according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA

GHS

Printing date: 05 April 2017

Revision: 05 April 2017

# SECTION 1: Identification of the substance/mixture and of the company/ undertaking · 1.1 Product identifier · Trade name: <u>VDP-OD</u>

· Article number: No other identifiers

• **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.

· Application of the substance / the mixture: Industrial uses.

 1.3 Details of the supplier of the Safety Data Sheet
 Manufacturer/Supplier: Mitsubishi Imaging (MPM), Inc.
 555 Theodore Fremd Avenue Rye, NY 10580 USA Phone: (914)925-3200

Mitsubishi Imaging (MPM), Inc.

• **1.4 Emergency telephone number:** CHEMTREC 1-800-424-9300 (US/Canada) +01 703-527-3887 (International)

# **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

• Classification according to Regulation (EC) No 1272/2008 Classifications listed are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).

Eye Dam. 1 H318 Causes serious eye damage.

## <sup>•</sup> 2.2 Label elements

#### · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the Globally Harmonized System within the United States.

The product is classified and labelled according to the CLP regulation. **Hazard pictograms** 



 Signal word Danger
 Hazard-determining components of labelling: succinic acid
 2-[2-(2-butoxyethoxy)ethoxy]ethanol
 Hazard statements
 H318 Causes serious eye damage.
 Precautionary statements
 P280 Wear eye protection.

(Cont'd. on page 2)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA

GHS

Printing date: 05 April 2017

#### Revision: 05 April 2017

#### Trade name: VDP-OD

(Cont'd. from page 1) 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/doctor.

• 2.3 Other hazards There are no other hazards not otherwise classified that have been identified. • Results of PBT and vPvB assessment

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

#### **SECTION 3: Composition/information on ingredients**

#### <sup>•</sup> 3.2 Mixtures

· Components:	
CAS: 57-55-6propylene glycol2EINECS: 200-338-0substance with a Community workplace exposure limit2Reg.nr.: 01-2119456809-23-XXXX	20-40%
CAS: 143-22-6       2-[2-(2-butoxyethoxy)ethoxy]ethanol       5         EINECS: 205-592-6       Index number: 603-183-00-0       €       Eye Dam. 1, H318       5         Reg.nr.: 01-2119475107-38-XXXX          5	5-15%
CAS: 56-81-5 glycerol substance with a Community workplace exposure limit Reg.nr.: 01-2119471987-18-XXXX	1-10%
CAS: 7631-86-9 EINECS: 231-545-4 Reg.nr.: 01-2119379499-16-XXXX	1-5%
CAS: 110-15-6 EINECS: 203-740-4 Reg.nr.: 01-2119896114-34-XXXX Additional information	<2%

#### · Additional information:

For the listed ingredient(s), the identity and/or exact percentages are being withheld as a trade secret. For the wording of the listed Hazard Statements refer to section 16.

## **SECTION 4: First aid measures**

#### <sup>•</sup> 4.1 Description of first aid measures

• After inhalation: Supply fresh air; consult doctor in case of complaints.

#### • After skin contact:

Wash with plenty of soap and water after use.

Launder contaminated clothing before reuse.

Seek medical treatment in case of complaints.

## • After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

(Cont'd. on page 3)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA

GHS

Printing date: 05 April 2017

Revision: 05 April 2017

Trade name: VDP-OD

(Cont'd. from page 2)

· After swallowing:

Rinse out mouth and then drink plenty of water. Do not induce vomiting.

Seek medical treatment in case of complaints.

• **4.2 Most important symptoms and effects, both acute and delayed** Coughing, dizziness, if inhaled.

Causes eye irritation.

· Hazards: Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## **SECTION 5: Firefighting measures**

#### • 5.1 Extinguishing media

Suitable extinguishing agents:

The product is not flammable.

Use fire extinguishing methods suitable to surrounding conditions.

• For safety reasons unsuitable extinguishing agents: None.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

· Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

## **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Use personal protective equipment as required.

Particular danger of slipping on leaked/spilled product.

