CLICK CHEMISTRY TOOLS

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Safety Data Sheet

Section 1: Identification of the substance, company and intended use.

1.1 Identification of the substance/mixture

Product No.: 1153, Component I, Hydrazine hydrate
Product Name: Click-&-Go Dde Protein Enrichment Kit

Synonym: Hydrazine, monohydrate

1.2 Identified use of the substance

Identified Use: Laboratory chemicals, manufacture of substances

1.3 Company/undertaking identification

Click Chemistry Tools
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Scottsdale, AZ 85260

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Section 2: Composition/Information on Ingredients

CAS No.: 10217-52-4
Mol. Formula: N/A
Mol. Weight: 32.05
Assay: N/A

Section 3: Hazards Identification

3.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 3), H311

Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

Skin sensitisation (Category 1), H317

Carcinogenicity (Category 1B), H350

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

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

3.2 GHS Label elements, including precautionary statements

Hazard pictograms (GHS-US) :

Signal word	Danger
Hazard statement(s)	
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H350	May cause cancer
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P281	Use personal protective equipment as required.
P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazardous components

Component		Classification	Concentration
Hydrazine hydrate Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No. EC-No. Index-No.	10217-52-4 206-114-9 007-008-00-3	Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H301 + H311 + H331, H314, H317, H350, H410	90 - 100 %

3.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

Section 4: First-Aid Measures

4.1 Description of first aid measures

If inhaled

Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

In case of skin contact

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Obtain medical attention if pain, blinking or redness persists.

If swallowed

Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POSION CENTER or physician if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Swallowing a small amount of this material will result in serious health hazard.

4.3 Indication of any immediate medical attention and special treatment needed

No additional information available

Section 5: Fire Fighting Measures

5.1 Extinguishing media

Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

5.2 Advice from firefighters

Standard procedure for chemical fires.

5.3 Further information

No data available

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4 Reference to other sections

See Section 8 for additional information.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place.

7.3 Specific end use(s)

For research use only.

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Hydrazine hydrate	10217-52-4	TWA	0.010000 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract cancer Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		TWA	0.01 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract cancer Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption		
		TWA	1.000000 ppm 1.300000 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		Skin designation The value in mg/m3 is approximate.		
		C	0.030000 ppm 0.040000 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen See Appendix A 2 hour ceiling value		
		PEL	0.01 ppm 0.013 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		

Engineering measures

Ensure adequate ventilation, especially in confined areas

8.2 Exposure controls

Personal Protective Equipment

Eye/face protection
Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: butyl-rubber
Minimum layer thickness: 0.3 mm
Break through time: 480 min
Material tested:Butoject® (KCL 897 / Aldrich Z677647, Size M)

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

Break through time: 30 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)
data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: Liquid
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	Not Applicable
e) Melting / Freezing points	°C and °F Mixture has not been tested
f) Initial boiling point &boiling range	°C and °F Mixture has not been tested
g) Flash point	96°C (205°F) closed cap
h) Evaporation rate	No data available
i) Flammability (solid, gas)	Non Flammable

j) Explosive limits	Upper explosion limit: 99.99 %(V) Lower explosion limit: 3.5 %(V)
k) Vapor pressure	7 hPa (5 mmHg) at 25 °C (77 °F)
l) Vapor density	1.73 - (Air = 1.0)
m) Relative density	1.029 g/cm3
n) Water solubility	Soluble in water
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

No data available.

Section 10: Stability and Reactivity

10.1 Reactivity

None known

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

Hazardous reaction has not been reported

10.4 Conditions to avoid

Extremely high or low temperatures

10.5 Incompatible materials

Strong reducing agents. Strong bases.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NOx)
Other decomposition products - No data available

Section 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
No data available
No data available
Inhalation: No data available
Inhalation: No data available
Dermal: No data available
Dermal: No data available
No data available
No data available

Skin corrosion/irritation
No data available
No data available

Serious eye damage/eye irritation
No data available
No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available
Laboratory experiments have shown mutagenic effects.

Carcinogenicity

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

IARC: 2B -	Group 2B: Possibly carcinogenic to humans (Hydrazine hydrate)
NTP:	RAHC - Reasonably anticipated to be a human carcinogen. The reference note has been added by TD based on the background information of the NTP. (Hydrazine hydrate)
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
No data available
No data available
No data available
Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

Additional Information

RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Liver - Irregularities - Based on Human Evidence
Liver - Irregularities - Based on Human Evidence

Section 12: Ecological Information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No information available

12.3 Bio accumulative potential

No information available

12.4 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.5 Other adverse effects

No information available

Section 13: Disposal Considerations

13.1 Waste treatment methods

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Section 14: Transport Information

DOT (US)
UN number: 2030 Class: 8 (6.1) Packing group: II
Proper shipping name: Hydrazine aqueous solution
Reportable Quantity (RQ): 1 lbs
Poison Inhalation Hazard: No

IMDG
UN number: 2030 Class: 8 (6.1) Packing group: II EMS-No: F-A, S-B
Proper shipping name: HYDRAZINE, AQUEOUS SOLUTION
Marine pollutant:yes

IATA

UN number: 2030 Class: 8 (6.1) Packing group: II
Proper shipping name: Hydrazine, aqueous solution
IATA Passenger: Not permitted for transport

Section 15: Regulatory Information

SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302:

Hydrazine hydrate, CAS-No.: 10217-52-4, Revision Date : 2007-07-01

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Hydrazine hydrate, CAS-No.: 10217-52-4, Revision Date : 2007-07-01

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Hydrazine hydrate, CAS-No.: 10217-52-4, Revision Date : 2007-07-01

Pennsylvania Right To Know Components

Hydrazine hydrate, CAS-No.: 10217-52-4, Revision Date : 2007-07-01

New Jersey Right To Know Components

Hydrazine hydrate, CAS-No.: 10217-52-4, Revision Date : 2007-07-01

California Prop. 65 Components

WARNING! This product contains a chemical known to the
State of California to cause cancer.

Hydrazine hydrate, CAS-No.: 10217-52-4, Revision Date : 2007-07-01

Section 16: Other Information

Revision date : 12/21/2018

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

Acute Tox. Acute toxicity
Aquatic Acute Acute aquatic toxicity
Aquatic Chronic Chronic aquatic toxicity
Carc. Carcinogenicity
Eye Dam. Serious eye damage
H301 Toxic if swallowed.
H301 + H311 + Toxic if swallowed, in contact with skin or if inhaled.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H331 Toxic if inhaled.

HMIS Rating

Health hazard: 3

Chronic Health Hazard: *
Flammability: 1
Physical Hazard 0

NFPA Rating

Health hazard: 3
Fire Hazard: 1
Reactivity Hazard: 0

Further information

For research purposes only. Not intended for human or animal diagnostic or therapeutic uses.

Disclaimer

The information provided in this Safety Data Sheet is from available published sources and is believed to be accurate to the best of our knowledge at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS