1 Product and Company

1.1 Identification of the substance or preparation:
Product name: Elastomeric Bitumen Sealant 0751/0785
1.2 Use of the substance or the preparation:
Sealant
1.3 Company/undertaking identification:
2HK SolutionsLtd
Unit 6 Henfield Business Estate
Westerleigh Road
Bristol BS36 2up
Telephone number for emergency:0845 2238801

2 Composition

Hazardous ingredients	CAS No. EINECS No	Conc in %. in %	Hazard symbol	Risks (R-phrases)
Naptha,hydrodesulfurized Heavy (Conc benzene <0.1%)	64742-82-1 265-185-4	2.5 - <25	F;Xn;N	11-51/53-65-67
Asphaltbitumes	8052-42-4 232-490-9	>25	-	-
quaternary ammonium compounds, trimethyltallow alkyl, chlorides	8030-78-2 232-447-4	1 - <5	F;C	11-22-34

3 Hazards Identification

- Flammable
- Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment

4 First aid Measures

4.1 Eye contact:
- Rinse immediately with plenty of water
- Seek medical advice

4.2 Skin contact:
- Rinse immediately with plenty of water
- If irritation persists: seek medical advice

4.3 After inhalation:
- Remove the victim into fresh air
- Seek medical advice

4.4 After ingestion:
- Never give water to an unconscious person
- Do not induce vomiting
- Seek medical advice

5 Fire Fighting Measures

5.1 Suitable extinguishing media:
- Water spray

- Polyvalent foam
- Dry chemical powder, Carbon Dioxide.

5.2 Unsuitable extinguishing media:
- Solid water jet ineffective as extinguishing medium

5.3 Special exposure hazards:
- On burning: release of carbon monoxide and carbon dioxide
- Gas/vapour flammable with air within explosion limits

5.4 Instructions:
- Take account of toxic firefighting water
- Use firefighting water moderately and contain it

5.5 Special protective equipment for firefighters:
- Heat/fire exposure: compressed air/oxygen apparatus

6 Accidental release measures

6.1 Personal protection/precautions:
see heading 8.1/8.3/10.3

6.2 Environmental precautions:
- Use appropriate containment to avoid environmental contamination

6.3 Methods of cleaning up:
- Take up liquid spill into inert absorbent material e.g.: sand/earth
- Take collected spill to competent authority
- Wash clothing and equipment after handling

7 Handling and Storage

7.1 Handling:
- Observe strict hygiene
- Avoid prolonged and repeated contact with skin
- In case of insufficient ventilation: keep naked flames/sparks away
- Do not discharge the waste into the drain
- Remove contaminated clothing immediately

7.2 Storage:
- Keep container tightly closed
- Keep away from: heat sources, ignition sources

Storage temperature : Roomtemperature
Quantity limits : N.D. **kg**
Storage life : 365 **days**

8 Exposure/Personal Protection

8.1 Exposure limit values:
ASPHALTBITUMES:
TLV-TWA : 0.5 I **mg/m3 - ppm**
TLV-STEL : - **mg/m3 - ppm**
TLV-Ceiling : - **mg/m3 - ppm**
OES-LTEL : 5 fumes **mg/m3 - ppm**
OES-STEL : 10 fumes **mg/m3 - ppm**
MAK : - **mg/m3 - ppm**
TRK : 10 E **mg/m3 - ppm**
MAC-TGG 8 h : 5 rook **mg/m3**
MAC-TGG 15 min. : - **mg/m3**
MAC-Ceiling : - **mg/m3**
VME-8 h : - **mg/m3 - ppm**
VLE-15 min. : - **mg/m3 - ppm**

GWBB-8 h : 5 rook **mg/m3** - **ppm**osure controls/Personal protection

8.2 Exposure controls:
8.2.1 Occupational exposure controls:
- Use only in well ventilated area
8.2.2 Environmental exposure controls: see heading 13
8.3 Personal protection:
8.3.1 respiratory protection:
- In case of insufficient ventilation: respiratory protection with filtertype A
8.3.2 hand protection:
- Chemically resistant gloves
8.3.3 eye protection:
- Safety glasses
8.3.4 skin protection:
- Suitable protective clothing