· 6.2 Environmental precautions Avoid release to the environment.

#### <sup>•</sup> 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of the material collected according to regulations.

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 disposal information.

## **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

(Cont'd. on page 4)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA

GHS

Printing date: 05 April 2017

#### Trade name: VDP-OD

Revision: 05 April 2017

(Cont'd. from page 3)

Prevent formation of aerosols. Use personal protective equipment as required.

Open and handle receptacle with care.

 $\cdot$  Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

· Storage:

• Requirements to be met by storerooms and receptacles:

Store in cool, dry conditions in well sealed receptacles.

· Information about storage in one common storage facility: Store away from foodstuffs.

• 7.3 Specific end use(s) No further relevant information available.

#### **SECTION 8: Exposure controls/personal protection**

<sup>•</sup> 8.1 Control para	· 8.1 Control parameters						
· Ingredients with li	Ingredients with limit values that require monitoring at the workplace:						
57-55-6 propylene glycol							
WEEL (USA)	Long-term value: 10 mg/m <sup>3</sup>						
56-81-5 glycerol							
AGW (Germany)	Long-term value: 200 E mg/m³ 2 (I);DFG, Y						
PEL (USA)	Long-term value: 15* 5** mg/m <sup>3</sup> mist; *total dust **respirable fraction						
TLV (USA)	TLV withdrawn-insufficient data human occup. exp.						
7631-86-9 precipita	ated silica (silica - amorphous)						
AGW (Germany)	Long-term value: 4 E mg/m <sup>3</sup> DFG, 2, Y						
NIOSH REL (USA)	Long-term value: 6 mg/m <sup>3</sup>						
OSHA PEL (USA)	Long-term value: 80 mg/m <sup>3</sup>						
	<ul> <li>DNELs: No further relevant information available.</li> <li>PNECs: No further relevant information available.</li> </ul>						
<ul> <li>8.2 Exposure controls</li> <li>Engineering measures Provide adequate ventilation.</li> <li>Personal protective equipment:</li> <li>General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed.</li> <li>Wash hands before breaks and at the end of work.</li> <li>Do not inhale gases / fumes / aerosols.</li> <li>Avoid contact with the eyes.</li> <li>Avoid close or long term contact with the skin.</li> <li>Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.</li> <li>Protection of hands: Gloves are advised for repeated or prolonged contact.</li> </ul>							

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA

GHS

Printing date: 05 April 2017

## Trade name: VDP-OD

Wear protective gloves to handle contents of damaged or leaking units. • Eye protection:

(Cont'd. from page 4)



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

• Body protection: Not required under normal conditions of use.

· Limitation and supervision of exposure into the environment: Avoid release to the environment.

· Risk management measures: No special requirements.

## **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical Appearance	• •	
Form:	Liquid	
Colour:	Clear or slightly cloudy solution	
Odour:	Slight	
Odour threshold:	Not determined.	
pH-value:	4.5-5.5	
Melting point/freezing point:	Not determined.	
Initial boiling point and boiling range:	Not determined.	
Flash point:	Not applicable.	
Flammability (solid, gas):	Not applicable.	
Auto/Self-ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	
Explosive properties:	Product does not present an explosion hazard.	
Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
Oxidising properties	Non-oxidising.	
Vapour pressure:	Not determined.	
Density:		
Relative density:	1.00-1.20	
Vapour density:	Not determined.	
Evaporation rate:	Not determined.	
Solubility in / Miscibility with		
water:	Fully miscible.	
Partition coefficient: n-octanol/water:	Not determined.	
		(Cont'd. on pag

Revision: 05 April 2017

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA

GHS

Printing date: 05 April 2017

Revision: 05 April 2017

Trade name: VDP-OD

(Cont'd. from page 5)

 Viscosity Dynamic: Kinematic:
 9.2 Other information

Not determined. Not determined. No further relevant information available.

