The first part: chemicals and enterprise signs

1.1 Product identification

HARTDUR E333

1.2 Recommended and restricted uses of substances or mixtures

Usage: Curing agent for coatings or adhesives in industrial or commercial applications

Suggested not to use in: not suitable for home work (DIY) applications.

1.3 Detailed information of the safety technical specification maker

Name of Supplier: Johnson Fine Chemical Co., Ltd.

Address: No. 14, 33 Rd., Taichung Industrial Park, Taichung, Taiwan

Zip code: 407021

Tel: +886-4-23502588

Fax: +886-4-23598551

Email: jfchem@johnson-fine.com

1.4 Emergency Call

Emergency Advisory Line: In case of emergency, please dial +886-4-23502588.

Fire emergency phone number: (86) 119

The second part: an overview of the risk

2.1 A classification of substances or mixtures

GHS risk categories:

Flammable liquid, class 2 (H225)

Acute toxicity, inhalation, class 4 (H332)

Skin irritation, category 2 (H315)

Eye stimulation, category 2 (H319)

Respiratory tract sensitization, class 1 (H334)

Skin sensitization, category 1 (H317)

Specific target organs toxic (one-time contact), Category 3 (H335) (H336)

2.2 Label elements

GHS- pictograph

DANGER

The harmful elements that must be listed on the label

ethyl acetate

Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate

Hazard Description:

H225 highly flammable liquid and steam.

H315 causes skin irritation.

H317 may cause an allergic reaction to the skin.

H319 causes severe eye irritation.

H332 inhalation is harmful.

Inhalation of H334 may lead to allergic or asthmatic symptoms or dyspnea.

H335 may cause respiratory irritation.

H336 may cause drowsiness or vertigo.

Prevention instructions:

P210 away from the heat source / spark / open fire.No Smoking.

P280 wears protective gloves/protective clothing/protective glasses/protective masks.

P303 + P361 + P353 if skin (or hair) contamination: remove all contaminated clothes immediately.Wash the skin / shower with water.

P305 + P351 + P338 if eye contact: rinse carefully with water for several minutes.If contact lenses are worn and can be easily removed, contact lenses are removed.Continue to wash.

P304 + P340 if inhaled incorrectly, transfer the victim to the fresh air and maintain a comfortable breathing rest posture.

P312 if you feel unwell, call the poisoning control center or seek medical treatment.

P403 + P233 is well ventilated and good storage.Keep the container closed.

P501 deals with the products and containers according to the local regulations.

2.3 Other dangers

No information is applicable.

The third part: Composition / composition information

Product type: mixture

3.1 mixture

Aromatic polyisocyanate

Dangerous component

ethyl acetate

Content [weight, -%]: about 70

GHS risk category: inflammable liquid 2H225 eye stimulation 2H319 specific target organ systemic toxicity (one contact) 3H336

Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate

Content [weight, -%]: about 27

GHS risk categories: acute toxicity 4 through oral H302 acute toxicity 2 inhalation H330 skin irritation 2 H315 eyes irritation 2 H319 respiratory tract
Sensitive 1 H334 Skin Allergy 1B H317 Specific Target Organ Systemic Toxicity (One Contact) 3H335

It contains impurities: chlorobenzene
Content [weight, -%]: < 2.5
GHS Risk Category: Acute Toxicity of Flammable Liquid 3H226 4 Inhalatory H332 Skin Stimulation 2 H315 Chronic Aquatic Toxicity 2 H411
Please pay attention to the following material
Two phenyl methane -4,4- diisocyanate
Content [weight, -%]: < 0.1
GHS Risk Category: Acute Toxicity 4 Inhalation H332 Skin Stimulation 2 H315 Eyes Stimulation 2 H319 Respiratory Tract Sensitization 1 H334 Skin Allergy 1 H317
Carcinogenic 2 H351 specific target organ systemic toxicity (one contact) 3 H335 specific target organ toxicity (repeated contact) 2 inhalation H373
Specific threshold concentration

Eye irritation 2	H319	>= 5%
Skin irritation 2	H315	>= 5%
Respiratory sensitization 1	H334	>= 0.1%
Specific target organ systemic toxicity (one contact) 3	H335	>= 5%

