Safety Data Sheet (SDS) Report

Project Number: **P2016112907**

Applicant: Ningbo Deli Imp & Exp Co.,Ltd
#301,Xu Xiake Rd ,Deli xingling Industrial Zone ,Ninghai ,Ningbo , Zhejiang,China.

Issue Date: 2016-12-23

Sample Description:

The sample information was submitted and identified on client's behalf to be:

Product Name	:	Liquid Glue(Clear and red)
Physical State	:	Liquid
Data Received	:	Nov 29, 2016
Last Information Date	:	Dec 21, 2016
Data Reviewed	:	Dec 23, 2016

Service Requested:

Based on the information provided by the applicant, the Safety Data Sheet (SDS) was generated in accordance with requirements of Regulation (EC) No1907/2006, Regulation (EC) No 2015/830, Regulation (EC) No 1272/2008, for details please refer to attached pages.

Authorized By:

On Behalf Of Regulatory Affairs in Intertek Testing Services Ltd., Shanghai

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Liquid Glue(Clear and red)

Ningbo Deli Imp & Exp Co.,Ltd.

Project number: **P2016112907**

Version No:**1.0**
Safety Data Sheet (Conforms to Regulation (EC) No 1907/2006 and Regulation (EC) No 2015/830)

Issue Date:**23/12/2016**
S.REACH.GBR.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product Identifier

Product name	Liquid Glue(Clear and red)
Synonyms	Not Available
Other means of identification	Not Available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Bonds most porous materials such as paper and cloth,and semi-porous materials such as wood.
Uses advised against	Not Applicable

1.3. Details of the supplier of the safety data sheet

Registered company name	Ningbo Deli Imp & Exp Co.,Ltd.
Address	#301,Xu Xiake Rd ,Deli xingling Industrial Zone ,Ninghai ,Ningbo ,Zhejiang,China.
Telephone	86-574-59976622
Emergency telephone	86-18367450523
Email	whp@nbdeli.com
Importer name	
Address	
Telephone	
Email	

1.4. Emergency telephone number

Association / Organisation	
Emergency telephone numbers	

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Not considered a hazardous mixture according to Reg. (EC) No 1272/2008 and their amendments. Not classified as Dangerous Goods for transport purposes.

Classification according to regulation (EC) No 1272/2008 [CLP]	Not Applicable

2.2. Label elements

CLP label elements	Not Applicable
SIGNAL WORD	**NOT APPLICABLE**

Hazard statement(s)

Not Applicable

Supplementary statement(s)

Not Applicable

CLP classification (additional)

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Continued...

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

2.3. Other hazards

Cumulative effects may result following exposure*.

REACh - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1.CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP]
1.7732-18-5 2.231-791-2 3.Not Available 4.Not Available	70-90	water	Not Applicable
1.9002-89-5 2.Not Available 3.Not Available 4.Not Available	6-10	polyvinyl alcohol	Not Applicable
1.56-81-5 2.200-289-5 3.Not Available 4.Not Available	0-5	glycerol	Not Applicable
1.5160-02-1 2.225-935-3 3.Not Available 4.Not Available	0-2	c.i. pigment red 53:1	Not Applicable
1.55406-53-6 2.259-627-5 3.616-212-00-7 4.Not Available	0-0.09	3-iodo-2-propynyl butyl carbamate	Acute Toxicity (Inhalation) Category 3, Acute Toxicity (Oral) Category 4, Specific target organ toxicity - repeated exposure Category1 (larynx), Serious Eye Damage Category 1, Skin Sensitizer Category 1, Acute Aquatic Hazard Category 1, Chronic Aquatic Hazard Category 1; H331, H302, H372, H318, H317, H400, H410
1.52-51-7 2.200-143-0 3.603-085-00-8 4.Not Available	0-0.075	2-bromo-2-nitropropan-1,3-diol	Acute Toxicity (Dermal) Category 4, Acute Toxicity (Oral) Category 4, Specific target organ toxicity - single exposure Category 3(respiratory tract irritation), Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1, Acute Aquatic Hazard Category 1; H312, H302, H335, H315, H318, H400

