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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : KIT CA-SCRN HBV AMP/DET 96T US-IVD

Mat.-No./ Genisys-No. : 03599779190

Manufacturer or supplier's details

Company : Roche Diagnostics

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Address : 9115 Hague Road

46250 Indianapolis IN

Telephone : 1-800-428-5074

Emergency telephone number:

In case of emergencies: : CHEMTREC 1-800-424-9300 (U.S. or

Canada)

1-703-527-3887 (International)

Recommended use of the chemical and restrictions on use

Restrictions on use : For professional users only.

SECTION 2. HAZARDS IDENTIFICATION

Physical state	liquid

GHS Classification

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section Label elements contains the resulting labelling for the kit.

GHS Label element

Hazard pictograms :





Signal word : Danger

Hazard statements : H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage. H360 May damage fertility or the unborn child.

Precautionary statements : **Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P234 Keep only in original container. P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT

induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off



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immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

P310 Immediately call a POISON CENTER or doctor/ physician.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

Storage:

P405 Store locked up.

P406 Store in corrosive resistant stainless steel container with a resistant inner liner.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Aggravated Medical

Condition

: None known.

Symptoms of Overexposure : No information available.

Carcinogenicity:

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

HBV MMX

GHS Classification

Not a hazardous substance or mixture.

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
glycerol	56-81-5	>= 5 - < 10

HBV Mg2+

GHS Classification

Not a hazardous substance or mixture.

Hazardous components

No hazardous ingredients

BH PS1

GHS Classification

Not a hazardous substance or mixture.

Hazardous components

No hazardous ingredients

BH 4



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GHS Classification

Not a hazardous substance or mixture.

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
sodium thiocyanate	540-72-7	>= 20 - < 30

BIPS1

GHS Classification

Not a hazardous substance or mixture.

Hazardous components

No hazardous ingredients

BI4

GHS Classification

Not a hazardous substance or mixture.

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
sodium thiocyanate	540-72-7	>= 20 - < 30

DN 4

GHS Classification

Corrosive to metals : Category 1

Skin corrosion : Category 1A

Serious eye damage : Category 1

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
sodium hydroxide	1310-73-2	>= 1 - < 5

CN 4

GHS Classification

Not a hazardous substance or mixture.

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
phenol	108-95-2	>= 0.1 - < 1

SB3

GHS Classification

Not a hazardous substance or mixture.

Hazardous components

No hazardous ingredients

SB



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GHS Classification

Eye irritation : Category 2A

Reproductive toxicity : Category 1A

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
N,N-dimethylformamide	68-12-2	>= 30 - < 50

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : Move to fresh air.

If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : Immediate medical treatment is necessary as untreated

wounds from corrosion of the skin heal slowly and with

difficulty.

If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Small amounts splashed into eyes can cause irreversible

tissue damage and blindness.

In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Do NOT induce vomiting.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. Take victim immediately to hospital.

Most important symptoms and effects, both acute and

delayed

: No information available.

Notes to physician : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local



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circumstances and the surrounding environment.

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment

for firefighters

: Wear self-contained breathing apparatus for firefighting if

necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Dispose of rinse water in accordance with local and national

regulations.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

To prevent leaks or spillages from spreading, provide a

suitable liquid retention system.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage. Observe label precautions.

Electrical installations / working materials must comply with

the technological safety standards.



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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

HBV MMX

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
glycerol	56-81-5	TWA (mist, respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (mist, total dust)	15 mg/m3	OSHA Z-1
		TWA (Mist - total dust)	10 mg/m3	OSHA P0
		TWA (Mist - respirable fraction)	5 mg/m3	OSHA P0

HBV Mg2+

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

BH PS1

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

BH 4

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

BIPS1

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

BI4

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

DN 4

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
sodium hydroxide	1310-73-2	O	2 mg/m3	ACGIH



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	С	2 mg/m3	NIOSH REL
	TWA	2 mg/m3	OSHA Z-1
	С	2 mg/m3	OSHA P0

CN 4

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

SB3

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

SB

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
N,N-dimethylformamide	68-12-2	TWA	10 ppm	ACGIH
		TWA	10 ppm 30 mg/m3	NIOSH REL
		TWA	10 ppm 30 mg/m3	OSHA Z-1
		TWA	10 ppm 30 mg/m3	OSHA P0

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Samplin g time	Permissible concentratio n	Basis
N,N-Dimethylformamide	68-12-2	N- Methylform amide	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI
		N-Acetyl-S- (N- methylcarba moyl) cysteine	Urine	Prior to last shift of workwee k	40 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an

approved filter.

