisticano to	ersions rotates	must all re comple	NO CONNU	d chemic it local, n	el la clas egional, s	affed as a
DT. UH-No Proper Shipping Namo Hazard Clees Packing Group		Chemica hazardo redonel i		Chemical was waste required	uat determinate generalisticano to	ersions rotates	must al e comple	NO CONNU	d chemic it local, n	el la clas egional, s	affed as a
DT. UN-No Proper Stepping Name Hazzari Clees Packlag Group St. UN-No.		Chemica hazardo redonel i		Chemical was waste required	uat determinate generalisticano to	ersions rotates	must al e comple	NO CONNU	d chemic it local, n	el la clas egional, s	affed as a
DT. UN-No Proper Stepping Name Hazzari Clees Packlag Group St. UN-No.		Chemical respector national i UNBASE ALKYLP 8 90	weste per veste.	Chemical was waste required	upt determinate generalistichen to	ersions rotates	must al e comple	NO CONNU	d chemic it local, n	el la clas egional, s	affed as a
OT. UN-No Proper Shipping Name Hazard Cless Practing Group St. UN-No Proper Shipping Name Hazard Cless		Chemical respector national i UNBASE ALKYLP 8 90	weste per veste.	Chemical was weeke regularity as weeke	upt determinate generalistichen to	ersions rotates	must al e comple	NO CONNU	d chemic it local, n	el la clas egional, s	affed as a
OT. UN-No Proper Shipping Name Hazard Close Packing Group DE. UN-No Proper Shipping Name Hazard Close Packing Group LiA.		Chemical hezardo nellonal i UNEASO ALKYLPI 8 8 UNEASO ALKYLPI 8	weste per veste.	Chemical was weeke regularity as weeke	upt determinate generalistichen to	ersions rotates	must al e comple	NO CONNU	d chemic it local, n	el la clas egional, s	affed as a
OT. UN-No Proper Stapping Name Hazard Class Packing Group St. UN-No Proper Stapping Name Hazard Class Allender Group JA UN-No JA UN-		Chemics hazzardos netional i Constituta de ALKYELPI B TB UNIDADO ALKYELPI B TE LENDARD	HENOLS	SOLID, N.C.	upt determinate generalistichen to	ersions rotates	must al e comple	NO CONNU	d chemic it local, n	el la clas egional, s	affed as a
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CT. UN-No Proper Bhipping Name Peach Researd Class Packing Group St. UN-No LOW-Thipping Name Peaching Group LOW-No LOW-No Proper Shipping Name Peaching Group LOW-No Peaching LOW-		Chemical Prozestor Institute Ins	WENCLS WENCLS WENCLS WENCLS	meations in Chemical was a waste regular to the control of the con	O.S.	orania w	nether a reset also complete	NO CONNU	d chemic it local, n	el la clas egional, s	affect as a man and a man and a man and a man and a man a ma

Tayrood Revision Date 05-8ep-201

Proported By Regulatory Albits
Thesess Fairer Debestills
Email: EMSIOS.FAA@themoslisher.com

Crestines Date
Revision Date
66-8ep-2014

Discisioner
The information provided on this Satisty Dehn lithest in correct to the best of our browledge, information and belief at the date of its publication. The information given is designed only as a guide for rate invalide, uses, proceeding, information the information transportation, disposal and information the information transportation, adaptated and in the information transportation.

tes only to the specific material designated and may wrist or in any arrowes, unless assertied in the text.

End of SDS

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SAFETY DATA SHEET

Revision Date 08-Nov-2015 Creation Date 14-Sep-2008

BP367-500; P410-3; P410-10; P410-100; P410-600; P412-3; P412-10; P412-500

KI (Granular, Free-flowing/Certified ACS/USP/FCC)

Laboratory chemicals.

Uses advised against No information available Details of the supplier of the safety data sheet.

Cat No. :

Emergency Telephone Number CHEMTRICO, Inside the USA: 800-424-9300 CHEMTRICO, Outside the USA: 001-703-527-3887

The state of the s ion. on under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification orients are not met

rwise classified (HHOC)

用的技术的的。 Weight % >45 **数据型型设计**工作。2015年(1717年)

Page 1/8

Revision Date 08-Nov-2015

OSHA PEL HIDSH ELH

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash station and addity showers are close to the workstation location.

Evalues Protection

Wear appropriate protective eyeglesess or chemical safety goggles as described by OBHA's eye and teos protection regulations in 29 CFR 1910.133 or European Standard EN166.

Side and body protect

Wear appropriate protective gloves and clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Star EN 149, Use a NIOSHMASHA or European Standard EN 149 approved respirator if exposure limits are exceeded or ill initiation or other symptoms are experienced.

Handle in accordance with good industrial hygiens and safety practice

hypical Blate
Solid
Spermence
White
door
Octoriess Physical State Appairance Odor Odor Threshold

Octorisas
No information available
6-8 5% in water (20°C)
660 °C / 1256 °F
1330 °C / 2446 °F @ 760 mmHg
No information available
No information available
No information available No data available
No data available
1 mm/kg @ 745 °C
Not applicable
No information availab
Not applicable
I K
166

WALL TO THE TOTAL PROPERTY.

Air sensitive. Light sensitive. Hygroscopic.

Page 3/6

None known, based on information available

Revision Date 06-Nov-2015 Potassium lodide

Plane immediately with planty of water, also under the syelids, for at least 15 minutes. Obtain medical attention. Eye Contact

Whish off Introductely with plenty of water for at least 15 minutes. Get medical attention in wedstely if symptoms occur. Skin Contact

Mc re to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if any optome occur.

Do not induce vomiting. Obtain medical attention. No information available. May cause pulmonary edems Treat symptomatically

Flesh Point No information availab Autoignition Temperature Explosion Limits

Specific Hazards Arising from the Chemical Keep product and empty contains r away from heat and sources of kyrition. Thermal decomposition can lead to release of britishing passes and vapor.

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Maxendous Combustion Products
Hydrigen lottle
Protection Egyptyment and Proceedings for Fixelighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHAR4CSH (approved or equivalent) and full

MEPA. Floriday

Methods for Contelement and Clean Sweep up or vacuum up spillage and collect in suitable conteiner for disposal. Avoid due formation. West persons protective equipment. Ensure adequate versistion Avoid contact with skin, eyes and chrising. Avoid ingestion and inhibition. Avoid dust formation.

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct surlight. Store under an inert annosphere.

Page 2/6

Potasalum lodide Novielon Date 06-Nov-2015

Incompetible products. Excess heat. Avoid dust formeflow. Exposure to molet sir or water. Exposure to air. Exposure to light.

Strong oxidizing agents

te Hyarogen lodide

Hazardous polymerization does not occur.

None under normal processing.

LDSS Direct LDSS Direct LDSS Introductor EFFO reging (No.) Not lated feet lotted No. | Internal LDSS Internal LDS

some multipost hos trade mort stadio piecesia sa Beer as stadio at

May cause Initation

The table below indicates whether each agency has fisted any ingredient as a carcino

Component CAB-Ho IARC NTP ACER CENAL Member Potencies under 7181-11-0 Not haird Not haird And hot haird Not haird No

No information available. Developmental Effects No information available None known STOT - single exposure STOT - repeated exposu ma / effects both scuts and May cause pulmonary edemi

ne Disruptor Infor This toxicological properties have not been fully investigated. Other Adverse Effects

Programme Company

Congeneral Problembre Alama Producetar Fish Millionates
Polasson etoks
Dischofryntus replace
Dischofryntus rep

. Will likely be mobile in the environment due to its water solubility.

0.04
The second section with the second
erators must determine whether a discarded chemical in classified as a hemical waste generators must also consult local, regional, and vaste regulations to ensure complete and accurate classification.
2. 数大点扩张 4. C. F.
2

Component	TECA	DSL	MDSL.	EINEC8	ELMICS	MLP	PICCS	ENCS	AICS	RECOR	KEC
Component Potassium lodide	X	X		201-959-4			X	X	X	X	X

No No No No

Page 5/6

ated to comply with the US CSHA HazCom 2012 Stars on under 29 CFR 1310.13100 to align with the Gishally Scalin and Labeling of Cherekola (GHD)

End of SDS

Page 5/6



SAFETY DATA SHEET

Revision Date 17-Sep-2014 Product Name Cat No. : C457-500 Cuprous chloride Laboratory chemicals. Uses advised against No information available behalls of the auguster of the safety data sheet.

Emergency Telephone Number CHEMTREC®, Inside the USA: 800-424-9200 CHEMTREC®, Outside the USA: 001-703-527-3867

Clear Microling.
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (20 CFR 1910.1200)

Label Elements

Copper(I) chloride

Page 1/7

Revision Date 17-Sep-2014

Personal Precautions

Live personal protective equipment. Ensure adequate verdistron.

Avoid release to the environment. Collect appliage.

ods for Containment and Clean Sweep up or vacuum up apillage and collect in suitable container for disposal. Do not let this chemical enter the environment, Avoid dust formation.

Do not breathe dust. Do not breathe vajours or spray mist. Do not get in eyes, on akin, or on clothing. Use only in area provided with appropriate exhaust ventilation. Minimize dust generation and accumulation. Weath hands before breaks and immediately after handing the product.

This product does not contain any hazardous materials with occupational exposure timbs established by the region specific regulatory bodies.

