

## SAFETY DATA SHEET HYDRAULIC SEAL

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

#### 1.1. Product identifier

Product name HYDRAULIC SEAL  
Product No. 201

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

Identified uses Anaerobic thread locking resin

#### 1.3. Details of the supplier of the safety data sheet

Supplier ORAPI APPLIED LIMITED,  
SPRING ROAD,  
SMETHWICK,  
WEST MIDLANDS, B66 1PT, ENGLAND  
Tel: 0121-525-4000  
Fax: 0121-525-4919  
Lee Baughan  
lee.baughan@orapiapplied.com

#### 1.4. Emergency telephone number

0121 525 4000 (09:00 - 17:00 hrs)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R36/37/38. R43. N;R51/53.

##### Human health

The product is irritating to eyes and skin. Vapours/aerosol spray may irritate the respiratory system. The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals.

##### Environment

The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

#### 2.2. Label elements

Contains 2-HYDROXYPROPYL METHACRYLATE

##### Labelling



Irritant



Dangerous for the environment

##### Risk Phrases

R36/37/38	Irritating to eyes, respiratory system and skin.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

##### Safety Phrases

S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37	Wear suitable gloves.
S51	Use only in well-ventilated areas.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.
S23	Do not breathe vapour/spray.

#### 2.3. Other hazards

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

# HYDRAULIC SEAL

## 3.2. Mixtures

DI-ISOPROPYLNAPHTHALENE	10-30%
CAS-No.: 38640-62-9	EC No.: 254-052-6
Registration Number: 01-2119565150-48-xxxx	
Classification (EC 1272/2008) Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. N;R51/53.
2-HYDROXYPROPYL METHACRYLATE	5-10%
CAS-No.: 27813-02-1	EC No.:
Classification (EC 1272/2008) Eye Irrit. 2 - H319 Skin Sens. 1 - H317	Classification (67/548/EEC) Xi;R36. R43.
ACRYLIC ACID	1-5%
CAS-No.: 79-10-7	EC No.: 201-177-9
Registration Number: 01-2119452449-31-xxxx	
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Acute Tox. 3 - H311 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 STOT SE 3 - H335 Aquatic Acute 1 - H400	Classification (67/548/EEC) R10 C;R35 Xn;R20/21/22 N;R50
CUMENE HYDROPEROXIDE	1-5%
CAS-No.: 80-15-9	EC No.: 201-254-7
Classification (EC 1272/2008) Org. Perox. E - H242 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 3 - H331 Skin Corr. 1B - H314 STOT SE 3 - H335 STOT RE 2 - H373 Aquatic Chronic 2 - H411	Classification (67/548/EEC) O;R7 T;R23 C;R34 Xn;R21/22,R48/20/22 N;R51/53
N,N-DIMETHYL-PARA-TOLUIDINE	0.1 - 1%
CAS-No.: 99-97-8	EC No.: 202-805-4
Classification (EC 1272/2008) Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT RE 2 - H373 Aquatic Chronic 3 - H412	Classification (67/548/EEC) T;R23/24/25 R33 R52/53

# HYDRAULIC SEAL

2'-PHENYLACETOHYDRAZIDE

0.1 - 1%

CAS-No.: 114-83-0

EC No.: 204-055-3

Classification (EC 1272/2008)

Acute Tox. 4 - H302

Acute Tox. 4 - H312

Acute Tox. 4 - H332

Skin Irrit. 2 - H315

Eye Irrit. 2 - H319

Skin Sens. 1 - H317

Carc. 2 - H351

STOT SE 3 - H335

Classification (67/548/EEC)

Xn;R20/21/22.

Carc. Cat. 3;R40.

Xi;R36/37/38.

R43.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

Inhalation

Remove victim immediately from source of exposure. Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.

Skin contact

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if irritation persists after washing.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

### 4.2. Most important symptoms and effects, both acute and delayed

Inhalation.

Irritation of nose, throat and airway.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

Eye contact

Irritation of eyes and mucous membranes.

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

No specific first aid measures noted.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

Extinguishing media

This product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Do not use water as an extinguisher.

### 5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

During fire, toxic gases (CO, CO<sub>2</sub>) are formed.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

### 5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid breathing fire vapours. Ventilate closed spaces before entering them.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

# HYDRAULIC SEAL

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours and contact with skin and eyes.

### 6.2. Environmental precautions

Do not discharge onto the ground or into water courses.

### 6.3. Methods and material for containment and cleaning up

Ventilate well. Absorb spillage with non-combustible, absorbent material. Transfer to a container for disposal.

### 6.4. Reference to other sections

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Avoid contact with skin and eyes.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep in original container. Keep containers tightly closed. Unsuitable containers: common metals (iron, aluminium, copper). Do not store near heat sources or expose to high temperatures.

Storage Class

Chemical storage.

### 7.3. Specific end use(s)

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

### 8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Chemical resistant gloves required for prolonged or repeated contact. Use protective gloves made of: Neoprene.

Eye protection

Wear approved safety goggles.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Brown.
Odour	Sweetish.
Solubility	Insoluble in water Soluble in: Hydrocarbons.
Relative density	1.05
Vapour pressure	<0.1 mmHg 20°C
pH-Value, Conc. Solution	~5
Viscosity	~500 cps
Flash point	>100°C Cd OC (Cleveland open cup).

### 9.2. Other information

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## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No specific reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

Hazardous Polymerisation

May polymerise.

Polymerisation Description

Avoid heat.