Hand protection

Material : Protective gloves

Remarks : The selected protective gloves have to satisfy the

specifications of EU Directive 89/686/EEC and the standard



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EN 374 derived from it. This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection : impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

HBV MMX

Appearance : liquid

pH : 8.8

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : No data available

Lower explosion limit : No data available

Density : 1.013 g/cm3

Solubility(ies)

Water solubility : completely miscible

Auto-ignition temperature : No data available

Thermal decomposition : No data available

HBV Mg2+

Appearance : liquid

pH : 6.6



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Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : No data available

Lower explosion limit : No data available

Solubility(ies)

Water solubility : completely miscible

Auto-ignition temperature : No data available

Thermal decomposition : No data available

BH PS1

Appearance : liquid

pH : 9.5

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : No data available

Lower explosion limit : No data available

Solubility(ies)

Water solubility : completely miscible

Auto-ignition temperature : No data available

Thermal decomposition : No data available

BH 4

Appearance : liquid

pH : 5.0

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Flammability (solid, gas) : The product is not flammable.



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Upper explosion limit : No data available

Lower explosion limit : No data available

Solubility(ies)

Water solubility : completely miscible

Auto-ignition temperature : No data available

Thermal decomposition : No data available

BIPS1

Appearance : liquid

pH : 9.5

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : No data available

Lower explosion limit : No data available

Solubility(ies)

Water solubility : completely miscible

Auto-ignition temperature : No data available

Thermal decomposition : No data available

BI4

Appearance : liquid

pH : 5.0

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : No data available

Lower explosion limit : No data available

Solubility(ies)

Water solubility : completely miscible

Auto-ignition temperature : No data available



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Thermal decomposition : No data available

DN 4

Appearance : liquid

pH : 12.6

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : No data available

Lower explosion limit : No data available

Solubility(ies)

Water solubility : completely miscible

Auto-ignition temperature : No data available

Thermal decomposition : No data available

CN 4

Appearance : liquid

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : No data available

Lower explosion limit : No data available

Solubility(ies)

Water solubility : completely miscible

Auto-ignition temperature : No data available

Thermal decomposition : No data available

SB3

Appearance : liquid

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash



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Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : No data available

Lower explosion limit : No data available

Solubility(ies)

Water solubility : completely miscible

Auto-ignition temperature : No data available

Thermal decomposition : No data available

SB

Appearance : liquid

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : No data available

Lower explosion limit : No data available

Solubility(ies)

Water solubility : completely miscible

Auto-ignition temperature : No data available

Thermal decomposition : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

: No dangerous reaction known under conditions of normal use.

No decomposition if stored and applied as directed.

Conditions to avoid : No data available

Incompatible materials : No data available

Hazardous decomposition

products

: No data available



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SECTION 11. TOXICOLOGICAL INFORMATION

HBV MMX

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Components:

glycerol:

Acute oral toxicity : LD50 Oral (rat): 12,600 mg/kg

LD50 Oral (mouse): 4,090 mg/kg

Acute inhalation toxicity : Acute toxicity estimate : > 30 mg/l

Method: Expert judgement

Acute dermal toxicity : LD50 Dermal (rabbit): 10,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Components:

glycerol:

Repeated dose toxicity -

: Mild eye irritant, Mild respiratory irritant, No skin irritation

Assessment

Aspiration toxicity

Not classified based on available information.

HBV Mg2+



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Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

BH PS1

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity



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Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

BH 4

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate : 3,470 mg/kg

Method: Calculation method

Components:

sodium thiocyanate:

Acute oral toxicity : LD50 Oral (rat): 764 mg/kg

LD50 Oral (mouse): 360 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

sodium thiocyanate:

Remarks: This information is not available.

Serious eye damage/eye irritation

Not classified based on available information.

Components:

sodium thiocyanate:

Remarks: This information is not available.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure



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Components:

sodium thiocyanate:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Not classified based on available information.

Components:

sodium thiocyanate:

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

Not classified based on available information.