ACORN TLY ORNA PEL TWA: 1 mg/m² Computerit
Copper(1) délande

eering Measures nel Protective Eustoment e/face Protection Ensure that eyewash stations and safety showers are close to the workstation los

Wear appropriate protective eyeglasees or chemical safety goggles as described by OSHA1 sye and face protection regulations in 39 CFR 1910.133 or European Standard EN166.
Wear appropriate protective gloves and clothing to prevent sith exposure. Follow the CSHA1 respirator regulation factor in 32 CFR 1910.134 or European Standard EN1 148 approved respirator till exposure Standard EN1 148 approved respirator till exposure Standard EN1 148 approved respirator till exposure Standard exposure Standard EN1 148 approved respirator till exposure till en1 148 approved till en1

Powder Solid Powder Solid
Grey
Odoriess
No Information available
No Information available
1430 °C / 806 °F
1490 °C / 2714 °F ® 760 mmHg
No Information available
No Information available
Na Information available
Na Information available

Copper(I) chloride

Prevention
Wash face, hands and any exposed skin throughly after handling
Do not set, drink or smoke when using this product

Inguestion

IF SWALLOWED: Call a POISON CENTE I or doctor/physician II you feel unwell
Rinse mouth

Component	CAS-No	Wedget %
Copper(1) chlorids	7758-80-6	95

Place immediately with planty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention. Eve Contect

Wash off investigately with plenty of water for at least 15 minutes. Obtain medical attention. Sidn Contact

Remove from exposure, Se down. Move to fresh air. Il breething is difficult, give copper. Il not breathing, give artificial respiration. Do not use mouth-to-mouth mesuchistion if violini repeated or inhelded the aubita

Revision Date 17-Sup-2014

Do not include vormiting. Clean mouth with water. Call a physision or Poleon Control Center Interestiately.

Seast Important symptoms/effects No information available. Treat symptometically

Substance is nonlimenable; use agent med according to enforcing the support of th

Fineh Point No information available

Specific Hazards Arising from the Chemical Non-combusible.

Mazendous Combustion Products
hydrogen orthodo gas
Production Services and Procustions for Pivelighters
As in any fire, were self-contained breathing apparatus pressure-demand, MSHARROSH (approved or equivalent) and full

Page 2/7

Copper(I) chloride

No information available No information available 4,140 No information available No deta available No information available No information available

None known, based on Information available

Moisture sensitive, Light sensitive. Exposure to light, incompatible products. Exposure to moist air or water

cardone Decomposition Products Hydrogen chloride gas

None under normal processing.

Acide Toxicky.

red and impediale effects as well as chronic effects from short and innu-tern exposure.

May cause Initiation

No information available The table below inclosies whether each agency hus fisted any ingredient as a carsing

Component CAS-No MARC NTP ACCEN CRISIA Mission Copper() chieved NTER-BIG No National Nationa

No miormation available. No information available **Developmental Effects** No information available STOT - single exposure STOT - repeated exposur No information available Symptoms /effects,both south: nd No information available deleyed

Endocrine Dieruptor Information No information available



Page 5/7

Company() chlorida

Propried By
Propried B

Disclaimer: The information provided on this Befory Data Sheet is correct to the heat of our inceedings, information and helitof at the dute of its publication. The information given is designed only on a guide for safe handling, son, proceeding, storage, transportation, disposed and release and la not to be considered as a nursually or quelty specification. The information relates only to the apposition content of independent and may not be variet for each nutried used in continuous many of the relation only to the apposition content of independent and may not be variet for each nutried used in continuous many of the content of the process of the content of

End of SDS

Y2 - Indicates an exempt propose that is a polymeter and in mode only from a that comprises one of the nilgibility criteria for the assemption rais. Not applicable TBCA 19(H) Not applicable BARA 212 CAR-No Copper(i) chloride
SARA 311/312 Hazarduus Celagori
Acute Health Hazard
Chronic Health Hezard
Fire Hessaid
Badden Ralenge of Business 7750-30-4 Yes No No No No CWA - Vennedous Guerallies CWA - Yorks Polistanes CWA - Principy Polistanes X Net applicable Not applicable anticents Hisraectory Peronglescin Whole Stock talend WHOLE Hunard Class D1B Toxic custerials E Corroalve material

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Page 6/7

Revision Data 24-Feb-2014

Ecotoxicity
Do not empty into drains.

Component	Freehwater Algee	Preshwater Fish	Microlon	Weler Flex
Magnessum sufficie	2706 mg/L EC60 = 72 h	18000 mg/L LCS0 84 h	= 84930 regit, ECS0 Photobademen phosphoreum 30 mm	1700 mgrt, ECS0 = 24 h 266.4 - 417.3 mgrt, ECS0 48 h

Bloscoumulation/ Accumulation No Information systlable No information available

Commission Commission

Chernical waste generators must determine whather a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate disaellicans.

Contract of the Contract of th Not regulated TDG IATA

IMDG/INO

Lagranic

2. - Listod

E. - Holdcribs a substance that is the subject of a Bection 5(s) Consent order entire TSCA.

F. - Indicates a substance that is the subject of a Bection 5(f) Fluto soulse TSCA.

H- - Indicates a polymeric substance contabling no free-redical Indicate in its investory name but is considered to cover the progress rates but may for writing lighterine regardless of the amounts used or the anti
R- - Indicates a colorance that is the subject of a Bection 6 risk management ratio order TSCA.

B- - Indicates a colorance that is the subject of a Bection 6 risk management ratio order TSCA.

B- - Indicates an obstance that is the subject of a Bection 6 risk management ratio order TSCA.

T- - Indicates an admission that is the subject of a Bection 4 tear (and enter TSCA.

T- - Indicates an admission that is the subject of a Bection 4 tear (and enter TSCA.

T- - Indicates an assempt opyleme that has a sunsible -terrange malecular valgit of 1,000 or greater.

Y1 - Indicates an assempt opyleme that it is polyment and is made only from reactions because the appendix for the consumptions one of the displaying or than 5 for the consumptions one of the displaying or the first or consumptions on of the displaying or the first the consumptions one of the displaying or the first the consumptions one of the displaying or them to be consumptions one of the displaying or them to the consumptions one of the displaying or them to the consumptions one of the displaying or them to the consumptions one of the displaying or them to the consumptions one of the displaying or them to the constitution of the displaying or them to the consumption or the constitution of the displaying or them to the constitu

Page 5/7

rision Data 24-Feb-2014

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 26 CFR 1910.1200 to align with the Globally Harmonized Byetem of Classification and Labeling of Chemicals (GHS).

i provided on this Setely Data Sheet is correct to the heet of our knowledge, intervention and belief at the data.

The intervention gives is designed only as a guide for sets handling, use, processing, strongs, dispasal and release and is not in the considerant as a neurostry or quality specification. The information has specific sealants designated and may not be valid for such material used in continuation with any other representations.

End of SDS

U.S. Federal Regulations

Revision Date 24-Feb-2014

TBCA 12(b) Not or plicable Not applicable

BARA 313

9ARA 211/212 Hazardose Categorization Acute Health Hazard Chronic Health Hazard Five Hazard Seddon Reinzer of Presente Hazard Reactive Hazard

Not applical Clean Air Act Not applicable

U.S. Department of Transportation Reportable Quantity (RQ); DOT Marine Pollutant DOT Severe Marine Pollutant

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations

Carestee
This product has been classified in accordance with the lexand criteria of the Controlled Products Regul
MSDG contains oil the information required by the CPR.

MIS Huzard Class

to one to the second

Prepared By

24-Feb-2014 24-Feb-2014 24-Feb-2014 Creation Data Revision Data Print Data

Page 6/7

Product Name fron(III) nitrate nonahydrate

AC423710000; AC423710030; AC423710050; AC423710100; AC423715000 Cet No. :

Ferric nitrate Laboratory chamicals Uses advised against No information available Details of the aspoller of the salety data about.

Creation Date 24-Dec-2009

Entity / Business Hame Acros Organics One Reagent Lane Fair Lawn, NJ 07410 Emergency Telephone Number For Information UB call: 001-80-ACROS-01 / Europe call: >242 14 57 62 11 Emergency Number UB:001-201-796-7100 / Europe: -302 14 57 62 89 CHEMTREC Tel. No.UB:001-800-424-8300 / Europe:001-703-527-3887

- 1-10 - 4- - The reduced - 1- 12 Cheartification.
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Diskizing solids 9th Corresion/irritation Berlous Eye Damage-Eye Initation Specific target organ toxicity (single exposure) Target Organs - Respiratory system. Category 3 Category 2 Category 2 Category 3

Label Florosets

Page 1/8

vision Date 10-Apr-2015

No information makehin

Not applicable

No data evaluble No data evaluble Orbito

Mafurganic material may cause fire. May ignite combustibles (wood paper, oil, clothing, etc.). If does not turn but may decompose upon heating to produce conceive and/or toxic fumes.

recognic visites (visite). Protective Egisphreent and Preventions for Flexifighters. As in any live, were self-curtained breathing apparatus pressure-demand, MSHANIOSH (approved or equivalent) and full protective gaze.

ment and Chen Keep away from clothing and other combustible materials. Sweep up or vacuum up spill and collect in substate container for disposal. Avoid dues formation. Sook up with inex absorbers material. Keep in what

Heruting

Wear personal protective equipment. Ensure adequate ventilation, Avoid dust formation, Do not get in eyes, on also, or on citativing. Do not breath adust. Do not legist. Keep away from citativing and other combustible and other accelerations.

Keep containers tightly closed in a dry, occi and well-ventilated place. Do not store near combustive materials, Store under an inert atmosphere.

PARTY IN THE PARTY Component Iron(III) releate nunshydrate Farns nitrate OBMA PEL (Vecaled) TWA: 1 regimi (Vecaled) TWA: 1 regimi Herico CEL (TWA) TWA: 1 mg/m²

and any exposed skin thoroughly siter handling vestprotective clothingleys protection/tace protection strumelysathistic superatures for it is a web-verifished erise or in a web-verifished erise subsparks/pen latense/hot surfaces. - No amolding on clothing/ other combustible materials in a world midnly with combustibles.