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures

General	If skin contact occurs: ▸ Immediately remove all contaminated clothing, including footwear. ▸ Flush skin and hair with running water (and soap if available). ▸ Seek medical attention in event of irritation. If this product comes in contact with eyes: ▸ Wash out immediately with water. ▸ If irritation continues, seek medical attention. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. ▸ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▸ Other measures are usually unnecessary. ▸ Immediately give a glass of water. ▸ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.
Eye Contact	If this product comes in contact with eyes: ▸ Wash out immediately with water. ▸ If irritation continues, seek medical attention. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: ▸ Immediately remove all contaminated clothing, including footwear. ▸ Flush skin and hair with running water (and soap if available). ▸ Seek medical attention in event of irritation.
Inhalation	▸ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▸ Other measures are usually unnecessary.

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Ingestion	▸ Immediately give a glass of water. ▸ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

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

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

5.1. Extinguishing media

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.
Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances.
In such an event consider:
- foam.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.

5.3. Advice for firefighters

Fire Fighting	▸ Alert Fire Brigade and tell them location and nature of hazard. ▸ Wear breathing apparatus plus protective gloves in the event of a fire. ▸ Prevent, by any means available, spillage from entering drains or water courses. ▸ Use fire fighting procedures suitable for surrounding area.
Fire/Explosion Hazard	, , ▸ The material is not readily combustible under normal conditions. ▸ However, it will break down under fire conditions and the organic component may burn. ▸ Not considered to be a significant fire risk. ▸ Heat may cause expansion or decomposition with violent rupture of containers. Decomposes on heating and produces toxic fumes of: carbon dioxide (CO_2) other pyrolysis products typical of burning organic material. May emit corrosive fumes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

Minor Spills	▸ Clean up all spills immediately. ▸ Avoid breathing vapours and contact with skin and eyes. ▸ Control personal contact with the substance, by using protective equipment. ▸ Contain and absorb spill with sand, earth, inert material or vermiculite.
Major Spills	Moderate hazard. ▸ Clear area of personnel and move upwind. ▸ Alert Fire Brigade and tell them location and nature of hazard. ▸ Wear breathing apparatus plus protective gloves.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling	▸ Avoid all personal contact, including inhalation. ▸ Wear protective clothing when risk of exposure occurs. ▸ Use in a well-ventilated area. ▸ Prevent concentration in hollows and sumps. ▸ **DO NOT** allow clothing wet with material to stay in contact with skin
Fire and explosion protection	See section 5
Other information	▸ Store in original containers. ▸ Keep containers securely sealed. ▸ Store in a cool, dry area protected from environmental extremes. ▸ Store away from incompatible materials and foodstuff containers.

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7.2. Conditions for safe storage, including any incompatibilities

Suitable container	▸ PP bottle. ▸ Polyethylene or polypropylene container. ▸ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Glycerol: ▸ reacts violently with strong oxidisers, acetic anhydride, alkali metal hydrides, calcium hypochlorite, calcium oxychloride, chlorine, chromic anhydride,chromium oxides, ethylene oxide, hydrogen peroxide, phosphorous triiodide, potassium chlorate, potassium permanganate, potassium peroxide, silverperchlorate, sodium hydride, sodium peroxide, sodium triiodide, sodium tetrahydroborate,is incompatible with strong acids, caustics, aliphatic amines, isocyanates, uranium fluoride ▸ is able to polymerise above 145 C

7.3. Specific end use(s)

See section 1.2

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

DERIVED NO EFFECT LEVEL (DNEL)

Not Available

PREDICTED NO EFFECT LEVEL (PNEC)

Not Available

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
UK Workplace Exposure Limits (WELs)	glycerol	Glycerol, mist	10 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
polyvinyl alcohol	Polyvinyl alcohol	24 mg/m3	270 mg/m3	1,600 mg/m3
glycerol	Glycerine (mist); (Glycerol; Glycerin)	45 mg/m3	860 mg/m3	2,500 mg/m3
c.i. pigment red 53:1	C.I. pigment red 53:1; (5-Chloro-2-((2-hydroxy-1-naphthyl)azo)-p-toluene sulfonic acid, barium salt)	3 mg/m3	68 mg/m3	410 mg/m3
3-iodo-2-propynyl butyl carbamate	Butyl-3-iodo-2-propynylcarbamate	3.3 mg/m3	36 mg/m3	220 mg/m3