Components:

sodium thiocyanate:

No data available

BIPS1

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity



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BI4

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate : 3,470 mg/kg

Method: Calculation method

Components:

sodium thiocyanate:

Acute oral toxicity : LD50 Oral (rat): 764 mg/kg

LD50 Oral (mouse): 360 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

sodium thiocyanate:

Remarks: This information is not available.

Serious eye damage/eye irritation

Not classified based on available information.

Components:

sodium thiocyanate:

Remarks: This information is not available.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

Components:

sodium thiocyanate:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Not classified based on available information.

Components:

sodium thiocyanate:



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Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

Not classified based on available information.

Components:

sodium thiocyanate:

No data available

DN 4

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Causes severe burns.

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Components:

sodium hydroxide:

Genotoxicity in vitro : Test Type: Ames test

Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Components:

sodium hydroxide:

Effects on fertility

Remarks: No data available

STOT - single exposure

Not classified based on available information.

Components:



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sodium hydroxide:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Not classified based on available information.

Components:

sodium hydroxide:

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

Not classified based on available information.

CN 4

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : > 40 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Components:

phenol:

Acute oral toxicity : LD50 Oral (rat): 317 mg/kg

LD50 Oral (mouse): 270 mg/kg

Acute inhalation toxicity : LC50 (rat): 0.9 mg/l

Exposure time: 8 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (rat): 669 mg/kg

LD50 Dermal (rabbit): 630 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks: May cause skin irritation and/or dermatitis.

Components:

phenol:



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Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

phenol:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Product:

Remarks: Causes sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Components:

phenol:

Genotoxicity in vitro : Remarks: In vitro tests showed mutagenic effects

Germ cell mutagenicity-

: In vitro tests showed mutagenic effects

Assessment

Carcinogenicity

Not classified based on available information.

Components:

phenol:

Remarks: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

Components:

phenol:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Not classified based on available information.

Components:

phenol:

Assessment: May cause damage to organs through prolonged or repeated exposure.



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Aspiration toxicity

Not classified based on available information.

Components:

phenol:

No aspiration toxicity classification

Further information

Components:

phenol:

Remarks: Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.

SB₃

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks: May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Product:

Remarks: Causes sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity



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STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SB

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 27.5 mg/l

Exposure time: 4 h

Test atmosphere: vapour Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : 3,750 mg/kg

Method: Calculation method

Components:

N,N-dimethylformamide:

Acute oral toxicity : LD50 Oral (rat): 2,800 mg/kg

Symptoms: Gastrointestinal disturbance

LD50 Oral (mouse): 3,700 mg/kg

Acute inhalation toxicity : Acute toxicity estimate : 11 mg/l

Test atmosphere: vapour Method: Expert judgement

Acute dermal toxicity : LD50 Dermal (rabbit): 1,500 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks: May cause skin irritation in susceptible persons.

Components:

N,N-dimethylformamide:

Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks: May cause irreversible eye damage.



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Components:

N,N-dimethylformamide:

Result: Eye irritation

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Components:

N,N-dimethylformamide:

Species: guinea pig

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:

N,N-dimethylformamide:

Genotoxicity in vitro : Test Type: Ames test

Result: negative

Carcinogenicity

Not classified based on available information.

Components:

N,N-dimethylformamide:

Carcinogenicity - : Animal testing did not show any carcinogenic effects.

Assessment

Reproductive toxicity

May damage fertility or the unborn child.

Components:

N,N-dimethylformamide:

Reproductive toxicity - : May damage the unborn child., Known human reproductive

Assessment toxicant

STOT - single exposure

Not classified based on available information.

Components:

N,N-dimethylformamide:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Not classified based on available information.

Components:

N,N-dimethylformamide:

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.



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Aspiration toxicity

Not classified based on available information.

Components:

N,N-dimethylformamide:

No aspiration toxicity classification

Further information

Components:

N,N-dimethylformamide:

Remarks: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

HBV MMX

Ecotoxicity

Product:

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Components:

glycerol:

Toxicity to fish : LC50: > 100 mg/l

Exposure time: 96 h

Toxicity to algae : EC0 (Scenedesmus quadricauda (Green algae)): > 10,000

mg/l

Exposure time: 7 d

Toxicity to fish (Chronic

toxicity)

: > 1 mg/l

Toxicity to bacteria : EC0 (Pseudomonas putida): > 10,000 mg/l

Exposure time: 16 h

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Persistence and degradability

Components:



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glycerol:

Biodegradability Remarks: The product is miscible in water and readily

biodegradable in both water and soil. Accumulation is not

expected.