Inhabitation

If IMPALED: Remove victim to fresh air and teep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician it you feel unwell

Sides
If ON SKIN: Wash with plenty of soap and water
if skin inflation occurs: Get medical advisatoria sion
Take off contaminated clothing and wash before reuse

Fine Exercises counting and waster count recent Fine ESS Rives cautiously with water for several intruves. Remove contact lenses, if present and easy to do. Continue rinsing If eye infration pensions: Get medical advice/altention Fire

h case of fire: Use CO2, dry chemical, or loam for extinction

in case of the: Use CUZ, dry chemical, or balle for extinction Storage Storage

- 64
260
eyelide, for at least 18 minutes.

Page 2/8

Do not include vomiting. Obtain medical attention.

WA: 1 mg/m²

ACBBH - American Conference of Developmental Industrial Programatic OBMH - Decognition dishiply and Health Administrations WINDER DULF - The Material Industria for Conquisitional Stating and Health Immediately Deriganism to Life or Health

ts No information available. Treat symptomatically

Engineering Mesoures Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate verification, capacitally in confined areas.

Personal Protective Equipm

We ar appropriate protective sympleces or chemical safety goggles as described by OE-14's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.

Wear appropriate protective gloves and clothing to prevent skin cup

Respiratory Pretection Handle in accordance with good industrial hygiene and safety precioe. Hydera Massures

Solid
Purple
Odorless
No information available
No information available
47 °C / 116.8 °F
No information available
Not applicable
Not applicable
Not applicable
Not applicable No data avalleble No data avalleble negligible negligible 1.680 Soluble In water No data avalleble Not applicable Not applicable Not applicable

Oxidizer: Contact with combustible/organic material may cause fire. Hygroscopic.

netton. Incompatible products. Excess hest. Combustitie meterial. Expos

Strong solidzing agents, Combustible meterial, Organic materials, Strong reducing agents

Comparem Pyrelineter Algae Produceter Fish Microtics West Plan
Face copies

Not lated 30 mgs, LCIO 95 h Met lated Ric taled

Ric taled
Ric taled
Ric taled
Ric taled
Commission on Disposibility
No information puralishing
No information evaluation.

Page 5/8

Revision Date 10-Apr-2018

Not applicable

CENCLA This meterial, as supplied, contains one or more substances regulated as a hazardox Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 502)

Component	Historiaus Bulistanios HGs	GERCLA EHS PON
Fantc nitrate	1000 fb	
California Proposition 65 This pro	iduct dises not centally any Proposition 65 ch	erricula

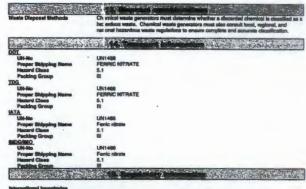
Component	Managementin	Manu Josephy	Pennsylvenia	Mireda	Phods follows
trons(HE) referate monetryckrate		×	×	×	K.
Ferric nitrate	X	X	X	×	X

effied in accordance with the heaved criteria of the Controlled Products Regulations (CPR) and normation required by the CPR



tron(III) nitrate nonshydrate

on Date 10-Apr-2015



Component	TSCA	DEL	NDSL.	EINECO	ELINCS	NLP	PICCS	ENCS	AICS	HECSC	KECL
Iron(III) nitrate nonehydrate					- 1		X	4.	×	X	
Iron(III) nitrate nonahydrate Ferric nitrate	X	X		233-800-5	-		X	X	X	X	×

Not applicable TRCA 12(b)

Component	CA0-No	Wedger %	SARA S10 - Viceshold Values 15
bon(III) nitrate nonafyrirate	7788-61-8	365	1,0
Perilic nitrate	10421-40-4		1,0

SARA 211/212 Hezurdoue Celegorizatic n

...... Page 6/8

iron(III) nitrate nonehydrate		Revision Date 10-Apr-2015
	Thromo Fisher Scientific Email: EMSDS.PA@themolisher.com	
Creation Date Revision Date	24-Dec-2009 10-Apr-2016	

10-Apr-2016
The Southern has been updated to comply with the US OSHA HazCom 2012 Stars replacing the convert legislation under 20 CFR 1910.1300 to align with the Globally Hazeverland System of Classification and Labeling of Chemicalis (0148)

End of SDS



SAFETY DATA SHEET

Revielon Date 10-Apr-2014 Creedon Date 09-Jun-2009 Product Nama Hydrogen Peroxide 3%

Cat No. :

H312-4; H312-500; H312P-4; H312SAM-1; H312SAM-2; H312SAM-3; H324-500; XX32455GAL; XXH31212OGAL; XXH31255GA

Hydrogen dioxide; Hyperoxide (USP/Certified) Laboratory chemicals.

Uses advised against No Information available Details of the supplier of the patety data sheet.

Emergency Telephone Number
CHEMTREON, Inside the USA: 800-424-9300
CHEMTREOB, Outside the USA: 001-703-527-5857

Chanelfication.
This chamical is considered hazardous by the 2012 OSHA Hazard Communication Standard (28 CFR 1910.1200)

tous Eye Damage/Eye Initiation

Category II

Signal Word Denger



Page 1/8

Revision Date 10-Agr-2014

Keep containers tightly closed in a dry, occil and well-verificated place. Keep away from direct annilight.

A CAMPAGE TO THE PARTY OF THE P

Component	ACBIH TLV	OSHA PEL	NEOSH IDLH
Hydrogen percede	TWA: 1 ppm	(Veceled) TWA: 1 ppm (Veceled) TWA: 1.4 mg/m² TWA: 1 ppm TWA: 1.4 mg/m²	TWA: 1.4 mg/m²
Acetic sold	TWA: 10 ppm STEL: 16 ppm	(Vacalind) TWA: 10 ppm (Vacalind) TWA: 25 mg/m² TWA: 10 ppm TWA: 25 mg/m²	TWA: 10 ppm TWA: 10 ppm TWA: 25 mg/m² STEL: 15 ppm STEL: 37 mg/m²
Component	Quebec	Mexico CEL (TWA)	Ontario TWAEY
Hydragen peroxide	TWA: 1 ppm TWA: 1.4 mg/m²	TWA: 1 ppm TWA: 1.5 mg/m ³ STEL: 2 ppm STEL: 3 mg/m ³	TWA: 1 ppm
Acetic soid	TWA: 10 ppm TWA: 25 mg/m² STEL: 15 ppm	TWA: 10 ppm TWA: 25 mg/m² 6TEL: 15 ppm	TWA: 10 ppm STEL: 15 ppm

Ensure that eyewesh stations and safety showers are close to the workstation location Ensure adequate verification, especially in confined areas.

Page 3/8

Personal Protective Equipment

Bidn and body protection

Wear appropriate protective eyeglesses or chemical safety goggles as described by OSHA's eye and lace protection regulations in 29 CFR 1910.133 or European Standard EN166.

Wear appropriate protective gloves and clothing to prevent skin exposure.

Revision Date 10-Apr-2014

Wash face, hands and any expose I skin thoroughly after handling Wear protective gloves/protective cluthing/eye protection/face protection

Skin
IF ON SKIN: Wash with plenty of soap and water
If skin initiation occurs: Get medical advice/stiention
Take oil contaminated clothing and wash before reuse

Eyes

**P NEYES: Rinne cautiously with water for several minutes. Pleasure consect lenses. If present and easy to do. Continue rinsing
if yet present such exhaustic persists: Get medical advice/intention
if yet instation persists: Get medical advice/intention
if yet instation persists: Get medical advice/intention
if yet instation persists.

**Research and exhaustic advantage of 1980(S).

New Identified.

Control of the second second								
Component	CAS-No	Weight %						
Water	7730-18-5	97						
Hydrogen peroxide	7722-84-1	3						
Acetic acid	64-19-7	\$1						

Planse transellately with plenty of water, also under the syelide, for at least 18 minutes. Obtain medical attention. Eye Contact

Skin Contact Weeh off immediately with plenty of water for at least 15 minutes. Get medical attention immediately it symptoms occur.

Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if amendation occur.

Do not include vorniting. Obtain medical attention.

Rost Important symptoma/effects Cisuses eye burns.
Trest symptomatically

No information available

ecific Hazards Arising from the Cremical encombustible. Containers may explode when heat

Hazardous Combustion Product :

oxygen Protective Equipment and Prone Jilices for Firefighters As in any fire, wear self-contained prestricy apparatus pressure-demand, MSHARNOSH (approved or equivalent) and full protective gene.

Page 2/6

Roylelon Date 10-Apr-8014

Liquid
Clear
Silipi
No Information available
No Information invalidable
No Information available No data evaluable
23.3 mmHg @ 30°C
> 1.00 (Air = 1.0)
1.00 Soluble in water
No data evallable
No information availab
No information availab

ity ster Formula ster Weight

No re known, based on information available

Light sensitive.

Incompetible products. Excess heat, Exposure to light.

mostible Meterials Powdered metals, Powdered metal salts.

Hazardous polymertzation dose not occur. None under normal processing.

non Teachy.

L050 Dermail LC50 Inhalation >2000 mg/kg (Rabbit) 2 g/m³ (Rat) 4 h 1060 mg/kg (Rabbil) 11.4 mg/L (Rat) 4 h

cts as well as chronic effects from short and long-term exposure.

Severe eye Initant

Page 4/8

Hydrogen Percention 376

Beneathcollon

No information available

Convingantially

This table basher information stretches whether each agency has fisted any ingredient as a cardringen.

Convingantially

This table laster information available

Note 1979

Note 197

Page 5/8

	ment	Specifically R	egulated Chemicals		(Highly Hazardoue Chemicals		
Hydrogen				10	7500 to		
ZERCLA Not material, an augustied, invironmental Response (contains one or mor Compensation and Li	substances regula soliby Act (CENCL)	ted as a hazardous est (40 CFR 302)	atance under the I	Comprehensive		
Comp	coand	Homerston	a Bobelacous Pills	CHRC	LA EHS ROL		
Hedrogen	perceido				1800 to		
Acetic	acid .		neer b				
Italo Right to Know	No.	Non-James	- Brondwin I	Marie	T Block like		
Component Weter		- interest	- X	-	Treasure treasure		
Hydrogen perexide	×	×	×		×		
Agetic acid	X	×	X		N N		
Injurtable Quertity (RQ): XXT Mache Polistert XXT Severe Mades Polist LS. Department of Home (No product contains the I	net H	**					
	Compensat		DHS Chemical Facility Anti-Terrorism Standard				
	fragen perculsie		2000 lb STQ (concentration of a	heat 30%)		
Her International Repu	halflame						

(7)

npared By Regulatory Affairs
Thermo Parker Soleratilic
Ernell: EMS DS. RA @thermofisher.co

wedlen Dale 09-Jen 2000 erteken Dale 10-Apr 2014

Province Summery
This Gournann has been updated to comply with the US CSHA HacCorn 2012 Standard populating the covered legislation under 20 CFH 1910.1200 to object with the Clinically Hearnman And Systems of Clinicallin

Hydrogen Percelda 3%

Indian Data 10.4m.2014



Waste Disposel Methods

Chemical westing gravestors must determine whether a disposed chemical in chemical in acceptance of the control of th

DOJ. Not regional Triple and Trip

International Investorie

Component	TECA	DSL	HD8L	EMECS	ELINCS	NLP	PICCE	ENCS	AJC8	RECSC	KECL
Water	X	X		231-701-2	-		X	-	X	X	X
Hydrogen percodde	X	X	-	231-766-0			X	X	X	X	X
Acetic acid	X	×	-	200-860-7	-		X	X	×	X	X

Logonal: Y. Lister

E - Indicates a substance that is the subject of a Bestien S(s) Consent order under TSCA.

N - Indicates a polyments audidence containing no two nation indicates in its inventory name but is considered to cover the dealgrain polymer made with any two-cediest indicater reportless of the encount used.

S - Indicates a substance that is ide: titled in a proposed or that Significant New Use Rule
T- buildrates a substance that is the substant of a Section A test and substant TST A

T - Indicates a substance many! I am reporting arefar the investory Update Rule, i.e. Partial Updating of the Till

303 - Indicates a substance energy I can reporting swater the breaktry Update Rule, La. Partial Updating of the TSGA from Production and Site Reports (40 CP) 710(0).

Y2 - Indicates an exempt palyment is at a 2 palymeter and is made only from resoluted brainful in a openitied list of low concern reactions that comprises one of the oligibility - which for the ecomption rule.

U.S. Federal Residetions

TBCA 12(b) Not applicable
BARA 319
Not applicable
SARA 31/312 Heardors Cutegor/testion
Acute Health Heard
Chronic Health Heard
Ples fitamed
Builden Released
Ples fitamed
Roy Heard
Roy Heard
Roy Heard
Roy Heard
Roy Heard

Component	CWA - Hammedown Selectments	CWA - Reportable Quantifica	CWA - Trado Pollutorilo	CWA - Priority Pullstante
Acertic solid	×	8900 to		•

Cheen Air Act Not applicable

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Hydrogen Peroxide 3%

Revision Date 10-Apr-2014

The intermedical provided on this Solety Oaks Wheel in convent to the best of ear haveholds, intermedical power in dealing of the production. The intermedical power is designed only as a public for early handling, use, proceeding, intermedical production, the intermedical power is a quiet for early or qualify operation. The intermedical revolves only to the specific nesterial discignized and may not be valid for each material used to combinate with any other meterial or is say process, unless upon "the first test."

End of SDS



SAFETY DATA SHEET

Revision Date 15-Dec-2015

mile Nitiric acid (65 - 70%)

Cat No. :

A198C-212, A200-212, A200-212LC, A200-500, A200-500LC, A200-612GAL, A200C-212, A2008-212, A200S-212LC, A200S-500, A200SI-212, A467-1, A467-2, A467-250, A467-500, A463-212; S719721

Azotic acid; Engraver's acid; Aqua tortis

Company Rather Scientific One Resport Lane Fair Lawn, NJ 07410 Fel: (201) 796-7100

Emergency Telephone Number CHEMTREC®, Inside the USA: 800-494-9300 CHEMTREC®, Outside the USA: 001-708-527-3887

saffich. Intrical is considered hazardose by the 2012 OSHA Hazard Communication Blandard (29 CFR 1910.1200)

Corresion/initiation
us Eye Damage/Eye Initiation
illic target organ toxicity (single expi
at Organs - Respiratory system.

Stymel Word Danger

Page 1/9

Mitric acid (65 - 70%)

Revision Date 15-Dec-2015

date medical attention is required. Wash off tremediately with plenty of water for of least 15 minutes. Remove and wash contaminated clothing before re-use. Call a physician bronzelasely.

If breathing is difficult, give oxygen. Do not use mouth-to-mouth sestiod if victim ingested or Inhalad the solutionos; give artificial respiration with the aid of a poolen neak equipped with a one-way valve or other poper respiratory medical device. Remove from exposure, lie down. Cell a physician invendedinal.

Do not linkups vorniting, Never give anything by mouth to an unconsolous person. Clean mouth with water. Call a physician interedistrily.

Causes laure by all exposure routes. Ingestion causes severe ewelling, severe damage to the delicate flasure and danger of perforation: Product is a convolve material. Use of questic lawage or emeals to contralivations. Possible perforation of atomach or excepting should be investigated. Treat symptomization.

Shiftable Entimulations fileds COs dry chemical, dry sand, alcohol-resistant barn.

No information modelship

The Artising from the Chemical area of initiating genes and vepors. The product ceases burns of eyes, skin and mucous imposition can lead to release of initiating genes and vepors. The product ceases burns of eyes, skin and mucous "Autom: Corriact with combustibiologaric material may cause tire, likey lights combusibles (wood paper, oil,

Mezandous Careleustion Products
Nitogen code (NOC) Thermal decomposition can lose to release of initiating gases and vapors
Productive Engine and Contract Thermal decomposition can lose to release of initiating gases and vapors
Productive Careleus and Contract Description appearant pressure-demand, MBHARICDH (approved or equivalent) and full
contentive caser. Thermal decomposition can lead to release of initiating gases and vapors.

Personal Processions

Environmental Processions

Environmental Processions

Environmental Processions

Should not be released into the environmental Processions

Should not be released into the environment, Do not flush this surface water or senhary sever system. See Section 12 the additional coolingial Information.

Page 3/6

ods for Contelment and Clean Sost up with inert absorbers material. Keep in suitable, closed containers for disposal Sweep up and shoved into authobs containers for disposal.

Mitric acid (65 - 70%)

our no unserne disatifium/signathrisi/vapore signity
Wash boo, hands and any sepses all six thoroughly after handling
Wass protective gloves/protective Jothing-type protection/size protect
Was only outdoors or in a weet-wer- "lested a six a
Keep away from healthquisidepen Jemes-frost surfaces. - No amolting
Keep Store were from citathrigh of a combustifie manaerulas.

Take any precaution to avoid mish g with combustifies materials.

Take any precaution to avoid mish g with combustifies to
Keep only in original consulaines. Keeprotore lawey so not missing with combustones. Take any precaution to avoid missing with combustones. Keep only in original container. Response immediately call a POISON CENT 3R or doctor/physician.

terinsection

IF 9NHALED; Remove victim to tresh air and keep at sest in a position comfortable for breathing

assure
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rines also with water/shower
Wash contaminated clothing before reuse

Wash contaminated clothing before reuse types If IN EYES: Plines caudously with water for several minutes. Remove contact lenses, it present and easy to do. Continue rinsing If IN EYES: Plines caudously with water for several minutes.

Ingestion
IF SWALLOWED: Rinse mouth, DO NOT Induce vorsiting

Fire in case of fire: Use CO2, dry chemical, or toam for extinction

Spills Absorb spillage to prevent material damage

Store in a dry place

Dispose!
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HHOC)...
None identified.

Unknown Acute Testisity .7 percent of the misture consists of ingredient(s) of unknown acute turicity

Component	CAS-No	Weight %
Nitric acid	7697-37-2	86 - 70
Water	7732-18-6	30 - 35

Immadiate medical attention is required. Show this selecy data short to the doctor in

fately with plenty of water, also under the oyelids, for at least 15 minutes. Eye Contect

Page 2/9

Miric sold (85 - 70%)

Revision Date 15-Dec-2015

Revision Date 15-Dec-2015

Heweting

Use only under a chamical fame hood. Weer personal protective equipment. Do not get in eyes, on aich, or on citathing. Do not breast to be not breasthe vepora or apray mist. Keep eyes, or hoo motivities and other computable meaning.

Keep containers tightly closed in a cool, well-ventilated place. Do not store reser combustitie materials.

Component	ACGIH TLV	CONA PEL	MOSH SOLH
Minc and	TWA: 2 ppm STEL: 4 ppm	(Vacated) TWA: 2 ppm (Vacated) TWA: 5 mg/m² (Vacated) STEL: 4 ppm (Vacated) STEL: 10 mg/m² TWA: 2 ppm TWA: 5 mg/m²	TVIA: 25 ppm TVIA: 2 ppm TVIA: 5 regim BTEL: 4 ppm BTEL: 10 regim
Component	Quebec	Mesico Oliz. (TWA)	Centerio TSIME
Ninc and	TWA: 2 ppm TWA: E.2 region 6TEL: 4 ppm STEL: 10 region	TWA: 8 ppm TWA: 6 mg/m² STEL: 4 ppm STEL: 10 mg/m²	TWA: 2 ppm STEL: 4 ppm

Personal Protective Equ

Eye/face Protection

Skin and body pro

Wear appropriate protective syspheses or cherrical sofety gaggles as described by OSHA's eye and face protection regulations in 28 CFR 1910.123 or European Standard EN186. Tightly fitting safety gaggles, Face-shield.