Phenyl isocyanate benzyl isocyanate
Content [weight, -%]: < 0.05

GHS Risk Category: Flammable liquid 3H226 acute toxicity 1 inhalation H330 acute toxicity 4 through oral H302 skin corrosion 1B H314 respiratory tract
Sensitized 1 H334 Skin Allergy 1 H317 Specific Target Organ System Toxicity (One Contact) 3 H335

The fourth part: first aid measures

4.1 First aid measures

General measures: Contaminated clothing and shoes must be removed immediately, decontaminated and discarded.
Inhalation: Move the patient to the fresh air area and keep him warm and rest. If he has difficulty breathing, see a doctor.
If in contact with skin: rinse with polyethylene glycol-containing detergent or with plenty of warm water and soap.If there is a skin reaction, go to a doctor.
If contact with eyes: open eyelids, rinse with warm water for a long time (at least 10 minutes), see an ophthalmologist.
Eat: prohibit vomiting, need to go to the doctor.

4.2 The most important symptoms and effects, including acute and delayed onset

Medical information: This product can stimulate the respiratory tract and may cause skin and respiratory allergies.Acute irritation and bronchial contraction are the main symptoms.According to the degree of exposure and symptoms, the need for further treatment was judged.

4.3 Instructions requiring immediate medical care and special treatment

Treatment measures: no applicable data.

The fifth part: fire protection measures

5.1 Fire extinguishing medium

Suitable extinguishing agents: carbon dioxide (CO2), foam, fire extinguishing powder, water spraying in fire.

Inappropriate fire extinguishing agent: high flow water jet

5.2 The special harm of a substance or a mixture

Carbon monoxide, carbon dioxide, nitrogen oxides, isocyanate vapors and trace amounts of hydrogen cyanide are released during combustion.Do not breathe in smoke and dust in case of fire and/or explosion.

5.3 Precautions for firefighters:

In the process of fire extinguishing, it is required to wear independent air supply breathing apparatus and airtight protective clothing.

Polluted water for fire extinguishing shall not be allowed to flow into soil, groundwater or surface water.

The sixth part: Leakage Emergency Treatment

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment (see part eighth).Keep away from the fire.Ensure adequate ventilation / exhaust.Leave unauthorized persons to leave.

6.2 Environmental protection measures

It is forbidden to drain into sewers, waste water or soil.

6.3 Methods of pollutant collection and removal

Remove leaks; cover residues with wet absorbing materials such as sawdust, chemicals based on hydrated calcium silicate, sand.Transfer to waste containers about an hour later. Do not seal (release carbon dioxide!)Keep wet in a safe and ventilated place for a few days.

6.4 Refer to other chapters

Other discarded measures are seen in the thirteenth part.

The seventh part: operation disposal and storage

7.1 Preventive measures for safe operation

Adequate air exchange and/or exhaust are provided in the working room.

The threshold mentioned in the eighth part must be monitored. Proper partial exhaust should be provided at any workplace where high concentration of isocyanate aerosol and / or vapour is generated to ensure that the exposure limit of the workplace is not exceeded (WEL). The air where the employee operates the product should be removed.

Explosion-proof measures are required.

Personal protective measures described in Part 8 must be observed. Preventive measures must be taken when the isocyanate is operated. Under any conditions, contact with skin and eyes should be avoided, and vapor inhalation should be avoided.

Stay away from food, drink and tobacco. Wash your hands before and after work, and apply skin care ointment. Keep the work clothes separately. Take off all the contaminated clothes immediately.

7.2 Safe storage conditions, including incompatibilities

Keep the container dry and tightly closed. Keep it cool and well ventilated. In order to maintain product quality, we must abide by the storage conditions of our product information sheet.

7.3 Specific end use

No information is applicable.

The eighth part: contact control / individual protection

8.1 Control parameters

Working place component control parameters

Material	Basis	Type	Numerical value	Threshold	Remarks
ethyl acetate	CN OEL	TWA	200 mg/m3		
ethyl acetate	CN OEL	STEL	300 mg/m3		
chlorobenzene	CN OEL	TWA	50 mg/m3		

The product may contain trace amounts of benzyl isocyanate.

8.2 Exposure control

respiratory system protection

Respiratory protection measures are required in inadequately ventilated working areas and in spraying products. It is recommended to wear an air supply mask or a respirator combined with a carbon filter and a particle filter when working for a short time.

