

Safety Data Sheet

According to Regulation (EC) No 1907/2006

FUS-10 II

Version 1.0

Issue date: 23/09/2018

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SDS Record Number: DR-NEW-FUS-10 II

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: FUS-10 II
Additional identification: Not available
Identification of the product: See section 3
Index Number: Not available
REACH registration No.: Not available

1.2 Relevant identified uses of the substance and uses advised against:

1.2.1 Identified uses:

This product can be qualitative or semi quantitative determination of urobilinogen, bilirubin, ketone, blood, protein, nitrite, leukocyte, glucose, specific gravity, pH (PH) in urine.

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): -
Supplier(Manufacturer): DIRUI Industrial Co., Ltd
Address: 3333 Yiju Street, New &High Tech. Development Zone, Changchun, Jilin 130103,
P.R. China
Contact person(E-mail): shiyanping@dirui.com.cn
Telephone: +86-431-85835743
Fax: +86-431-85835742

1.4 Emergency telephone Number:

+86-431-85835743

Available outside office hours? YES NO

Section 2 Hazards Identification

2.1 Classification of the substance/mixture:

2.1.1 Classification:

The mixture is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard codes
Acute Tox. 4	H302
Skin Corr. 1A	H314
Eye Dam. 1	H318
Acute Tox. 4	H332
Resp. Sens. 1	H334
STOT SE 3	H335

STOT RE 2	H373
Aquatic Chronic 2	H411

For full text of H- phrases: see section 2.2.

2.2 label elements:

Hazard Pictograms:



Signal Word(S):

Danger

Hazard Statement:

H302: Harmful if swallowed

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage

H332: Harmful if inhaled

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335: May cause respiratory irritation

H373: May cause damage to organs through prolonged or repeated exposure

H411: Toxic to aquatic life with long lasting effects

Precautionary statement:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P285: In case of inadequate ventilation wear respiratory protection.

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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

P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

P304 + P341 IF INHALED: If breathing is difficult, 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.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P314: Get medical advice/attention if you feel unwell.

P330: Rinse mouth.

P342+ P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local regulation.

2.3 Other hazards:

Not available.

Section 3 Composition/information on ingredients

Substance/Mixture:

Mixture

Ingredient(s):

	Chemical Name	Registration No.	CAS No.	EC No.	Concentration	Classification
Protein	tetrabromophenol blue	-	4430-25-5	224-622-9	0.1%W/W	H318 H412
	citrate buffer	-	77-92-9/68-04-2	201-069-1/200-675-3	97.4%W/W	Not Classified
	polyvinyl acetate	-	9003-20-7	618-358-7	2.5%W/W	Not available
Blood	cumyl hydroperoxide	-	80-15-9	201-254-7	26.0%W/W	H242 H302 H312 H314 H331 H373 H411
	tetramethyl benzidine	-	54827-17-7	259-364-6	1.5%W/W	H315 H319 H335
	phosphate buffer	-	7558-79-4/7558-80-7	231-448-7/231-449-2	35.3%W/W	Not Classified
	polyethylene glycol	-	25322-68-3	500-038-2	37.2%W/W	H335
Glucose	glucose oxidase (123U)	-	9001-37-0	232-601-0	1.7%W/W	H334
	horseradish peroxidase (203U)	-	9003-99-0	232-668-6	0.2%W/W	H334
	potassium iodide	-	7681-11-0	231-659-4	0.1%W/W	Not Classified
	citrate buffer	-	77-92-9/68-04-2	201-069-1/200-675-3	71.8%W/W	Not Classified
	polyethylene glycol	-	25322-68-3	500-038-2	26.2%W/W	H335
Ketone	sodium nitroprusside	-	13755-38-9	604-025-3	5.7%W/W	H301
	TAPS buffer	-	29915-38-6	249-954-1	29.9%W/W	Not Classified
	polyvinylpyrrolidone	-	9003-39-8	618-363-4	64.4%W/W	Not available
Leukocyte	pyrrole phenol ester	-	-	-	4.3%W/W	Not available
	phenyl diazonium salt	-	-	-	0.4%W/W	Not available
	phosphate buffer	-	7558-79-4/7558-80-7	231-448-7/231-449-2	92.6%W/W	Not Classified
	triton-100	-	9002-93-1	-	2.7%W/W	H302 H315 H318 H411