9 Physical and Chemical properties

9.1 General information:
Appearance (at 20°C) : Viscous
Odour : Naphtha
Colour : Black
9.2 Important health, safety and environmental information:
pH value : N.D.
Boiling point/boiling range : 160 **°C**
Flashpoint : 44 **°C**
Explosion limits : N.D. **Vol%**
Vapour pressure (at 20°C) : 6 **hPa**
Vapour pressure (at 50°C) : N.D. **hPa**
Relative density (at 20°C) : 1.3
Water solubility : Insoluble
Soluble in : Aromatic hydrocarbons, aliphatic hydrocarbons
Relative vapour density : N.D.
Viscosity (at 20°C) : 78 **Pa.s**
Flow time (according to ISO 2431) : > 60 **s**
Partition coefficient n-octanol/water : N.D.
Evaporation rate
ratio to butyl acetate : N.D.
ratio to ether : N.D.
9.3 Other information:
Melting point/melting range : N.D. **°C**
Auto-ignition point : 210 **°C**
Saturation concentration : N.D. **g/m3**

10 Stability and reactivity

10.1 Conditions to avoid/reactivity:
- Stable under normal conditions
10.2 Materials to avoid:
- Keep away from: heat sources, ignition sources
10.3 Hazardous decomposition products:
- On burning: release of carbon monoxide and carbon dioxide

11 Toxicological Information

11.1 Acute toxicity:
LD50 oral rat : N.D. **mg/kg**
LD50 dermal rabbit : N.D. **mg/kg**
LD50 dermal rabbit : N.D. **mg/kg**
LC50 inhalation rat : N.D. **mg/l/4 h**
LC50 inhalation rat : N.D. **ppm/4 h**
11.2 Chronic toxicity:
EC carc. cat. : not listed
EC muta. cat. : not listed
EC repr. cat. : not listed
Carcinogenicity (TLV) : not listed
Carcinogenicity (MAC) : not listed
Carcinogenicity (VME) : not listed
Carcinogenicity (GWBB) : not listed
Carcinogenicity (MAK) : not listed
Mutagenicity (MAK) : not listed
Teratogenicity (MAK) : not listed
IARC classification : not listed
11.3 Routes of exposure: ingestion, inhalation, eye and skin
11.4 Acute effects/symptoms:
AFTER INHALATION:
EXPOSURE TO HIGH CONCENTRATIONS:
- Feeling of weakness
- Dizziness
- Headache
- Nausea
- Disturbances of consciousness

AFTER INGESTION:
- Nausea
- Irritation of the gastric/intestinal mucosa

AFTER EYE CONTACT:
- Slight irritation

ON CONTINUOUS EXPOSURE/CONTACT:
- Irritation of the eye tissue

11.5 Chronic effects:
ON CONTINUOUS EXPOSURE/CONTACT:
- Dry skin
  - Skin rash/inflammation

12 Ecological Information

12.1 Ecotoxicity:
- No data available

12.2 Mobility:
- **Volatile organic compounds (VOC):** 15 %
- Insoluble in water
- Substance sinks in water

For other physicochemical properties see section 9
12.3 Persistence and degradability:
- **Biodegradation BOD_5** : N.D. **% ThOD**
- **water** : No data available
- **soil : T ½** N.D. **days**

12.4 Bioaccumulative potential:

- **log Pow** : N.D.
- **BCF** : N.D.