If the respiratory tract is susceptible to allergies (such as asthma and chronic bronchitis) it is recommended not to operate this product.

Hand protection

Protective gloves material EN 374:

Butyl Rubber-IIR: Thickness >=0.5 mm; Penetration time >=60 min.

Suggestion: the polluted gloves should be discarded.

Eye protection

Wear protective goggles / protective cover.

Skin and body protection

Wear proper protective clothing.

The ninth part: physical and chemical characteristics

9.1 Basic physical and chemical information

Appearance: liquid

Color: nature

Smell: aromatics

Olfactory threshold: no data

PH value: no data

Boiling point / boiling range: about 77 C at 1013 hPa

Flash point: about - 4 degrees C DIN 51755

Evaporation rate: no data

Flammability (solid state, gaseous state): not applicable

Combustion value: not applicable

High / lower flammability or explosion limit:

The upper limit of ethyl acetate: 11.5% (V) / lower limit: 2.2% (V)

Vapor pressure: about 97 hPa at 20 C

Vapor density: no data

Density: about 1 g/cm3 at 20 C

Water Solubility: Insoluble in Water - Reaction with Water to Form Carbon Dioxide

Surface tension: no data

The value of the octanol / water distribution coefficient: no data

Spontaneous combustion temperature: not applicable

Ignition temperature: about 460 C

Decomposition temperature: no data

Dynamic viscosity: about 3 mPa, s at 20 C DIN 53015;

Explosion characteristics: no data

Dust explosion level: no data

Oxidation characteristics: no data

9.2 Other information

The above data are non - product indicators.For product indicators, please refer to the product technical information table.

The tenth part: stability and reactivity

10.1 Reactivity

This information is not available.

10.2 chemical stability

This information is not available.

10.3 Possible harm reaction

Exothermic reactions with amines and alcohols; reactions with water to produce CO2. In closed vessels, there is a risk of bursting due to increased pressure.

10.4 Conditions to avoid contact

This information is not available.

10.5 Incompatible material

This information is not available.

10.6 Hazard decomposition product

When stored or operated correctly, there is no dangerous decomposition product.

The eleventh part: toxicological data

Please refer to the following data:

11.1 Toxicological effect

Acute toxicity, transoral

Half lethal dose (LD50) rats: > 2000 mg/kg

Method: OECD chemical test guide 423

Toxicological study on this product

Acute toxicity, transdermal

ethyl acetate

Half lethal dose (LD50) in rabbits, male: more than 18,000 mg/kg

Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate

Based on existing data, the classification standards are not met.

Acute toxicity, inhalation

ethyl acetate

Rats with half lethal concentration (LC50): 22.5 mg/l, 6 h

Test environment: steam

Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate

Half lethal concentration (LC50) rats, male/female: 0.437 mg/l, 4 h

Test environment: dust / smoke

Method: OECD chemical test guide 403

Primary skin irritation

Species:Rabbit
Test cycle: 4 h
Results: irritant
Classification: cause skin irritation.
Method: OECD chemical test guide 404
Toxicological study on this product

Primary mucosal irritation
Species:Rabbit
Results: 4 h
Classification: cause serious eye irritation.
Method: OECD chemical test guide 405
Toxicological study on this product

Sensitivities
ethyl acetate
Skin sensitization based on Magnusson/Kligmann (maximization test)
Species: guinea pig
Results: negative
Classification: do not cause skin allergy.
Method: OECD chemical test guide 406

Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
Skin sensitization according to Buehler (percutaneous test):
Species: guinea pig
Results: positive
Classification: H317: Skin contact may cause allergies (subcategory 1B)
Method: OECD chemical test guide 406
A toxicological study of the solvent containing this product was carried out.