Nitrite	p-arsanilic acid	-	98-50-0	202-674-3	1.3%W/W	H301 H331 H400 H410
	tetrahydrobenzoquinolin-3-phenol	-	-	-	0.9%W/W	Not available
	glycine buffer	-	56-40-6/1310-73-2	200-272-2/215-185-5	89.6%W/W	Not Classified /H314
	poly(methyl vinyl ether co.maleic anhydride)	-	25153-40-6	607-572-6	8.2%W/W	Not available
Specific Gravity	bromthymol blue	-	76-59-5	200-971-2	4.8%W/W	Not Classified
	poly(methyl vinyl ether co.maleic anhydride)	-	25153-40-6	607-572-6	90.2%W/W	Not available
	sodium hydroxide	-	1310-73-2	215-185-5	5.0%W/W	H314
pH	methyl red	-	493-52-7	207-776-1	3.3%W/W	Not Classified
	bromthymol blue	-	76-59-5	200-971-2	55.0%W/W	Not Classified
	polyethylene glycol	-	25322-68-3	500-038-2	41.7%W/W	H335
bilirubin	2,4-dichloroaniline diaonium salt	--	-	-	0.6%W/W	Not available
	salicylic acid buffer	-	69-72-7	200-712-3	57.3%W/W	H302 H318
	caffeine	-	58-08-2	200-362-1	32.1%W/W	H302
	mannitol	-	87-78-5	201-770-2	10.0%W/W	Not Classified
Urobilinogen	fast blue B salt	-	14263-94-6	238-153-2	0.2%W/W	Not available
	phosphate buffer	-	7558-79-4/7558-80-7	231-448-7/231-449-2	98.0%W/W	Not Classified
	mannitol	-	87-78-5	201-770-2	1.8%W/W	Not Classified

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

4.1.2 In case of skin contact:

Wash off with soap and plenty of water.

4.1.3 In case of eyes contact:

Immediately flush eyes with plenty of water, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

4.1.4 In case of ingestion:

If large amounts were swallowed, give water to drink and get medical advice.

4.2 Most important symptoms and effects, both acute and delayed:

Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Harmful if inhaled. May cause

allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure.

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released: Carbon oxides, Nitrogen oxides.

5.3 Special fire fighting methods and special protective actions for fire-fighters:

Wear self contained breathing apparatus for fire-fighting if necessary.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Provide adequate ventilation. Avoid skin and eye contact. Refer to section 8 of SDS for personal protection details.

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator.

6.2 Environmental Precautions:

Do not let product enter drains.

6.3 Methods for Containment and Cleaning up:

Take up mechanically.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

6.5 Additional information:

Not applicable.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures: Ensure good ventilation/exhaustion at the workplace. Avoid contact with eyes. Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

7.1.2 Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from ignition sources. Store away from foodstuffs. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s):

Not applicable.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: diisopropylbenzene dihydro peroxide(CAS#80-15-9): The concentration threshold:
Long-term exposure limit (TWA):1mg/m3(Lithuania)
polyethylene glycol(CAS#25322-68-3):TWA: average:1000mg/m3(Slovakia)

potassium iodide(CAS#7681-11-0): Exposure limits:8h:5 mg/m3(Bulgaria)

caffeine(CAS#58-08-2): Exposure limits:8h:0.5 mg/m3(Bulgaria)

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
			ppm	mg/ m3	ppm	mg/ m3	Notes
Sodium hydroxide	215-185-5	1310-73-2	-	-	-	2	-

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values: Not available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear protective glasses.

Hand protection: Wear protective gloves.

Body protection: Wear protective clothing.

Respiratory protection: Wear protective respiratory.