Ingredient	Original IDLH	Revised IDLH
All ingredients	Not Available	Not Available

8.2. Exposure controls

8.2.1. Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard 'physically' away from the worker and ventilation that strategically 'adds' and 'removes' air in the work environment.
8.2.2. Personal protection	
Eye and face protection	▸ Safety glasses with side shields. ▸ Chemical goggles. ▸ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	▸ Wear chemical protective gloves, e.g. PVC. ▸ Wear safety footwear or safety gumboots, e.g. Rubber The selection of suitable gloves does not only depend on thematerial, but also on further marks of quality which vary from manufacturer tomanufacturer. Where the chemical is a preparation of several substances, theresistance of the glove material can not be calculated in advance and hastherefore to be checked prior to the application. The exact break through time for substances has to be obtainedfrom the manufacturer of the protective gloves and.has to be observed whenmaking a final choice. Personal hygiene is a key element of effective hand care.
Body protection	See Other protection below
Other protection	▸ Overalls. ▸ P.V.C. apron. ▸ Barrier cream.
Thermal hazards	Not Available

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Respiratory protection

Selectionof the Class and Type of respirator will depend upon the level of breathingzone contaminant and the chemical nature of the contaminant.

8.2.3. Environmental exposure controls

See section 12

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Clear or red liquid

Physical state	Liquid	**Relative density (Water = 1)**	Not Available
Odour	Odourless	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	Not Available	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	Not Available	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not flammable	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water (g/L)	Not Available	**pH as a solution (1%)**	Not Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available

9.2. Other information

Not Available

SECTION 10 STABILITY AND REACTIVITY

10.1.Reactivity	See section 7.2
10.2. Chemical stability	▸ Unstable in the presence of incompatible materials. ▸ Product is considered stable. ▸ Hazardous polymerisation will not occur.
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Not normally a hazard due to non-volatile nature of product
Ingestion	The material has **NOT** been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence.
Skin Contact	Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.
Eye	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.

Liquid Glue(Clear and red)	**TOXICITY**	**IRRITATION**

Continued...

	Not Available	Not Available

water	TOXICITY	IRRITATION
	Oral (rat) LD50: >90000 mg/kg[2]	Not Available

polyvinyl alcohol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >7940 mg/kg[2]	Skin: moderate
	Oral (rat) LD50: >20,000 mg/kg[2]	

glycerol	TOXICITY	IRRITATION
	Intraperitoneal (Mouse) LD50: 8700 mg/kg[2]	Not Available
	Intraperitoneal (Rat) LD50: 4420 mg/kg[2]	
	Intravenous (Mouse) LD50: 4250 mg/kg[2]	
	Intravenous (Rat) LD50: 5566 mg/kg[2]	
	Oral (Guinea pig) LD50: 7750 mg/kg[2]	
	Oral (Mouse) LD50: 4090 mg/kg[2]	
	Oral (Rat) LD50: 12600 mg/kg[2]	
	Subcutaneous (Mouse) LD50: 91 mg/kg[2]	
	Subcutaneous (Rat) LD50: 100 mg/kg[2]	

3-iodo-2-propynyl butyl carbamate	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg[2]	Eye: Irritating
	Inhalation (rat) LC50: 0.680 mg/l/4hr *[2]	Skin: Slight irritant
	Oral (rat) LD50: 1056 mg/kg[2]	

2-bromo-2-nitropropan-1,3-diol	TOXICITY	IRRITATION
	dermal (rat) LD50: 64 mg/kg[2]	Eye (rabbit): 5 mg
	Inhalation (rat) LC50: >5 mg/L/4hr[2]	Skin (human): 10 mg moderate
	Inhalation (rat) LC50: 0.8 mg/L/4hr[2]	Skin (rabbit): 500 mg/24h mild
	Oral (rat) LD50: 180 mg/kg[2]	Skin (rabbit): 80 mg moderate