Respiratory sensitization
Classification: inhalation can cause allergies.
According to the 2006/121/EC instruction appendix VI classification

Subacute, subchronic and delayed toxicity
ethyl acetate
LOAEL: 350 ppm
Intoxication: inhalation

Species: rat, male / female
Dose level (grade): 0-350 - 750-1500 ppm
Test cycle: 13 w
Frequency of exposure: 6 hours a day, 5 days a week
Target organ: nasal cavity
Subject matter: steam
Method: OECD chemical test guide 413

NOAEL: 900 mg/kg
The way of poisoning: through the mouth
Species: rat, male / female
Dose level (grade): 0-300-900-3600 mg/kg
Test cycle: 13 w
Frequency of exposure: every day

Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
NOAEL: 0.47 mg/m3
Subacute respiratory toxicity, rats
Species: rat, male / female
Dose level (grade): 0 - 0,5 - 4-35 mg/m3
Frequency of exposure: 6 hours a day, 5 days a week
Subject matter: (as of aerosols)
Method: OECD chemical test guide 412
There is a irritation to the nasal cavity.

carcinogenicity
ethylacetate
No data
Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
No data

Reproductive toxicity / fertility
ethyl acetate
From the data available, there is no evidence of renewable toxicity.
Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
From the data available, there is no evidence of renewable toxicity.

Reproductive toxicity / teratogenicity

ethyl acetate
NOAEL (teratogenicity): 20000 ppm
NOAEL (mother): 16000 ppm
NOAEL (developmental toxicity): 20000 ppm
Species: rat, female
Intoxication: inhalation
Dose level (grade): 0-10000-16000-20000 ppm
Method: OECD chemical test guide 414
Research on similar products.

Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
Animal experiments on compounds with similar structures showed no signs of specific reproductive toxicity.

In vitro genotoxicity
Test species: Salmonella/microsome test (Ames test)
Metabolic activation: there is / no
Results: there were no signs of mutagenicity.
Method: OECD chemical test guide 471
Research on products.

Type of test: Point mutation in mammalian cells (HPRT test)
Experimental system: Chinese hamster V79 cell line
Metabolic activation: there is / no
Results: negative
Method: OECD chemical test guide 476
Research on products.

Test type: micronucleus test
Experimental system: Chinese hamster V79 cell line
Metabolic activation: there is / no
Results: negative
Method: OECD chemical test guide 487
Research on products.

In vivo genotoxicity
ethyl acetate
Test type: in vivo micronucleus test

Species: mice, males
Intoxication pathway: intraperitoneal
Dose: 0-100 - 200-400 - 800 mg/kg
Results: negative
Method: OECD chemical test guide 474

STOT assessment - one-off contact
ethyl acetate
May cause drowsiness or vertigo.
Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
It may cause respiratory irritation.

STOT assessment - repetitive contact
ethyl acetate
Based on existing data, the classification standards are not met.
Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
Based on existing data, the classification standards are not met.

Inhalation hazards
ethyl acetate
Based on existing data, the classification standards are not met.
Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
Based on existing data, the classification standards are not met.

CMR evaluation
ethyl acetate
Carcinogenicity: Based on existing data, the classification criteria are not met.
Mutagenicity: In vitro and in vivo tests showed no mutagenic effect.According to this data, the substance was not classified as mutagenic.
Teratogenicity: Based on the existing data, it does not meet the classification criteria.
Reproductive Toxicity/Fertility: Based on available data, the classification criteria are not met.
Triphenylmethane-4,4',4'-triisocyanate triphenylmethane triisocyanate
Carcinogenicity: Based on existing data, the classification criteria are not met.
Mutagenicity: There was no mutagenic effect in vitro test. According to this data, the substance was not classified as mutagenic substance.
Teratogenicity: Based on the existing data, it does not meet the classification criteria.
Reproductive Toxicity/Fertility: Based on available data, the classification criteria are not met.

Toxicological assessment

ethyl acetate

Acute impact: Based on available data, the classification criteria are not met.

Allergy: Based on available data, the classification criteria are not met.

Repeated dose poisoning: Repeated exposure may cause dry and cracked skin.

Triphenylmethane-4,4',4'-triisocyanate triphenylmethane triisocyanate

Acute effect: deglutition is harmful.Inhalation is fatal.Cause skin irritation.Cause serious eye irritation.

Allergy: may cause skin allergy.Inhalation may cause allergic or asthmatic symptoms or breathing difficulties.

Repeated dose poisoning: Based on the existing data, it does not meet the classification criteria.

Additional information

Triphenylmethane-4,4',4'-triisocyanate triphenylmethane triisocyanate

SPECIAL PROPERTIES/EFFECTS: Excessive exposure, especially when spraying paint containing isocyanate without necessary precautions, can irritate the eyes at a certain concentration.