12.5 Other adverse effects:

- **WGK** : 2 (classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)
- **Effect on the ozone layer** : Not dangerous for the ozone layer (1999/45/EC)
- **Greenhouse effect** : No data available
- **Effect on waste water purification** : No data available

13 Disposal Considerations

13.1 Provisions relating to waste:

- Waste material code (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 08 04 09* (waste adhesives and sealants containing organic solvents or other dangerous substances)
- Hazardous waste (91/689/EEC)

13.2 Disposal methods:

- Incinerate under surveillance
- Substance must not be discharged into the sewer
- Do not discharge into surface water

13.3 Packaging:

- Waste material code packaging (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 10* (packaging containing residues of or contaminated by dangerous substances

14 Transport Information

14.1 Classification of the substance in compliance with UN Recommendations

UN number : -
CLASS : NOT SUBJECT
SUB RISKS :
PACKING :
PROPER SHIPPING NAME :
UN 3295, Hydrocarbons, liquid, n.o.s.(naphtha, hydrodesulfurized heavy)

14.2 ADR (transport by road)

CLASS : NOT SUBJECT
PACKING :
DANGER LABEL TANKS :
DANGER LABEL PACKAGES :

14.3 RID (transport by rail)

CLASS : NOT SUBJECT
PACKING :
DANGER LABEL TANKS :
DANGER LABEL PACKAGES :

14.4 ADNR (transport by inland waterways)

CLASS : NOT SUBJECT
PACKING :
DANGER LABEL TANKS :
DANGER LABEL PACKAGES :

14.5 IMDG (maritime transport)

CLASS : 3
SUB RISKS :
PACKING : III

EMS : F-E, S-E
MARINE POLLUTANT : -
14.6 ICAO (air transport) :
CLASS : 3
SUB RISKS : -
PACKING : III
PACKING INSTRUCTIONS PASSENGER AIRCRAFT : 309/Y309
PACKING INSTRUCTIONS CARGO AIRCRAFT : 310
14.7 Special precautions in connection with transport
:
Viscous liquid with a flash point ranging from 23°C to 61°C, which meets the conditions indicated in 2.3.3.1.5 of ADR, RID and ADNR and in 2.3.2.5 of IMDG not subject to ADR, RID and ADNR and neither to IMDG Code chapters 4.1, 5.2, 6.1

15 Reglatory Information

Labelling in accordance with EC directives 67/548/EEC and 1999/45/EC
R10 : Flammable
R52/53 : Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment
S(02) : (Keep out of reach of children)
S61 : Avoid release to the environment. Refer to special instructions/safety data sheets.

16 Other Information

The information provided on this MSDS is correct to the best of our knowledge, information and belief
at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered
as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in
any process, unless specified in the text.
N.A. = NOT APPLICABLE
N.D. = NOT DETERMINED
***** = INTERNAL CLASSIFICATION
Exposure limits:
TLV : Threshold Limit Value - ACGIH US 2002
OES : Occupational Exposure Standards - United Kingdom 2001
MEL : Maximum Exposure Limits - United Kingdom 2001
MAK : Maximale Arbeitsplatzkonzentrationen - Germany 2001
TRK : Technische Richtkonzentrationen - Germany 2001
MAC : Maximale aanvaarde concentratie - the Netherlands 2002
VME : Valeurs limites de Moyenne d'Exposition - France 1999
VLE : Valeurs limites d'Exposition à court terme - France 1999
GWBB : Grenswaarde beroepsmatige blootstelling - Belgium 2002
GWK : Grenswaarde kortstondige blootstelling - Belgium 2002
EC : Indicative occupational exposure limit values - directive 2000/39/EC
I : Inhalable fraction = **T :** Total dust = **E :** Einatembarer Aerosolanteil
R : Respirable fraction = **A :** Alveolengängiger Aerosolanteil/Alveolar dust
C : Ceiling limit
a: aerosol **r:** rook/Rauch (fume)
d: damp (vapour) **st:** stof/Staub (dust)
du: dust **ve:** vezel (fibre)
fa: Faser (fibre) **va:** vapour
fi: fibre **om:** oil mist
fu: fume **on:** olienevel/Ölnebel (oil mist)

p: poussière (dust) **part:** particles
Chronic toxicity:
K : List of the carcinogenic substances and processes - The Netherlands 2002
Full text of any R-phrases referred to under heading 2:
R11 : Highly flammable
R22 : Harmful if swallowed
R34 : Causes burns
R51/53 : Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment
R65 : Harmful: may cause lung damage if swallowed
R67 : Vapours may cause drowsiness and dizziness