Bioaccumulative potential

Components:

glycerol:

Partition coefficient: n-

octanol/water

: log Pow: -2.66

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Remarks

Regulation 40 CFR Protection of Environment: Part 82 Protection of

> Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

HBV Mg2+

Ecotoxicity

Product:

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment: Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a

Remarks Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

BH PS1



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Ecotoxicity

Product:

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Remarks

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

BH 4

Ecotoxicity

Product:

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Components:

sodium thiocyanate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC0 (Daphnia magna (Water flea)): 11 mg/l

Exposure time: 48 h

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Persistence and degradability

No data available



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Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Remarks

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

Components:

sodium thiocyanate:

Additional ecological

information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life

with long lasting effects.

BIPS1

Ecotoxicity

Product:

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Remarks

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

BI4

Ecotoxicity

Product:

Ecotoxicology Assessment



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Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Components:

sodium thiocyanate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC0 (Daphnia magna (Water flea)): 11 mg/l

Exposure time: 48 h

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Remarks

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a

Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

Components:

sodium thiocyanate:

Additional ecological

information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life

with long lasting effects.

DN 4

Ecotoxicity

Product:

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Components:



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sodium hydroxide:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 45.4 mg/l

Exposure time: 96 h

LC50 (Leuciscus idus (Golden orfe)): ca. 7 mg/l

Toxicity to daphnia and other

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 40.38 mg/l

Exposure time: 48 h

Ecotoxicology Assessment

Acute aquatic toxicity

: This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Remarks

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

CN 4

Ecotoxicity

Product:

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Components:

phenol:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 1.75 mg/l

Exposure time: 96 h

LC50 (Carassius auratus (goldfish)): 46 mg/l

Exposure time: 24 h



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LC50 (Oncorhynchus mykiss (rainbow trout)): 5 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 12 mg/l

Exposure time: 24 h

EC50 (Daphnia magna (Water flea)): 10 mg/l

Exposure time: 48 h

EC50 (Daphnia magna (Water flea)): 4.2 mg/l

Exposure time: 48 h

Toxicity to algae IC50 (Pseudokirchneriella subcapitata (green algae)): 150

Exposure time: 96 h

Method: OECD Test Guideline 201

EC50 (Chlorella vulgaris (Fresh water algae)): 370 mg/l

Exposure time: 96 h

Toxicity to bacteria (Pseudomonas putida): 64 mg/l

Ecotoxicology Assessment

Acute aquatic toxicity

: This product has no known ecotoxicological effects.

Chronic aquatic toxicity This product has no known ecotoxicological effects.

Toxicity Data on Soil Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Persistence and degradability

Components:

phenol:

Biodegradability : Biodegradation: 96 %

Exposure time: 28 d

Method: OECD Test Guideline 302

Remarks: According to the results of tests of biodegradability this product is considered as being readily biodegradable.

Biochemical Oxygen

Demand (BOD)

: 1,680 mg/g

Incubation time: 5 d

Chemical Oxygen Demand

(COD)

: 2,300 mg/g

Impact on Sewage

Treatment

Do not discharge product into the aquatic environment without

pretreatment (biological treatment plant).

Bioaccumulative potential

Components:

phenol:

Partition coefficient: n-

octanol/water

: log Pow: 1.46



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Mobility in soil

No data available

Other adverse effects

No data available

Product:

Remarks

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

SB₃

Ecotoxicity

Product:

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Remarks

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

SB

Ecotoxicity

Product:

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Components:



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N,N-dimethylformamide:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 10,600 mg/l

Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 9,800 mg/l

Exposure time: 96 h

LC50 (Lepomis macrochirus (Bluegill sunfish)): 6,300 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 15,700 mg/l

Exposure time: 48 h

Toxicity to algae : EC50 (Chlorella pyrenoidosa): 890 mg/l

IC50 (Desmodesmus subspicatus (green algae)): > 500 mg/l

Exposure time: 96 h

EC50 (Photobacterium phosphoreum): 2,000 mg/l Toxicity to bacteria

Exposure time: 0.08 h

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: No data available

Persistence and degradability

Components:

N,N-dimethylformamide:

Biodegradability : Zahn-Wellens Test

Result: Readily biodegradable.