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Stein EN 140. Use a NICSHMESHA or European Standard EN 148 approved respirator il excosure limits are exceeded or ill inflation or other symptoms are experienced.

Hygiene Messures

Ké. p away from tood, difek and animal leeding stalfs. When using, do not set, drink or an ake. Contaminated work obtaining should not be allowed out of the wortsplace. Providi req, also cleaning of equipment, work rear and coloring. Avoid contest with siles, eyes and cib hile, For environmental protection remove and wash all contaminated protection on glammar bloom evue. Were stalked glooms and eyerface particular on glammar bloom evue. Were stalked glooms and eyerface particular and the second stalked of the second systems of the second second protection.

te Liquid Cher Colorines, Light yellow Blavorg Anold No information available < 1.0 (0.116)

Incompatible products. Combustible material. Excess heat. Exposure to air or moisture over protonged periods. tible material. Strong bases, Reducing agents, Metals, Powdered metals, Organic s, Addelysies, Alcohole, Cyseides, Anseonia, Strong reducing agents maktion: Products Nitrogen oxides (NCs), Thermal decomposition can lead to release of intelling gases and vapors Hazardous polymerization does not occur. None under normal processing.

Acade Toxicity.		
Product Information		
Oral LD60	Superi on ATE date, the classification orbits are not met. ATE > 2000 mg/kg.	
Dermel LDS0	Seped on ATE date, the classification criteria are not met. ATE > 2000 mg/kg.	
Manner E C'60	Second on AVE date the elemethration reliable are not met ATF v. 90 mod.	

| Notice | Little Demont | LCDD Sheletion | LCDD Sheletion | LCDD Sheletion | LCDD Sheletion | Notice | LCDD Sheletion | Notice | Not Stated | Not Stated | LCDD = 2500 ppm, (Plot) 1h | Water | Not Stated | Not Sta

Compas severe burns by all exposure toutes

No information available

The table below indicates whether each agency has listed any ingredient as a servine Component CAS-No IARC NTP ACGIN CINA Mexico

Page 5/9

Minric acid (65 - 79%) Revision Date 15-Dec-2015

Proper Shipping Name HITHIC ACID
Hazard Close 8
Suboldiny Hezard Close 8.1
Packing Group
8 Proching Group
BIGGARIO.
UM-800
UM-800
Proper Shipping Name
ATTRIC ACID
Subskillery Rezard Close
Fundam Group

5.1

All of the components in the product are on the following inventory field: X = found

Component	TSCA	DBL	NOGL.	EMECS	ELHCS	NLP	PICCS	BHCS	AICS	ECSC	KECL
Nitric acid	X	X		E31-714-2			X	X	X	X	X
Water	X	×	-	201-791-2			X		X	X	X

- Listed

- Indication a substitution that is the eachpoint of a Boothen S(s) Connecti order under YBCA.

- Indication a substitution that is the outport of a Boothen S(s) Posts made: TBCA.

- Indication a pulyment's estimations contribing an inversable if institution to the Inventory name but in consultance or indication as grantered public establishmen.

- Indication a substitution are command PBD consideration.

- Indication a substitution that is little endplored or Boothen of this management and on order TBCA.

- Indication a substitution that is little endplored or Boothen of their Boothen State United Residents on the Indication as produced from Boothen State Into ender TBCA.

- Indication a substitution amount their representing earlier the benefitive Spatient Plant (Ind. Particle Updating of the TBCA little or produced and the Indication and PBLA.)

1. Indication an enemant polymer than this is insurince-average maleuralest religible of 1,880 or greater.

1. Indication are command polymer than this is insurince-average maleuralest religible of 1,880 or greater.

1. Indication are command polymer than the an approacher could be made the TBCA little or greater.

TBCA 15(k) Not applicable

SARA 213 Worlgat % SARA 311 - Threehold Value % 61 - 79 1.8 CARAN 7007-67-2 65 - 70 Ninic aski

AAA 211/312 Hearn'd Categories
Acute Meeth Heard
Chrenic Heath Hazard
Fire Steamed
Buddon Release of Prosoure Hazard
Reactive Negard Yes Yes No No Yes

CWA (Clean Water Act)				
Component	CWA - Huanedous	CWA - Reportable	CVRA - Tools Pedatents	CWA - Printry Polisiants
10.1	- British	Committees.		
Princ acre	Α	1000 10		

Clasin Air Act Not applicable OSHA Coopelanal Selety and Health Administration Nitric acid (65 - 70%) Ninc and 7987-57-2 Not lasted Not lasted Not below Not based Not b No Information available. No information available. The toxionisplost properties have not been totly investigated. 医体系的 "此"。 Companied Productor Algan Presidenter Fish Microbian

Micro and Son based LOSC: -72 regd, 96h Not lasted
(Sendorans affects) Wasta Disposal festionals

Of vinical wasta generators must determine whether a discorded character in classified as a least endous waster. Other than whether a waster generators must also contain local, regionst, and pas oner hazardous waster explainters to enume complete and accordate classification. pat onel hazardous waste regulation to ensure conglete and accurate classification.

| Internal Colors | Internal Colors

Page 8/9

Hitric sold (65 - 70%) talon Date 15-Dec-8015

Component Specifically Regulated Chemisels Signly Successions Chemisels Note and 100 September 100 S

Consponent Meanthus Substance 80a CB Nikis and 1000 6
This product does not contain any Proposition 65 Chemicals CERCLA ENB RQs 1600 b

Component	Mossochusette	Since Jerony	Permaylmole	Minole	Ethode Selent
Nitrio acid	X	×	X	X	X
Water			X		

U.S. Department of Homeland Security This product contains the following DHS c versionis:

Component DHS Chemical Pacifity And-Turruntum Standard
Whit AntiDiffer International Sequentias.



公司公司公司公司

12-febr-9208
13-Dec-0215
15-Dec-0215
This deswerrer has been updated to comply with the US 05/44 HaxCern 2012 Starylard seplantly the convent implication under 20 GPR 1910-1220 to align with the Galately Harverthood System of Cleaniflaction and Labeling of Chemicals (SH15)

Disclaimer
The injurnation provided in this Sefety Date Sheet is correct to the best of our brondesige, infurnation and belief of the



SAFETY DATA SHEET

etton Date 15-Feb-2010 Revision Date 10-Apr-2015 Control Control

P317-100; P317-500

Potassium rhodanate; Potassium sulfocyanate; Potassium sulfocyanide; Potassium leothiocyanate (Crystallina/Certified ACS)

scommended Use Laboratory chemicals.

Emergency Telephone Number CHEMTRECO, Inside the USA: 900-424-9300 CHEMTRECO, Outside the USA: 001-703-527-9887

Clessification.
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute crail toxicity Asute demoit toxicity Asute Inhalation Toxicity - Dusta and Missa

Signal Word Warning

Page 1/7

Potassium thiocyanata Revision Date 10-Apr-2015

Not coddlising

Sensitivity to Mechanical Impact No Information available Sensitivity to Static Discharge No Information available

Specific Heserole Anieling from the Chemical Keep product and empty container away from heat and sources of ignition.

Mezer-duce Cembastion Products
Nitragen auties (VICQ Sultre roldes Potassium oxides
Productiva Espainest und Presentions for Pastigations
As in any fire, west self-consistent bestimmt agelerates pressure-demand, MSHARNCSH (approved or equivalent) and full
productive gas. Thermal discomposition can lead to release of britaining gases and vegors.

Plemmability

Personal Precautions
Environmental Precautio

Methods for Containment and Clean Sweep up or vanion up spillage and collect in suitable container for disposal. Avoid dust the tomation.

Keep containers lightly closed in a dry, cool and well-vertilated place. Keep away from acids.

ACGINTLY (Vecetor) TWA: 5 mg/m² MORH IDLH IDLH: 25 mg/m²

OBMA - Docupational Safety and Health Administration HIDBH ISLIF: The Hainnal Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate verifiation, especially in confined areas.

Personal Projective Easts

Wear appropriate protective eyeglesses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1810.133 or European Standard Entes.

Prevention
Wash face, hands and any expose I slin thoroughly after handling
Do not set, drink or snoke when u ing this product
Wase protective gloves/protective libitings-ye protection/face prote
Avoid brestifes (austinums/pastint / reportingsy)
Use only outdoors or in a well-vex lated area.

Inhaletton
IF BHALED: Remove victim to lreah air ar d keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physiciun it you feel unwell

Skin
IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician it you feel unwell

Ingestion
IF SWALLOWED: Cell a POISOM CENTER or doctor/physician If you feel unwell

Compone	and .	CAS-Mo	Weight %
Potagoium thioc	oyenete	333-20-0	>05

Revision Date 10-Apr-2015

diate medical attention is required.

Wash off knowclately with plenty of water for at least 15 minutes. Immediate medical attention is required.

Do not induce varieting. Cell a physician or Poison Control Center Immediately.

Notes to Physician

DIVERSE NO. No applicable

Page 2/7

Potensium thiocyanate Revision Date 10-Agr-2015

Skin and body protection Wear appropriate protective gloves and dothing to prevent sidn exposure.