## **SECTION 10: Stability and reactivity**

• 10.1 Reactivity No further relevant information available.

• **10.2 Chemical stability** Stable under normal temperatures and pressures.

Thermal decomposition / conditions to be avoided:

Keep away from heat and direct sunlight.

No decomposition if used and stored according to specifications.

- 10.3 Possibility of hazardous reactions Reacts with strong alkali.
- 10.4 Conditions to avoid

Excessive heat.

Direct sunlight.

\* 10.5 Incompatible materials Oxidisers, strong bases, strong acids

· 10.6 Hazardous decomposition products Carbon monoxide and carbon dioxide

## **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

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

· LD/LC50 values relevant for classification: None.

· Primary irritant effect

• Skin corrosion/irritation: Based on available data, the classification criteria are not met.

· Serious eye damage/irritation:

Causes serious eye damage.

· Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

• NTP (National Toxicology Program):

None of the ingredients are listed.

**OSHA-Ca** (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable routes of exposure:

Ingestion.

Eye contact.

Skin contact.

• Germ cell mutagenicity: Based on available data, the classification criteria are not met.

(Cont'd. on page 7)

## Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA

GHS

Printing date: 05 April 2017

Revision: 05 April 2017

Trade name: VDP-OD

(Cont'd. from page 6)

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

• **Reproductive toxicity:** Based on available data, the classification criteria are not met.

• STOT-single exposure: Based on available data, the classification criteria are not met.

· STOT-repeated exposure: Based on available data, the classification criteria are not met.

• Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION	12:	<b>Ecological</b>	information
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· 12.1 Toxicity

· Aquatic toxicity: No further relevant information available.

• **12.2 Persistence and degradability** No further relevant information available.

• **12.3 Bioaccumulative potential** No further relevant information available.

• 12.4 Mobility in soil No further relevant information available.

• Additional ecological information:

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment

• **PBT:** Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

## **SECTION 13: Disposal considerations**

#### <sup>•</sup> 13.1 Waste treatment methods

· Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of larger amounts in accordance with Local Authority requirements.

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

#### · Uncleaned packaging:

• **Recommendation:** Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

## **SECTION 14: Transport information**

14.1 UN-Number
 DOT, ADR, IMDG, IATA

Not Regulated

(Cont'd. on page 8)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA

GHS

Printing date: 05 April 2017

Revision: 05 April 2017

Trade name: VDP-OD

		(Cont'd. from page 7)
<ul> <li>14.2 UN proper shipping name</li> <li>DOT, ADR, IMDG, IATA</li> </ul>	Not Regulated	
<ul> <li>14.3 Transport hazard class(es)</li> </ul>		
· DOT, ADR, IMDG, IATA · Class	Not Regulated	
<ul> <li>14.4 Packing group</li> <li>DOT, ADR, IMDG, IATA</li> </ul>	Not Regulated	
<ul> <li>14.5 Environmental hazards:</li> <li>Marine pollutant:</li> </ul>	No	
<sup>•</sup> 14.6 Special precautions for user	Not applicable.	
<ul> <li>14.7 Transport in bulk according to Anr of Marpol and the IBC Code</li> </ul>	nex II Not applicable.	

#### **SECTION 15: Regulatory information**

<sup>•</sup> 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· United States (USA)

· SARA

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65 (California):

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

• Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· Carcinogenic Categories

· EPA (Environmental Protection Agency)

None of the ingredients are listed.

(Cont'd. on page 9)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA

GHS

Printing date: 05 April 2017

Revision: 05 April 2017

Trade name: VDP-OD

(Cont'd. from page 8)

· IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

#### NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients are listed.

• National regulations:

· Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

• Other regulations, limitations and prohibitive regulations

• Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

\* 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases

H318 Causes serious eye damage.

#### · Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do) Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: (Cont'd. on page 10)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA

GHS

Printing date: 05 April 2017

## Trade name: VDP-OD

Revision: 05 April 2017

(Cont'd. from page 9)

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