Biodegradation: 97 % Exposure time: 7 d

Method: OECD Test Guideline 302

Remarks: According to the results of tests of biodegradability this product is considered as being readily biodegradable.

Result: Readily biodegradable.

Biodegradation: > 90 % Exposure time: 28 d

Method: OECD Test Guideline 301

Biochemical Oxygen

Demand (BOD) Incubation time: 5 d

Bioaccumulative potential

Components:

N,N-dimethylformamide:

Bioaccumulation : Remarks: Does not bioaccumulate.

: 900 mg/g

Partition coefficient: n-

octanol/water

: log Pow: -0.85

Method: OECD Test Guideline 107



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Mobility in soil

No data available

Other adverse effects

No data available

Product:

Remarks

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a

Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

Components:

N,N-dimethylformamide:

Additional ecological

information

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International regulation

IATA-DGR

UN/ID No. : UN 1824

Proper shipping name : Sodium hydroxide solution

Class : 8 Packing group : III

Labels : Corrosives

Packing instruction (cargo : 856

aircraft)

: 852

Packing instruction (passenger aircraft)

IMDG-Code

UN number : UN 1824

Proper shipping name : Sodium hydroxide solution

Class : 8
Packing group : III
Labels : 8
EmS Code : F-A, S-B

. 17,00



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Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR

UN/ID/NA number : UN 1824

Proper shipping name : Sodium hydroxide solution

Class : 8 Packing group : III

Labels : Class 8 - Corrosive

ERG Code : 154 Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

HBV MMX

OSHA Hazards : No OSHA Hazards

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Sodium azide	26628-22-8	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sodium azide	26628-22-8	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

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

reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical

components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA

Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI

Intermediate or Final VOC's (40 CFR 60.489):

glycerol 56-81-5 5.63 %

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.



90 - 100 % 5 - 10 %

KIT CA-SCRN HBV AMP/DET 96T US-IVD

Version 1.2 Revision Date 06-10-2014 Print Date 06-23-2014

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

OSHA Process Safety Management Lists

This product does not contain any hazdous materials listed under OSHAs process safety management of highly hazardous chemicals.

Massachusetts Right To Know

water

glycerol

glycerol	56-81-5	5 - 10 %
sodium azide	26628-22-8	0 - 0.1 %
Pennsylvania Right To Know		
water	7732-18-5	90 - 100 %
glycerol	56-81-5	5 - 10 %
sodium azide	26628-22-8	0 - 0.1 %
New Jersey Right To Know		

California Prop 65 : This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

7732-18-5

56-81-5

reproductive harm.

Inventories

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

HBV Mg2+

OSHA Hazards : No OSHA Hazards

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Sodium azide	26628-22-8	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sodium azide	26628-22-8	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

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

reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical

components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA

Title III, Section 313.



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Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

OSHA Process Safety Management Lists

This product does not contain any hazdous materials listed under OSHAs process safety management of highly hazardous chemicals.

Massachusetts Right To Know

sodium azide	26628-22-8	0 - 0.1 %	
Pennsylvania Right To Know			
water	7732-18-5	90 - 100 %	
sodium azide	26628-22-8	0 - 0.1 %	

New Jersey Right To Know

water 7732-18-5 90 - 100 %

California Prop 65 : This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

Inventories

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

BH PS1

OSHA Hazards : No OSHA Hazards

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sodium azide	26628-22-8	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Sodium azide	26628-22-8	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.



Version 1.2 Revision Date 06-10-2014 Print Date 06-23-2014

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

reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical

components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA

Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

 sodium hydroxide
 1310-73-2
 0.071 %

 edetic acid
 60-00-4
 0.038 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

sodium hydroxide 1310-73-2 0.071 % edetic acid 60-00-4 0.038 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

OSHA Process Safety Management Lists

This product does not contain any hazdous materials listed under OSHAs process safety management of highly hazardous chemicals.