Follow the OSHA respirator regulations found in 20 CFR 1910.134 or European Sto EN 149. Use a NIOSHMSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if initiation or other symptoms are experienced. Respiratory Protection

Handle in accordance with good industrial hygiene and salety practice

Crystalline Solid
Coloriess - White
Odoriess
No iniomation available
5.3-8.7 5% aq solution
170 - 179 °C / 338 - 354.2 °F

A CONTRACT OF THE PERSON OF TH

Light sensitive. Moisture sensitive. Air sensitive.

Incompatible products. Excess heat, Avoid dust formation. Exposure to light. Exposure to moist air or water, Exposure to air.

Strung oxidizing agents. Acids, Strong bases Hazardous Decompaetton Frod scts Nitrogen oxides (NOx), Sultur oxides, Potazalum oxides

Contact with acids liberates very tools gas. A CONTRACTOR OF THE PARTY OF TH

LD90 Cred LD90 Served LCS0 Inheletion 864 reg/tg (Ret.) Not belief Hop tyled

Revision Date 10-Apr-2015 Products
Delayed and immediate offects as well as chronic effects from short and impetern exposure. No information available The table below indicates whether each agency has listed any ingredient as a cardinogen. Component CAS-No MAPC NTP ACGIR OffsiA Megilion
Potessum Docyanete 323-50-0 No Information available
Not telled Not telle Developmental Effects No Information available. No information available Aspiration hexard No information available The toxicological properties have not been fully investigated. <u>Scattascopy</u>.

Hiermful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment. | Compared Freeheater Alase Preshwater Pain Microtox Water Plea
| Polisavire thiospeanis | Red lated Compared pages | Red lated p Will likely be mobile in the environment due to its water solubility. Waste Disposal Herhods
Chemical waste generators must determine whether a discorded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and resional hazardous waste ge DOI. Not regulated
IDG. Not regulated
Apt regulated
Apt regulated
Not regulated
Not regulated
Not regulated

Page 5/7

Revision Date 10-Apr-2015 Potassium thiocyanata This product does not contain any DHS chemicals.



ided on this Belaty Date Sheet is correct to the best of our knowledge, information and helief at the 1. The information given is designed only as a guide for sele handling, use, processing, storage, sel and release and is not to be considered as a warranty or quality specification. The information scillc material designated and may not be valid for each material used in combination with any other case, unless appointed in the text.

End of SDS

Component	TSCA	DSL	NDSL.	EINECS	ELINCS	MLP	PICCS	ENCS	AICS	NECSC	П
Potassium thiocyanale	X	X	-	206-370-1			X	X	X	X	۳
Legionel: X - Listned E - Indicates a substance the F - Indicates a substance the F - Indicates a substance the F - Indicates a polyment each polymen reads with any time. F - Indicates a substance the B - Indicates a substance the S - Indicates a substance the XU - Indicates a s	relance contractions in the subject of in the subject of in the subject of the su	sining no for regard set of a S d in a pro- act of a S reporting (B).	free-radio free of the ection 8 ri posed or ection 4 to under the	cel initiator i e emount u isk manager final Signifi sit rule und inventory t e molecular	in its inver- sed. ment rule : part New I or TSCA. Spelete Rul weight of	under T Jee Rul In, Le. P	SCA. o ortist Upd	letting of D	to TSCA	inventory	De
Y2 - Indicates on exempt po- that comprises one of the eli U.S. Federal Regulations. TBCA 13(b)		Not app		n rule.				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
BARA 213 Compo			-	CARN	_	_	Webst	-	T nam	A 313 - Th	_
Cempa	and the same			CAS-No Weight %			300	Value			
Potensium ti	Nocyanale		-	209-30-0		>68			1,6	-	
Chronic Health Hanze Fire Hazard Saniden Release of Pr		ard		No No No							
Reactive Hazard											
											_
	-	IA - Herr			Reportation		WA - Toxi	e Pollutur	de CWA	- Pyterby	P
Clean Weter Act Component		IIA - Herri Belorier		CWA -				in Pollutan	da CWA	- Pyterby	R
Clean Weter Ast						• 0			to CWA		P
Clean Water Act Composent Potessium thiocyanate Clean Air Act			ons.	Ou	antities.	1		K		Х	
Clean Water Act Component Potessium thicoyansis Clean Air Act Component			HAPS D	Ou	antities.	1		K			
Clean Water Act Composent Fotessium thiocyanate Clean Air Act			ons.	Ou	antities.	1		K		Х	
Clean Water Act Component Potessium thicoyansis Clean Air Act Component	nate y and Hr alth	Adminis	HAPS D	Ger	Class	e 1 Que	one Despise	K .		Х	
Clean Weise Act Component Potessium thiocyprate Clean, Air Act Component Potessium thiocyp OSHA Cocupetoral Safety Not applicable CERCLA	nate y and Hr alth	Adminis	HAPS D	Ou	Class	e 1 Que	one Despise	K .		Х	
Clean Water Act. Component Potessium thicogenate Component Component Potessium thicoge 08HA Cocupetoval Bufely Not applicable DERCLA Not applicable	nate y and Hr alth	Adminis	HAPS D	Ger	Class	e 1 Que	one Despise	K .		Х	
Clean Water Act. Component Potessium thiocyanab Clean Air Act. Component Potessium thiocya CSHA Cocupational Bufely Not applicable CSRCLA Not applicable CSRCLA Collination CSRCLA	nate y and Hr alth	Adminis	HAPS D X Water	Ger	Clea	e 1 Que	n 65 chem	K .		Х	

Page 6/7

U.S. Department of Transportation Reportable Quentity (RQ): DOT Mastre Pollutant DOT Severe Marine Pollutant U.S. Department of Homeland Security

FLINN SCIENTIFIC, INC. Safety Data Sheet (SDS)

SDS #: 363.00

Revision Date: February 6, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Gelatin

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word N/A

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent laboratory practices should be observed.

Product should be treated as a chemical and is not for consumption as it has been stored with other nonfood-grade chemicals.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Gelatin	9000-70-8	Unspecified	Unspecified	

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA CODE

None

established

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

FLINN SCIENTIFIC, INC.

Safety Data Sheet

Gelatin

SDS #: 363.00

Revision Date: February 6, 2014

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines and amides. Moisture sensitive. Store tightly closed in a cool, dry place.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes. Wash hands thoroughly after handling.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Light amber granules. Faint, sour, animal-like odor. Soluble: Hot water. Insoluble in most organic solvents.

Not for human consumption.

SECTION 10 — STABILITY AND REACTIVITY

Stable nonhazardous substance. Shelf life: Indefinite, if kept dry.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute effects: N.A.
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD₅₀: N.A.
IHL-RAT LC₅₀: N.A.
SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Shelf life:

SECTION 13 - DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding. Flinn Suggested Disposal Method #26a is one option.

SECTION 14 - TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 - OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Filinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the Flinn Science Catalog/Reference Manual for additional Information about laboratory chemicals.

Revision Date: February 6, 2014

SDS SAFETY DATA SHEET RUPERT, GIRBON 4 SPIDER PO BOX 435, HEALDSBURG CA. 1944 TELL (1917 433-4914 FAX: (1917) 433-4946

Name: Green Label Silk Dyes SDS No; All Colors Date: 6/6/15

Chemical, Product and Company Identification
Product Name: Sitk Colors Green Label
Catalog Codes: NA
CASE: NA
TSCA: COMPLIANCE

CUI: NA. Symonym: REACTIVE DYESTUFF Chemical Name: Vinyl Sulphones Chemical Formula: 701, 703, 706, 710, 712, 714, 715, 717, 716, 721, 722, 723, 725, 730, 732, 735, 736, 745, 730, 759

Contact Information:
Rupert Gibbon & Spider
1147 Healsburg Rd
Healsburg Rd
Healsburg Rd
800-442-0455
CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300
International CHEMTREC, call: 1-703-527-3887
For non-amergency sasistance, call: 800-442-0455

Composition and Information on Ingredients

Name REACTIVE DYESTUFF ACEDIC ACID 1.5%

3. Hazaris Identification

Routes of Entry: INHALATION:YES, SKIN ABSORPTION.NO, INGESTION: NO
SKIN CONTACT: YES, EYE CONTACT:YES
Potential Acute Interference Int

4. FIRE AID TREBUILS
General Windomstein: Immediately remove all contaminated clothing
Eye Contact: Wash immediately with large amounts of water to 15 minutes, afting the upper and
lower Set until no evidence of product rement. Get medical sterrition immediately. Do not weer

is urns not evidential or product remisers. Set medical assential infinitelessys. 2014 News Beneals while handling.
set: District with water. Get medical attembon. Never give fluide or induce vomiting if patient solous or has comulations.