Thermal hazards: Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls: Avoid discharge into the environment.
According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	Solid
Colour:	Not available
Odour:	Not available
Odour threshold:	Not available
pH:	Not available
Melting point/range (°C):	-9 °C (CAS#80-15-9)
Boiling point/range (°C):	53 °C(CAS#80-15-9)
Flash point (°C):	79 °C(CAS#80-15-9)
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (solid, gas):	Not available
Ignition temperature (°C):	Not available
Upper/lower flammability/explosive limits:	Not available
Vapour pressure (25°C):	0.00327 mm Hg(CAS#80-15-9)
Vapour density:	Not available
Relative density	1.06(CAS#80-15-9)
Bulk density (kg/m³):	Not available
Water solubility:	13900 mg/L(CAS#80-15-9)
n-Octanol/Water (log Po/w):	1.6(CAS#80-15-9)
Auto-ignition temperature:	Not available

Decomposition temperature:	> 80 °C(CAS#80-15-9)
Viscosity, dynamic (mPa.s):	12.5 mPa s (20 °C) (CAS#80-15-9)
Explosive properties:	Not available
Oxidising properties:	Not available
Molecular Formula:	Not available
Molecular Weight:	Not available

9.2. Other information:

Fat solubility(solvent– oil to be specified) etc:	Not available
Surface tension:	Not available
Dissociation constant in water(pKa):	12.6(CAS#80-15-9)
Oxidation-reduction Potential:	Not available
Specific gravity:	Not available

Section 10 Stability and reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions.
10.2 Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	Incompatible materials.
10.5 Incompatible materials:	Strong oxidizing agents.
10.6 Hazardous decomposition products:	In case of fire, the following can be released: Carbon oxides, nitrogen oxides.

Section 11 Toxicological information

11.1 Toxicokinetics, metabolism and distribution:

Non-human toxikological data:	Not available
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11.2 Information on toxicological effects:

Acute toxicity:	
salicylic acid buffer (CAS# 69-72-7)	
LD50(Oral, Rat):	891 mg/kg bw(male)
LD50(Dermal, Rat):	> 2000 mg/kg bw
LC50(Inhalation, Rat):	Not available

Skin corrosion/Irritation:	Causes severe skin burns and eye damage
Serious eye damage/irritation:	Causes serious eye damage
Respiratory or skin sensitization:	May cause allergy or asthma symptoms or breathing difficulties if inhaled
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	May cause respiratory irritation
STOT-repeated exposure:	May cause damage to organs through prolonged or repeated exposure

Section 12 Ecological information

Toxicity:

diisopropylbenzene dihydro peroxide (CAS#80-15-9)

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	3.9 mg/L	96h	Fish	OECD 203	N/A	N/A
EC50	18.84 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	3.1 mg/L	72h	Algae	OECD 201	N/A	N/A

salicylic acid buffer (CAS# 69-72-7)

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	1370 mg/L	96h	Fish	OECD 203	N/A	N/A
EC50	870 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	> 100 mg/L	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability:

diisopropylbenzene dihydro peroxide (CAS#80-15-9): Not readily biodegradable
 salicylic acid buffer (CAS# 69-72-7): Readily biodegradable

Bioaccumulative potential:

diisopropylbenzene dihydro peroxide (CAS#80-15-9): BCF=9

Mobility in soil:

diisopropylbenzene dihydro peroxide (CAS#80-15-9): log Koc = 1.6
 salicylic acid buffer (CAS# 69-72-7): log Koc= 1.54

Results of PBT&vPvB assessment:

Not available.

Other adverse effects:

Toxic to aquatic life with long lasting effects.

Section 13 Disposal considerations

13.1 Waste treatment methods:

The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

13.2 Product / Packaging disposal:

If empty container retains product residues, all label precautions must be observed.
 Return for reuse or dispose according to national or local regulations.

Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	1759	1759	1759
UN Proper shipping name	CORROSIVE SOLID, N.O.S. (diisopropylbenzene dihydro peroxide, sodium hydroxide)	CORROSIVE SOLID, N.O.S. (diisopropylbenzene dihydro peroxide, sodium hydroxide)	CORROSIVE SOLID, N.O.S. (diisopropylbenzene dihydro peroxide, sodium hydroxide)
Transport hazard Class	8	8	8
Packaging group	I	I	I
Environmental hazards	Yes	Yes	Yes
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	IBC07	IBC07	IBC07

Section 15 Regulation information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

Chemical Safety Assessment has been carried out? YES NO

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by EU No 453/2010

16.2 Training instructions:

Not applicable.

16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.4 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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