### 10.4. Conditions to avoid

Avoid contact with strong oxidisers. May attack light-alloy metals and liberate hydrogen gas. In contact with metals generates hydrogen gas, which together with air can form explosive mixtures.

### 10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Chemically active metals.

### 10.6. Hazardous decomposition products

During fire, toxic gases (CO, CO<sub>2</sub>) are formed. When heated, vapours/gases hazardous to health may be formed.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Inhalation

Irritating to respiratory system. May cause irritation to the respiratory system.

Ingestion

May cause discomfort if swallowed. May cause stomach pain or vomiting. Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

Skin contact

Irritating to skin. Prolonged or repeated exposure may cause severe irritation. May cause sensitisation by skin contact. Risk of sensitisation or allergic reactions among sensitive individuals.

Eye contact

Irritating to eyes. Irritation of eyes and mucous membranes. Extreme irritation of eyes and mucous membranes, including burning and tearing.

#### Toxicological information on ingredients.

#### ACRYLIC ACID (CAS: 79-10-7)

##### Acute toxicity:

Acute Toxicity (Oral LD50)

1250 mg/kg Rat

#### CUMENE HYDROPEROXIDE (CAS: 80-15-9)

##### Acute toxicity:

Acute Toxicity (Oral LD50)

382 mg/kg Rat

Acute Toxicity (Dermal LD50)

382 mg/kg Rat

Acute Toxicity (Inhalation LC50)

220 ppmV (gas) Rat 4 hours

**HYDRAULIC SEAL**  
**2-HYDROXYPROPYL METHACRYLATE (CAS: 27813-02-1)**

Acute toxicity:

Acute Toxicity (Oral LD50)  
7964 mg/kg Mouse

**DI-ISOPROPYLNAPHTHALENE (CAS: 38640-62-9)**

Acute toxicity:

Acute Toxicity (Oral LD50)  
3900 mg/kg Rat

**SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity

The product is not expected to be hazardous to the environment.

**12.1. Toxicity**

Acute Fish Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**12.2. Persistence and degradability**

Degradability

The product is biodegradable.

**12.3. Bioaccumulative potential**

Bioaccumulative potential

No data available on bioaccumulation.

**12.4. Mobility in soil**

Mobility:

The product is immiscible with water and will sediment in water systems.

**12.5. Results of PBT and vPvB assessment**

This product does not contain any PBT or vPvB substances.

**12.6. Other adverse effects**

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

Dispose of waste and residues in accordance with local authority requirements. Contact specialist disposal companies.

**SECTION 14: TRANSPORT INFORMATION**

**14.1. UN number**

UN No. (ADR/RID/ADN) 3082

UN No. (IMDG) 3082

**14.2. UN proper shipping name**

Proper Shipping Name Environmentally Hazardous Substance, Liquid, n.o.s.

**14.3. Transport hazard class(es)**

ADR/RID/ADN Class Class 9: Miscellaneous dangerous substances and articles.

IMDG Class 9

Transport Labels

## HYDRAULIC SEAL



### **14.4. Packing group**

ADR/RID/ADN Packing group III

IMDG Packing group III

### **14.5. Environmental hazards**

Environmentally Hazardous Substance/Marine Pollutant



### **14.6. Special precautions for user**

EMS F-A, S-B

Tunnel Restriction Code (E)

### **14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

## SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health Regulations 2002 (as amended) The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 ("CDG 2009"), SI 2009 No 1348

### **15.2. Chemical Safety Assessment**

## SECTION 16: OTHER INFORMATION

# HYDRAULIC SEAL

Abbreviations and acronyms used in the safety data sheet

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

ADR: European Agreement concerning the International Carriage of dangerous Goods by Road.

IMDG: International Maritime Code for Dangerous Goods.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

EINECS: European Inventory of Existing Commercial Chemical Substances.

CAS: Chemical Abstract Service.

DNEL: Derived No-Effect Level.

PNEC: Predicted No-Effect Concentration.

LD50: Lethal dose, 50 percent.

LC50: Lethal concentration, 50 percent. WEL: Workplace Exposure Limit.

STEL: Short Term Exposure Limit.

TWA: Time Weighted Average.

PBT: Persistent Bioaccumulative Toxic.

vPvB: Very Persistent and Very Bioaccumulative.

General information

For further information or advice contact our technical service line during regular office hours on 0121-524-1000.

This safety data sheet has been compiled for the product as supplied, properties and hazards will vary if the product is diluted with water or mixed with any other material.

Revision Comments

The information contained herein is based on known available data believed to be reliable but does not constitute the users own assessment of the work place risk as required by other Health and Safety Legislation.

Revision Date 12-02-2014

Revision 3

Supersedes date 19-03-2010

Safety Data Sheet Status Approved.

Date 12-02-2014

Signature Health and Safety Manager

Risk Phrases In Full

R34 Causes burns.

R35 Causes severe burns.

R33 Danger of cumulative effects.

R10 Flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R21/22 Harmful in contact with skin and if swallowed.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R65 Harmful: may cause lung damage if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

R36 Irritating to eyes.

R37 Irritating to respiratory system.

R40 Limited evidence of a carcinogenic effect.

R7 May cause fire.

R43 May cause sensitisation by skin contact.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R23 Toxic by inhalation.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R50 Very toxic to aquatic organisms.



## HYDRAULIC SEAL

### Hazard Statements In Full

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H412	Harmful to aquatic life with long lasting effects.
H242	Heating may cause a fire.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H411	Toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.

### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.