SDS SAFETY DATA SHEET RUPERT, CHIBRON & SPIDER PO BOX 415, HEALDSBURG CA, 19448 TEL: (197) 433-977 FAX: (197) 433-976

pH (1% soln/www.j. Bolling Point: NA Melting Point: NA Crifical Temperature: >240 C Specific Gravity: NA pH (1% soln/water): Approx. 4.0 - 5.0 Specific Gravity: N Vapor Pressure: N Vapor Density: NA Volatifity: NA Odor Threshold: N Water/Oll Dist. Cos old: NA Water/Oil Dist. Coeff.; NA lonicity (in Water); NA Dispersion Properties: NA Solublity: +/- 70-100 g/L

Section 10: Stability and Reactivity Data

Stability: stable Instability: Persperature: No thermal decomposition when stored and handled correctly. Conditions of instability: NA Incompatibility with various substances: NA Corrosivity: Corrosive Special Remarks on Reactivity: None expected Special Remarks on Corrosivity: NA Polymer/Lation: NA

Section 11: Toxicological Information

Section 11: Toxicolorical Information
Pouse of Enriy: Not available
Toxicity to Animale:
Animal Toxicity Oral – LDS0 (Ingestion), >3000 mgA (rats)
Fish, LCS0, >100 mg/ (48 hour, Killish)
Eye Effects – Non-Intrant
Sion Effects – Non-Intrant
Sonettarsion – May cause sensitization by skin contact (Guinea Pig).
Chronic Effects on Humans: Not available
Other Toxic Effects on Humans: Not available
Special Remarks on Toxicity to Animals: None
Special Remarks on Chronic Effects on Humans: None
Special Remarks on Other Toxic Effects on Humans: None

Section 12: Ecological Information Economicsty: NA

Ecotoxicity: NA BOD5 and COD: NA

Section 13: Disposal Considerations

Waste Disposal:
Product: If utilization or recycling of the product is not possible, it should be disposed of in accordance with existing federal. M state and local environmental regulations, e.g. by incineralion

sed Packaging: Soiled, empty containers are to be treated in the same way as the

Section 14: Transport Information

SDS. SAFETY DATA SHEET
RUPERT, GIBBON & SPIDER PO BCX 42S, HEALDSBURG CA. 95448 TEL: (707) 433-9577 FAX: (707) 433-999

Inhaletton: If inhaled, remove to fivesh air. If not breathing, give artificial respiration, preferably mouth to mouth. If breathing is difficult, give oxygen. Call a physician.

SMC contact: Remove all contaminated dictiting premodialely. Weah immediately with soap and pierity of water. If a temporary skin reaction occurs, it should be treated as aftergic contact demenstits. Launder curriaminated dictiting before reuse.

Section 5: Fire and Explosion Data Flammability of the Product: NA Auto-Ignition Temperature: IA Flash Points: Not Applicable Flammabile Units: NA Products of Combustion:N

Products of Combusion:N/
Fire Nazards in Presence of Various Substances: NA
Explosion Nazards in Presence of Various Substances: NA
Explosion Nazards in Presence of Various Substances: NA
Fire Fighting Biddle and Instructions: CO2, by Chemical, Foam, Water
Special Remerks on Pres & Explosion Nazards: Freightiers should be equipped with protective
cothing a self-contains. J breaking appearates to protect against potentially tool: a rintation funce
in case of fire or explosion, keep unrecessary people sway, tectiles hazard are & any entity.
Stay upwind, out of low areas, and verifilize Cothed spaces before entering.

Section 6: Accident: J. Retrase Measures
Large or Small Spill: 10 not empty tino drains or waters. Do not touch or walk through the
spilled materials; slop leaft typo can do it without risk. Take up with sand or other noncombustible absorbern frasteri or suitable vacuum and place into labeled sealable containt
For further disposal measures are section 13.

Section 7; Handking and Storage Precautions: in accord with good industrial practice. Handle with care and avoid personal

contact. Storage: In accord with good industrial practice, Handle with care and avoid personal contact.

Section 8: Exposure Controls/Personal Protection
General Protective Measures: Avoid contact with eyes and skin Immediately remove all

Section 8: Exposure Centros/Personal Protection
General Protection Measures: Avoid contact with eyes and skin Immediately remove all
contaminated citching.
Personal Protection:
Eye: Employees should wear protective sye-goggles with aide protection shield.
Eye: Employees should wear protective sye-goggles with aide protection shield.
Eye: Employees should evoid skin contact by wearing protective ciching, Long sleeve shins,
pants, gloves a.g., to PVC or nitritle rubber, and booths are recommended. Additional protections
such as impervious suits are recommended when the potential of dermal contact is significant.
Employees should weath tresh enables and booths are for directing and shower thoroughly
before leaving work. Keep away from food and drink suffs.
Respiratory: Inhalation of dust and serosols must be absolutely prevented by the use of a
NIOSH approved dust respirator.
Other: Wear overalls, apron or other protective clothing.
Personal Protection in Cese of a Large Spiff: Gloves, & other protective clothing
Exposure Limits: NA

Section 9: Physical and Chemical Properties

ecular Weight: NA or: Ranges from Yellow to Dark Brown

SDS. SAFETY DATA SHEET RIPERT, GIBBON & SPIDER PO BOX 425, HEALDNBURG CA. 15446 TEL: (197) 433-1577 FAX: (197) 433-1576

DOT Clessification: 1 x regulated identification: Non-ha zardous link Material Special Provisions fo 'Transport: Frt. Class Package: 5 i

Section 15: Other Regulatory Information
Fadural and State Regulators: Information
TSCA: The components of the product are listed on the TSCA inventory
SARA 313: This product is not subject SARA Title III Section 313 reporting requirements under
40 CFR 372. 40 CFR 972.
SARA 312:
Immediate (acute) health hazard — Yes
Delayed (chronic) health hazard — Yes
Fire hazard — No
Sudden Release of Pressure — No
Reactivity — No
Calfornia Proposition 65: This product does not contain any components currently on the
Calfornia Lib of Known Cercinogens and reproductive Toxins.
Other Regulations: Label in accordance with the EEC directives:
Hazard Symbols: Xn Harmful
R 42/43. May cause semitization by inhelation and skin contact
S22: Oo not breath dust
S24: Avoid contact with skin
S37: Wear suitable gloves
This product is not abject to the German Ordinance that bans certain azo dyes or the 19th
Amendment of the Council Directive 76/769/EEC
WhildIts (Ceroside):
DECL (EEC):

HMIS (U.S.A.): Health Hazard: Yes (Acute) Fire Hazard: NA Reactivity: NA

Pursonal Protection: Gloves National Fire Protection Association (U.S.A.): NA

Section 16: Other Information

The Information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider Inc. does not guarantee the accuracy or completeness thread. Rupert, Gibbon & Spider Inc. research control of this SDS is other or exclusive or exclusive or exclusive to the SDS is other or exclusive to become aware of and underst and 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. 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers Product name

: Sodium azide

: 13412 : Sigma-Aldrich : 011-004-00-7

20028-22-8 CAS-No.

1.2 Relevant identified uses of the substance or mixture and uses advised against : Laboratory chemicals, Synthesis of substances

tdurdfied uses

1.3 Details of the supplier of the safety data sheet

Company

: Sigma-Akirich 3050 Spruce Street SAINT LOUIS MO 63103 USA

+1 800-325-5832 +1 800-325-5052

1.4 Emergency teleph

Emergency Phone # : (314) 778-8555

2. HAZARDS IDENTIFICATION

2.1 Classification of the subs

Celestration of the suscellance or instance (RH Classification in accordance with 29 CFR 1610 (OSHA HCS) Acute toolity, Cral (Category 2), H500 Acute toolity, Orral (Category 1), H510 Specific target capan toolity - repeated auposure, Oral (Category 2), 8 Acute squate Crackity (Category 1), H410 Chronic aquatic toolity (Category 1), H410 ure, Oral (Category 2), Brain, H373

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary state

Pictogram

** Dunger

Signal word

H410

Falsi II swellowed or in contact with skin May cause damage to organs (Brain) through prolonged or repeated exposure it sendlowed. Very toxic to aquelic life with long testing effects.

Do not breathe dust/furne/ges/mist/vep Do not get in eyes, on skin, or on clothing

Signa-Aldich - 19412

6. FIREFIGHTING MEASURES

Extinguishing modin Suitable extinguishing m

Special hezarde arising from the substa Sodium caldes

Advice for firelighters
Wear self-contained breathing apparatus for firelighting it necessary.

6.4 Further information No data available

6. ACCIDENTAL RELEASE MEASURES

Personal procestions, protective equipment and energency precedures.

Wear respiratory profession. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure add

Evacuation previously to settle ereus. Avoid breathing dust.

For personal protection set section 5.

Environmental precessions
Prevent further testage or splittings if safe to do so. Do not let product enter drains. Discharge into the environment must be excelled.

6.2

Bethods and resterists for centalment and obserting up.
Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not tlush with water. Keep in suffa-cioned containers for disposal.

Reference to other section For disposal see section 13.

7. HANDLING AND STORAGE

Preceditions for selfe benditing
Avoid contact with skin and eyes. Avoid formation of dust and serosols. Further proceeding of solid materials may res
in the formation of constaustice dusts. The potential for combustible dust formation should be taken into consideration
before additional processing occurs.

Provide appropriate exhaust vertiliation at places where dust is formed.

For preceditions see section 2.2.

Conditions for sefs storage, including any incompetibilities
Keep container sightly closed in a dry and well-verificated place.
Never allow product to get in contact with water during storage. Do not store year acids:

Heat sensitive. Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic haze

7.2 Specific and use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipular

8. EXPOSURE CONTROLSPERSONAL PROTECTION

8.1 Control param

Components with work place of CAS-No. 28828-22-8 USA. NIOSH Recommended Exposure Limits Potential for dermal absorption USA NIOSH Recommended Exposure Limits mg/m3
Potential for dermal absorption

Do not est, drink or smoke when using this product.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face

week protective glovest protective coloring/ eye protection frace protection.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rince mouth.

IF ON SKRI: Gentity wasth with plenty of soap and water. Immediately call a POISON CENTER or doctor/ physician.

Get medical advice/ attention if you feet unwell.

Take off continentated cirching and wasth before rouse. Collect spillage.

Store locked up.

Dispose of contentar container to an approved weste disposal plant. P802 + P850 + P310

P314 P362 P391 P405

2.3

Hiszends not otherwise classified (HMOC) or not covered by GHS.
Contact with acids liberates very toxic gas.