Danger of eyes, nose, larynx and respiratory tract.Allergic symptoms (such as dyspnea, cough, asthma, etc.) may lag behind.Allergic people have the above effects even at lower isocyanate concentrations.

The twelfth part: ecological data

It is forbidden to drain into sewers, waste water or soil.

Please refer to the following data:

12.1 toxicity

Acute fish toxicity

Nontoxic at saturated concentration. Species: zebra fish

Test cycle: 96 h

Method: OECD chemical test guide 203

Ecotoxicology of the product.

Chronic toxicity to fish

ethyl acetate

NOEC ＜ 9.65 mg/l

Species: Pimephales promelas (fat head minnows)

Test cycle: 32 D

Method: early life stage test

Acute toxicity of Daphnia magna

Nontoxic at saturated concentration. Species: Daphnia magna

Test cycle: 48 h

Method: OECD chemical test guide 202
Ecotoxicology of the product.

Toxicity of chronic Daphnia magna
ethyl acetate
NOEC (reproduction) 2.4 mg/l
Species: Daphnia magna
Test cycle: 21 d
Method: no data

Acute algal toxicity
Nontoxic at saturated concentration.
Species: near grill
Test cycle: 72 h
Method: OECD chemical test guide 201
Ecotoxicology of the product.

Acute bacterial toxicity
Half effective concentration (EC50) > 10000 mg/l
Species: activated sludge
Test cycle: 3 h
Method: OECD chemical test guide 209
Ecotoxicology of the product.

Toxicity of sediment
ethyl acetate
Because the n-octanol/water partition coefficient is low, it will not be absorbed by sediments.
Evaluation of Ecotoxicology

ethyl acetate
Acute aquatic toxicity: The substance can be classified as non-hazardous to aquatic organisms.
Chronic aquatic toxicity: Because the substance is easily biodegradable, the chronic toxicity to aquatic organisms can be regarded as non-hazardous.
Soil toxicity data: Soil is not expected to be adsorbed.
Impact on sewage treatment: Because of low bacterial toxicity, there is no negative impact on the performance of biological wastewater treatment plants.

Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate

Acute aquatic toxicity: The substance can be classified as non-hazardous to aquatic organisms.
Chronic aquatic toxicity: It is not expected that there will be any chronic aquatic toxicity.
Impact on sewage treatment: Because of low bacterial toxicity, there is no negative impact on the performance of biological wastewater treatment plants.

12.2 Persistence and degradability

Biodegradability
ethyl acetate
Test type: Aerobic
Inoculating body: activated sludge
Biodegradability: about 69%, 20 days, that is easy to biodegrade

Inoculating body: activated sludge
Biodegradability: 93%, 6 D, that is, biodegradability
Method: simulation test

Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
Biodegradability: 41.5%, 28 d, not easy to degrade
Method: OECD chemical test guide 301 F

Stability of water
ethyl acetate
Test type: hydrolysis
Half-life: 16 Years (pH value: 5)
Hydrolysis temperature: 25 ° C

Test type: hydrolysis
Half-life: 2 Years (pH value: 7)
Hydrolysis temperature: 25 ° C

Test type: hydrolysis Half-
life: 7.5 D (pH value: 9)
Hydrolysis temperature: 25 ° C

Hydrolyze slowly in contact with water.
Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
Test type: hydrolysis

Matter is hydrolyzed rapidly in water.

Photodegradation
ethyl acetate
Test types: light transformation in air
Temperature: 25 C
Photoreceptor: hydroxyl structure
The half-life of indirect photolysis: 75 H
After vaporization or air contact, the product will be degraded slowly through photochemistry.

Volatility (Henry's law constant)
Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
0.11 Pa*m3/mol at 20 C
Method: calculated

12.3 Bioaccumulation

Bioaccumulation or bioaccumulation
ethyl acetate
Bioaccumulation factor (BCF): 30
Species: the round belly of the fish (golden fish)
Test cycle: 3 D
There is no obvious accumulation in the organic body.