Legend:	*1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances*

Acute Toxicity	⊘	**Carcinogenicity**	⊘
Skin Irritation/Corrosion	⊘	**Reproductivity**	⊘
Serious Eye Damage/Irritation	⊘	**STOT - Single Exposure**	⊘
Respiratory or Skin sensitisation	⊘	**STOT - Repeated Exposure**	⊘
Mutagenicity	⊘	**Aspiration Hazard**	⊘

Legend: ✗ *– Data available but does not fill the criteria for classification*
✓ *– Data required to make classification available*
⊘ *– Data Not Available to make classification*

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
polyvinyl alcohol	LC50	96	Fish	0.230mg/L	3
glycerol	LC50	96	Fish	>11mg/L	2
glycerol	EC50	96	Algae or other aquatic plants	77712.039mg/L	3
glycerol	EC0	24	Crustacea	>500mg/L	1
c.i. pigment red 53:1	LC50	96	Fish	=500mg/L	1
c.i. pigment red 53:1	EC50	48	Crustacea	>0.772mg/L	2
c.i. pigment red 53:1	EC50	72	Algae or other aquatic plants	>0.941mg/L	2

Continued...

c.i. pigment red 53:1	EC50	72	Algae or other aquatic plants	>0.941mg/L	2
c.i. pigment red 53:1	NOEC	72	Algae or other aquatic plants	0.531mg/L	2
3-iodo-2-propynyl butyl carbamate	LC50	96	Fish	0.067mg/L	4
3-iodo-2-propynyl butyl carbamate	EC50	48	Crustacea	0.04mg/L	5
3-iodo-2-propynyl butyl carbamate	EC50	96	Algae or other aquatic plants	1.978mg/L	3
3-iodo-2-propynyl butyl carbamate	EC50	96	Crustacea	0.0234mg/L	4
3-iodo-2-propynyl butyl carbamate	NOEC	48	Crustacea	<0.01mg/L	4
2-bromo-2-nitropropan-1,3-diol	LC50	96	Fish	20mg/L	4
2-bromo-2-nitropropan-1,3-diol	EC50	48	Crustacea	0.78mg/L	4
2-bromo-2-nitropropan-1,3-diol	EC50	96	Algae or other aquatic plants	21548.018mg/L	3
2-bromo-2-nitropropan-1,3-diol	EC50	504	Crustacea	0.27-0.88mg/L	2
2-bromo-2-nitropropan-1,3-diol	NOEC	504	Crustacea	0.27mg/L	2
Legend:	*Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data*				

For 2-bromo-2-nitropropan-1,3-diol(Bronopol)
Environmental fate:
One hydrolysis study indicatesthat bronopol appears to hydrolyse slowly at acidic or neutral pH conditions.Bronopol decomposes in aqueous solution on exposure to light. Increases intemperature increase decomposition.
Ecotoxicity:
Bird LD50: mallard duck 510 mg/kg
Bird dietary LC50: quail 4488 ppm
Daphnia magna EC50 (48 h): 1.4mg/l
Fish LC50: trout 41.5 ppm

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
water	LOW	LOW
polyvinyl alcohol	LOW	LOW
glycerol	LOW	LOW
3-iodo-2-propynyl butyl carbamate	HIGH	HIGH
2-bromo-2-nitropropan-1,3-diol	LOW	LOW

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
water	LOW (LogKOW = -1.38)
polyvinyl alcohol	LOW (BCF = 7.5)
glycerol	LOW (LogKOW = -1.76)
c.i. pigment red 53:1	LOW (BCF = 15)
3-iodo-2-propynyl butyl carbamate	LOW (LogKOW = 2.4542)
2-bromo-2-nitropropan-1,3-diol	LOW (LogKOW = -0.6408)

12.4. Mobility in soil

Ingredient	Mobility
water	LOW (KOC = 14.3)
polyvinyl alcohol	HIGH (KOC = 1)
glycerol	HIGH (KOC = 1)
3-iodo-2-propynyl butyl carbamate	LOW (KOC = 365.3)
2-bromo-2-nitropropan-1,3-diol	HIGH (KOC = 1)

12.5.Results of PBT and vPvB assessment

	P	B	T

Continued...