Sometime Acids may react with lead and copper plumbling to form highly explosive metal sizinies., Rapidly absorbed through sith.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances Formula NgNa 65.01 phroi 26628-92-6 267-862-1 011-004-00-7

Acute Tox. 2; Acute Tox. 1; C= 100 % For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first sid

General advice Consult a physician. Show this safety date sheet to the doctor in attendance. Nove out of dang

If transled it breathed in, move person into tresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wesh off with soap and plenty of water, Take victim Immediately to hospital. Consult a physician.

In case of eye contact. Flush eyes with water as a precaution.

If exultored Never give anything by mouth to an unconcious person, Plinse mouth with water. Consult a physician.

Most important symptoms and effects, both scute and delayed. The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any imms No data available tiste medical attention and special tr

Page 2 of 8

C		USA. ACGIH Threehold Limit Values (TLV)		
Lung de Cerdiec Not clas	rnage Impairment reliable as a human ci	ercinogen		
C	0.290000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)		
Lung de Cardiac Not clas	impairment sellable as a human co	arcinogen		
C	0.110000 ppm	USA. ACG/H Threehold Limit Values (TLV)		
Lung de Cardiec Not clas	rnage impairment selfiable as a human c	ercinogen		
C	0.290000 mg/m3	USA, ACGIH Threshold Limit Values (TLV)		
Lung de Cardiac Not clas	arcinogen			
C	0.11 ppm	USA. ACGIH Threshold Limit Values (TLV)		
Lung de Cerdiec	arcinogen			
C	0.29 mg/m5	USA. ACGIH Threehold Limit Values		
Cardiac	Lung demage Cardiac Impairment Not classifiable as a human carcinogen			
C	0.1 ppm	USA, NIOSH Recommended Exposure Limits		
Potentia	al for dermal absorptio	n		
C	0.3 mg/m3	USA. NIOSH Recommended Exposure Limits		
Potentia	el for dermal absorptio	n		
C	0.1 ppm	USA, OSHA - TABLE Z-1 Limits for Air Conteminents - 1910,1000		
Skin no				
С	0.3 mg/m3	USA. OSHA - TABLE 2-1 Limits for Air Conteminants - 1910.1000		
	tation			

8.2 Exposure controls

Approprieté engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately affur handling the produ

onal protective equipa

Eyelace proteotion
Face shield and setting glasses Use equipment for eye proteotion tested and approved under appropriate
government standards such as NRCBH (US) or EN 196(EU).

tes. Gloves must be inspected prior to use. Use proper glove removal technique (without outer surface) to avoid eith confact with this product. Dispose of conteminated gloves after on with applicable term and good laboratory practices. Wesh and dry lends.

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm

Page 2 of 8

Break through time: 460 min Malerial lested:Dermatrie (ICCL 740 / Aktrich 2677272, Stan Nr)

Option contact Meterial: Hitch subber Meterial: Hitch subber m: Mens nusses um layer Blokmees: 0.11 mm Grouph Gres: 480 min al lesied:Dermit98 (KCL 740 / Aldrich 2877372, Sign M)

indiaminate researchermanne (V.C. 740 / Audita 26/72/2, jaun ki)
diale source: (V.C. Grebét, D.-36/12/4 Eichermani, phone +40 (1)8658-87300, e-mail salmelikcl.de, test method:
ENS74
If used in solution, or missed with offer substances, and under conditions which differ from EN 374, contact the
supplier of the CE approved glows. This recommendation is advisory only and must be evaluated by an
inclusival hygientist and salley officer fermiller with the specific elbastion of substances by our customers. It
should not be construed as offering an approval for any specific use scenario.

Body Presention Complete sail protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the derigenous substance at the specific workplace.

Resignatively production
Where risks assessment shows all-purifying respirators are appropriate uses a full-face particle respirator byte.
Whom risks assessment shows all-purifying respirators are appropriate uses a full-face particle respirator is the
sole means of protuction, uses a full-face supplied air respirator. Use respirators and components tested and
approved under appropriate government standards such as NOOH (US) or 2016 (ED).

Control of environmental expanses

Prevent further instage or splitting if safe to do so. Do not let product enter drains. Discharge into the environment must be smoked.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical pr

Form: crystalline Colour: white No dala availa b) Odour c) Odour Threehold No data available 10 at 65 gf at 25 °C (77 °F) d) pH e) Melting point/freezing 275 °C (527 °F) soint Initial botting point and No data svallable botting range No data available No data available g) Flesh point h) Evaporation rate i) Flammability (solid, gas) The product is not terrenable. - Flammability (solids) Upper/lower flammability or explosive limits No data available it) Vepour pressure i) Vepour density 0.01 hPa (0.01 mmHg) at 20 °C (66 °F) No data available m) Relative density n) Water solubility 1,850 akm3 65 gil at 20 °C (66 °F) - completely soluble o) Partition coefficactanol/water

p) Auto-Ignition 209 °C (596 °F) at 1,013 hPa (760 mmHg)

No component of this product present at levels greater than or equal to 0.1% is identified as a known or antidpated cardinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a curcingen or potential carcinogen by OSHA.

Reproductive toxicity No data available

No data avallable

-Annich - 13412

illic turgel organ toxicity - single exposure via svelishin

Specific target organ tenicity - repeated exposure Oral - May came densige to organs through prolonged or repeated exposure. - Brain

Aspiration tezerd No data available

Additional Inform

Reposited dose Rut - mails and female - Oral - LOAEL : 6 mg/kg toalcity RTECS: VY8050000

Nauses, Headachs, Vomiting, Laboratory experiments in animals have shown sodium azide to produce a prolound hypoteneive effect, dernyalization of myelinated narve filters in the central narvous system, testicular damage, bibliomass, aleate, or injulies, and hepsite and central effect. The best of our knowledge, the chemical, physical, and tostoological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity to lish

mortelity LCS0 - Pirregheles promoles (listhand minnow) - 8.40 mg/l - 98 h (OECD Test Guideline 200)

Toolcity to eigne statio test ECSD - Pseudotóroineriella subcapitata - 0.35 mg/l - 86 h (OECD Test Guideline 201)

12.2 Persistence and degradabilit No data evaluable

12.2 Bloeccumulative potential No data evallable

12.6 Other edverse effects An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to equatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional vests disposal services to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical solventator equipped with an attendourner and scrutcher.

Conteminated packaging Dispose of as urused product.

q) Decomposition temperature 200 °C (572 °F) r) Vecosity r) Explosive properties No data available

Not emplosive Oxidizing properties

9.2 Other safety Inform **Bulk density** 0.6 kglm3

16. STABILITY AND REACTIVITY

10.1 Heactivity No data evaluate

10.2 Chemical stability
Stable under recommended storage conditions.

18.3 Possibility of Immediate reaction No data available

18.4 Conditions to avaid An explosion occurred when a relidance of sodium azide, methylane chloride, dimethyl authoride, and authoric acid whethy consentrated on a rotary evaporator. 18.5 Incompetible meterials Habitata Acids, Acids chanten, Hydrazine, Dimethyl suttate, Inorganic acid chiorides

19.5 Heardown decomposition products
Other decomposition products - No data available
in the event of first see section 6

11. TORICGLOGICAL INFORMATION

11.1 Information on testcological eff Acute testcity No data evaluable

Inhalation: No data available

Dermal: No data availab

No data available

Skin corrector/britation Skin - reconstructed human epiderrals (PhE) Peault: No skin initiation - 15 min

Serious one demagatery irritation Eyes - Bovine comios Result: No eye Irritation - 4 h (OECD Test Guideline 457)

Respiratory or aich sensitivation in vivo assay - Mouse Penuli: Doss not cause sidn sensiti (OECO Test Guideline 429)

Germ cell mutagenicity No data available

IARC: No component of this product pres rel at levels greater than or equal to 0.1% is identified as

Olyman-Addicts - 19412

Page 5 of 9

Page 6 of 9

14. TRANSPORT INFORMATION

DOT (UB)
UN number: 1867 Class; 6.1
Proper shipping name; Sodium azide
Reportable Quentity (RQ); 1000 lbs Packing group; If

Poleon Inhalation Hazard: No

Packing group: II EMS-No: F-A, S-A

MEDG
UN number: 1667 Class: 8.1
Proper shipping name: SODIUM AZIDE
Marine polularityee
MTA

SATA UN number: 1867 Clase: 8.1 Proper shipping name: Sodium axide

Packing group: 8

16. REGULATORY DECIMATION

SARA 302 Compone The following compon

ed by SARA Title III, Seather 202: CAS-No. Revision Date 2002-07-07 Sodum szide SARA 313 Components
The following coraponents are subject to reporting levels establish

field by SARA Title III, Section 212: CAS-No. Feebles Del 2007-07-01 Sodium solde SARA 311/312 Hazards

Rodium azide Pennsylvenia Hight To Know Comp CAB-No. 20029-22-8 Sodium szide

New Jersey Right To Know Components.

CAS-No. 20020-22-8

Sodium azide

California Preg. 66 Components.
This product does not contain any chemicals known to State of California to cause canser, birth delects, or any other construction.

14. OTHER INFORMATION

Full text of H-Distancents referred to under sections 2 and 3.

Acute Tox.

Acute aquatic toxicity

Chronic aquatic toxicity

Felicor - H810

Feli

Mann-Aldah - 12419 Peas 7 of 3 Steam Abbieh - 12412 HMIS Rating
Health hazard: 4
Chronic Health Hazard: Flammability. 0
Physical Hazard 0 NFPA Rating Health hazard. Fire Hazard: Reactivity Hazard:

. . .

Reactivity Hazard: 0

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precubions. It does not represent any pusurantee of the properties of the product. Signma-Adrich Corporation and its Affliates shall not be held liable for any damage resulting from handling or from constant with the above product. See serve, sigma-addrich com and/or the reverse side of invoice or packing stip for additional terms and conditions of sale.

Preparation Information Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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