Massachusetts Right To Know

sodium azide	26628-22-8	

Pennsylvania Right To Know

water	7732-18-5	90 - 100 %
sodium azide	26628-22-8	0 - 0.1 %
sodium hydroxide	1310-73-2	0 - 0.1 %
edetic acid	60-00-4	0 - 0.1 %

New Jersey Right To Know

water 7732-18-5 90 - 100 %

California Prop 65 : This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

Inventories

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

BH 4

OSHA Hazards : Harmful by ingestion., Moderate eye irritant

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



Version 1.2 Revision Date 06-10-2014 Print Date 06-23-2014

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Disodium hydrogen phosphate	7558-79-4	5000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

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

reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical

components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA

Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

disodium 7558-79-4 0.157 %

hydrogenorthophosphat

е

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

disodium 7558-79-4 0.157 %

hydrogenorthophosphat

е

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

OSHA Process Safety Management Lists

This product does not contain any hazdous materials listed under OSHAs process safety management of highly hazardous chemicals.

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

water	7732-18-5	70 - 90 %
sodium thiocyanate	540-72-7	20 - 30 %
disodium hydrogenorthophosphate	7558-79-4	0.1 - 1 %

New Jersey Right To Know

water	7732-18-5	70 - 90 %
sodium thiocyanate	540-72-7	20 - 30 %
Sodium phosphate, monobasic,	10049-21-5	1 - 5 %
monohydrate		



Version 1.2 Revision Date 06-10-2014 Print Date 06-23-2014

California Prop 65 : This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

Inventories

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

BIPS1

OSHA Hazards : No OSHA Hazards

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Sodium azide	26628-22-8	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sodium azide	26628-22-8	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

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

reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical

components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA

Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

sodium hydroxide 1310-73-2 0.071 % edetic acid 60-00-4 0.038 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

sodium hydroxide 1310-73-2 0.071 % edetic acid 60-00-4 0.038 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

OSHA Process Safety Management Lists



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This product does not contain any hazdous materials listed under OSHAs process safety management of highly hazardous chemicals.

Massachusetts Right To Know

sodium azide	26628-22-8	0 - 0.1 %

Pennsylvania Right To Know

water	7732-18-5	90 - 100 %
sodium azide	26628-22-8	0 - 0.1 %
sodium hydroxide	1310-73-2	0 - 0.1 %
edetic acid	60-00-4	0 - 0.1 %

New Jersey Right To Know

water 7732-18-5 90 - 100 %

California Prop 65 : This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

Inventories

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

BI4

OSHA Hazards : Harmful by ingestion., Moderate eye irritant

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

CERCLA Reportable Quantity

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

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

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

reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical

components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA

Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307



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OSHA Process Safety Management Lists

This product does not contain any hazdous materials listed under OSHAs process safety management of highly hazardous chemicals.

Massachusetts Right To Know

No components are subject to the Massachusetts Right to

Know Act.

Pennsylvania Right To Know

water 7732-18-5 70 - 90 % sodium thiocyanate 540-72-7 20 - 30 %

New Jersey Right To Know

 water
 7732-18-5
 70 - 90 %

 sodium thiocyanate
 540-72-7
 20 - 30 %

 Sodium phosphate, monobasic, monohydrate
 10049-21-5
 1 - 5 %

California Prop 65

: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Inventories

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

DN 4

OSHA Hazards : No OSHA Hazards

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Sodium hydroxide	1310-73-2	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

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

reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical

components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA

Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act



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The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

sodium hydroxide

1310-73-2

1.6 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

sodium hydroxide

1310-73-2

1.6 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

OSHA Process Safety Management Lists

This product does not contain any hazdous materials listed under OSHAs process safety management of highly hazardous chemicals.

Massachusetts Right To Know

sodium hydroxide

sodium hydroxide

sodium hydroxide

1310-73-2 1 - 5 %

Pennsylvania Right To Know

water

7732-18-5 1310-73-2 90 - 100 % 1 - 5 %

New Jersey Right To Know

water

7732-18-5 1310-73-2 90 - 100 % 1 - 5 %

California Prop 65

: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other

reproductive harm.

Inventories

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

CN₄

OSHA Hazards : No OSHA Hazards

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Phenol	108-95-2	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Phenol	108-95-2	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 302 : The following components are subject to reporting levels

established by SARA Title III, Section 302:

phenol 108-95-2 0.1 %



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SARA 313 : SARA 313: This material does not contain any chemical

> components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA

Title III, Section 313.

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR

61):

108-95-2

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI

Intermediate or Final VOC's (40 CFR 60.489):

phenol 108-95-2 0.1 %

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

108-95-2

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

phenol 108-95-2 0.1 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section

OSHA Process Safety Management Lists

This product does not contain any hazdous materials listed under OSHAs process safety management of highly hazardous chemicals.