Relevant available data	Not Available	Not Available	Not Available
PBT Criteria fulfilled?	Not Available	Not Available	Not Available

12.6. Other adverse effects

No data available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: ▸ Reduction ▸ Reuse ▸ Recycling ▸ Disposal (if all else fails) This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. ▸ **DO NOT** allow wash water from cleaning or process equipment to enter drains. ▸ It may be necessary to collect all wash water for treatment before disposal. ▸ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. ▸ Where in doubt contact the responsible authority. ▸ Recycle wherever possible. ▸ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. ▸ Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material). ▸ Decontaminate empty containers.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1.UN number	Not Applicable
14.2.UN proper shipping name	Not Applicable
14.3. Transport hazard class(es)	Class: Not Applicable Subrisk: Not Applicable
14.4.Packing group	Not Applicable
14.5.Environmental hazard	Not Applicable
14.6. Special precautions for user	Hazard identification (Kemler): Not Applicable Classification code: Not Applicable Hazard Label: Not Applicable Special provisions: Not Applicable Limited quantity: Not Applicable

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable
14.2. UN proper shipping name	Not Applicable
14.3. Transport hazard class(es)	ICAO/IATA Class: Not Applicable ICAO / IATA Subrisk: Not Applicable ERG Code: Not Applicable
14.4. Packing group	Not Applicable
14.5. Environmental hazard	Not Applicable
14.6. Special precautions for user	Special provisions: Not Applicable Cargo Only Packing Instructions: Not Applicable

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Cargo Only Maximum Qty / Pack	Not Applicable
Passenger and Cargo Packing Instructions	Not Applicable
Passenger and Cargo Maximum Qty / Pack	Not Applicable
Passenger and Cargo Limited Quantity Packing Instructions	Not Applicable
Passenger and Cargo Limited Maximum Qty / Pack	Not Applicable

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable
14.2. UN proper shipping name	Not Applicable
14.3. Transport hazard class(es)	IMDG Class: Not Applicable IMDG Subrisk: Not Applicable
14.4. Packing group	Not Applicable
14.5. Environmental hazard	Not Applicable
14.6. Special precautions for user	EMS Number: Not Applicable Special provisions: Not Applicable Limited Quantities: Not Applicable

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable
14.2. UN proper shipping name	Not Applicable
14.3. Transport hazard class(es)	Not Applicable | Not Applicable
14.4. Packing group	Not Applicable
14.5. Environmental hazard	Not Applicable
14.6. Special precautions for user	Classification code: Not Applicable Special provisions: Not Applicable Limited quantity: Not Applicable Equipment required: Not Applicable Fire cones number: Not Applicable

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex IV - Exemptions from the Obligation to Register in Accordance with Article 2(7)(a) (English)
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)
European Customs Inventory of Chemical Substances ECICS (English)

POLYVINYL ALCOHOL(9002-89-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
European Customs Inventory of Chemical Substances ECICS (English)

GLYCEROL(56-81-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English)
UK Workplace Exposure Limits (WELs)
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

C.I. PIGMENT RED 53:1(5160-02-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List of Substances
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)
EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
European Customs Inventory of Chemical Substances ECICS (English)

3-IODO-2-PROPYNYL BUTYL CARBAMATE(55406-53-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Continued...

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)
European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

2-BROMO-2-NITROPROPAN-1,3-DIOL(52-51-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31
European Customs Inventory of Chemical Substances ECICS (English)
European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : 98/24/EC, 92/85/EC, 94/33/EC, 91/689/EEC, 1999/13/EC, Commission Regulation (EU) 2015/830, Regulation (EC) No 1272/2008 and their amendments

15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

SECTION 16 OTHER INFORMATION

Full text Risk and Hazard codes

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Other information

Ingredients with multiple cas numbers

Name	CAS No
polyvinyl alcohol	9002-89-5, 25213-24-5, 54626-91-4, 34872-35-0

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.
For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:
EN 166 Personal eye-protection
EN 340 Protective clothing
EN 374 Protective gloves against chemicals and micro-organisms
EN 13832 Footwear protecting against chemicals
EN 133 Respiratory protective devices

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit。
IDLH: Immediately Dangerous to Life or Health Concentrations
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index

end of SDS