12.4 Migration in soil

Distribution in environmental zoning
ethylacetate
Adsorption / soil
Because the n-octanol/water partition coefficient is low, it will not be absorbed by soil.
There is a high mobility in the soil

Benzyl isothiocyanate of sulfur phosphate triphenylmethane triisocyanate
Adsorbent
Koc value: 1670000
Koc value: 6.22
Method: calculated

Environmentaldistribution
ethyl acetate
Method: (calculated)
The product will be dispersed in various environments (soil/water/air).

12.5 PBT and vPvB evaluation results

No data

12.6 Other adverse effects

Isocyanate reacts with water at the interface to form carbon dioxide and water-insoluble solid material (polyurea) with high melting point.The reaction will be surfactants (such as detergent) or water soluble solvent acceleration.Experience has shown that polyurea is an inert substance and is not degradable.

The thirteenth part: discarded notices

It must abide by applicable international, national and local laws and regulations for abandonment.Waste in the European Union should be based on appropriate regulations of the European Waste Classification (EWC).

13.1 Waste Disposal Method

After the final product is recovered, all residual products in the container must be removed from the container (no liquid, no powder, no viscous matter).After the residues on the inner wall of the container are treated harmlessly, the products and hazard labels on the container must be removed.It can be sent to appropriate collection points for treatment according to existing recovery schemes in the chemical industry.Containers should be recycled in accordance with national laws and environmental regulations.

Waste can not be discharged from waste water.

The fourteenth part: transportation information

Land transportation

14.1 United Nations number:1993

14.2 United Nations Transport nameFlammable liquid, not specified(ethyl acetate, chlorobenzene)

14.3 Transport risk level: 3

14.4 Packaging category: II

14.5 Environmental hazard: no

IATA

14.1 United Nations number: 1993

14.2 United Nations Transport Name: FLAMMABLE LIQUID, N.O.S.
(Ethyl Acetate, Monochlorobenzene)

14.3 Transport risk level: 3

14.4 Packaging category: II

14.5 Environmental hazard: no

IMDG

14.1 United Nations number: 1993

14.2 United Nations Transport Name: FLAMMABLE LIQUID, N.O.S.

(Ethyl Acetate, Monochlorobenzene)

14.3 Transport risk level: 3

14.4 Packaging category: II

14.5 Environmental hazard: no

14.6 Special precautions

See section sixth - 8

Additional information: highly flammable.

Keep dry.The temperature is higher than +40 C.

Stay away from food, acid and alkali..

14.7 According to the rules of the MARPOL73/78 convention, the rules of II and IBC

It is not applicable.

The fifteenth part: Legal Information

15.1 Safety, Health and Environmental Protection Laws and Regulations for Substances or Mixtures

Other regulations

Comply with the requirements of the following regulations:

Regulations on the Safety Management of Hazardous Chemicals No. 591 of the State Council Decree

GB/T 16483 Chemical Safety Technical Specification Content and Project Order

GB 13690 general guidelines for the classification and hazard publicity of chemicals

GB 30000.2-29 chemical classification and label specification

GB 15258 regulations for the preparation of chemical safety labels

The operation of isocyanates and solvents must comply with existing national regulations.

The sixteenth part: other information

The complete text of the hazard (H) warnings mentioned in Parts 2, 3 and 10 of the GHS Classification.

H225 highly flammable liquid and steam.

H226 flammable liquid and steam.

H302 deglutition is harmful.

H314 causes severe skin burns and eye injuries.
H315 causes skin irritation.
H317 may cause an allergic reaction to the skin.
H319 causes severe eye irritation.
H330 inhalation is fatal.
H332 inhalation is harmful.
Inhalation of H334 may lead to allergic or asthmatic symptoms or dyspnea.
H335 may cause respiratory irritation.
H336 may cause drowsiness or vertigo.
H351 is suspected of carcinogenesis.
Long-term or repeated exposure to H373 may cause organ damage.
H411 is toxic to aquatic organisms and has a long-term lasting effect.
All changes to the previous version will be noted at the margin.This version will replace all previous versions.
Supplementary information
According to our knowledge and information, the information provided in this security technical specification is correct on the date of its release, and the information given is only for safe operation. Guidance on use, disposal, storage, transportation and abandonment should not be considered as a guarantee or a quality indicator.This information is only applicable to the specified product,
This product is not suitable for mixing with other substances or combining with any process unless specifically specified.