Massachusetts Right To Know

108-95-2 0.1 - 1 % phenol

Pennsylvania Right To Know

90 - 100 % water 7732-18-5 phenol 108-95-2 0.1 - 1 %

New Jersey Right To Know

water 7732-18-5 90 - 100 % 0.1 - 1 % phenol 108-95-2

California Prop 65 : This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

Inventories

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

SB 3

OSHA Hazards : No OSHA Hazards

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

CERCLA Reportable Quantity

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

SARA 304 Extremely Hazardous Substances Reportable Quantity



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Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Hydrogen Peroxide	7722-84-1	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

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

reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical

components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA

Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

OSHA Process Safety Management Lists

This product does not contain any hazdous materials listed under OSHAs process safety management of highly hazardous chemicals.

Massachusetts Right To Know

hydrogen peroxide	7722-84-1	0 - 0.1 %
Pennsylvania Right To Know		
water	7732-18-5	90 - 100 %
hydrogen peroxide	7722-84-1	0 - 0.1 %
New Jersey Right To Know		
water	7732-18-5	90 - 100 %

California Prop 65 : This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

Inventories

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

SB

OSHA Hazards : Harmful by skin absorption., Moderate eye irritant,

Reproductive hazard

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



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CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
N,N-Dimethylformamide	68-12-2	100	250

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

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

reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels

established by SARA Title III, Section 313:

N,N-dimethylformamide 68-12-2 40 %

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

N,N-dimethylformamide 68-12-2

40 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI

Intermediate or Final VOC's (40 CFR 60.489):

N,N-dimethylformamide 68-12-2 40 %

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

OSHA Process Safety Management Lists

This product does not contain any hazdous materials listed under OSHAs process safety management of highly hazardous chemicals.

Massachusetts Right To Know

N,N-dimethylformamide	68-12-2	30 - 50 %
Pennsylvania Right To Know		
water	7732-18-5	50 - 70 %
N,N-dimethylformamide	68-12-2	30 - 50 %
New Jersey Right To Know		
water	7732-18-5	50 - 70 %
N.N-dimethylformamide	68-12-2	30 - 50 %

California Prop 65 : This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

Inventories

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



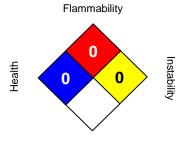
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SECTION 16. OTHER INFORMATION

Further information

HBV MMX

NFPA:



Special hazard.

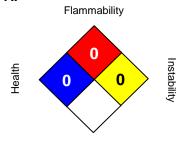
HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic

HBV Mg2+

NFPA:



Special hazard.

HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

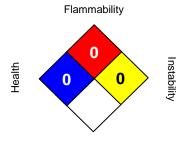
4 = Extreme, * = Chronic

BH PS1



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NFPA:



Special hazard.

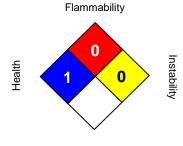
HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic

BH 4

NFPA:



Special hazard.

HMIS III:

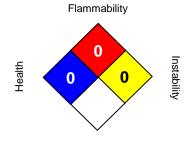
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic

BI PS1

NFPA:



Special hazard.

HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,

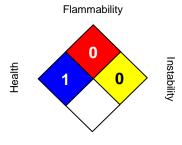
2 = Moderate, 3 = High 4 = Extreme, * = Chronic

BI4



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NFPA:



Special hazard.

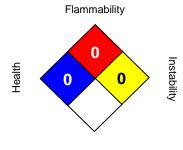
HMIS III:

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic

DN 4

NFPA:



Special hazard.

HMIS III:

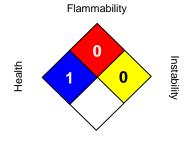
HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic

CN 4

NFPA:



Special hazard.

HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

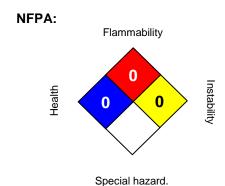
0 = not significant, 1 =Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic

SB₃



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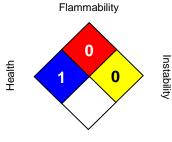
HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic





Special hazard.

HMIS III:

HEALTH	2*
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a 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.