

MATERIAL SAFETY DATA SHEET

for

AEROFOAM NBR GLUE 52-10

AEROFOAM

SAFETY DATA SHEET AEROFOAM NBR GLUE 52-10
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Page 1 of 11

Status: **01/07/2011**

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY

PRODUCT NAME:	Adhesive 52-10
USE OF THE PRODUCT:	Special adhesive for processing of all flexible Aerofoam insulating materials
MANUFACTURER / DISTRIBUTOR:	Hira Industries LLC PO Box, 9013 Al Ghail Industrial Area, Ras Al-Khaima, UAE P: 07-2589006 F: 07-2589008 www.aerofoam.ae
TECHNICAL CONTACT POINT:	Dr. Laurențiu Pestrîțu Quality, Safety, Product Management Tel: +971 4 884 8414; Fax: +971 4 884 8434 laurentiu@rhira.com

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:	Extremely flammable. Can cause eye irritation. Can cause skin irritation. Moderate respiratory tract irritant. Harmful if swallowed. Inhalation of vapors may cause loss of feeling and weakness in the hands and feet and loss of manual dexterity. Inhalation of high concentrations may result in central nervous system effects such as dizziness, weakness, fatigue, nausea, headache and lack of coordination.
ADDITIONAL INFORMATION	At use formation of explosive / highly flammable vapor-air mixtures is possible.

3. COMPOSITION / INFORMATION ON INGREDIENTS

DESCRIPTION	Polychlorene-based adhesive, free from aromatic compounds: Hexane, Toluene, Heptane, Chlorinated Rubber, Cyclohexane & Zinc Oxide.
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Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard.

CHEMICAL NAME

LD50 / LC50

HAZARDOUS INGREDIENTS

Solvent naphtha (petroleum), hydro treated light naphthenic

(EG-No. 295-529-9)

Percentage: 40 - 50 %

Classification: F, R 11; N, R 51/53; Xn R38, R 65, R67

Classification acc. to 67/548/EWG, Annex I, Annotation P:

Substance contains < 0,1 percent by weight benzene.

Ethyl acetate (CAS 141-78-6)

Percentage: 15 - 25 %

Classification: F, R 11; Xi, R36, R66, R67

Acetone (CAS 67-64-1)

Percentage: 10 - 15 %

Classification: F, R 11; Xi, R36, R66, R67

Butanone (CAS 78-93-3)

Percentage: 3 - 7 %

Classification: F, R 11; Xi, R36, R66, R67

2-Propanol (CAS 67-63-0)

Percentage: 1 - 5 %

Classification: F, R11; Xi, R36, R67

Zinc oxide (CAS 1314-13-2)

Percentage: < 0,25 %

Classification: N, R50/53

4. FIRST-AID MEASURES

IN CASE OF INHALATION

Move to fresh air. Restore breathing, if necessary. Call a physician if symptoms persist.

IN CASE OF SKIN CONTACT

Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

IN CASE OF EYE CONTACT

Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.

IN CASE OF INGESTION

Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Do not give anything by mouth to an unconscious person. Induce vomiting as a last measure. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA

Carbon dioxide, extinguishing powder or water spray jet. In case of larger fire use water spray jet or alcohol resistant foam.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapors are heavier than air and can travel to a source of ignition and flash back.

SPECIAL FIRE FIGHTING INSTRUCTIONS

Persons exposed to products of combustion should wear self contained breathing apparatus and full protective equipment.

HAZARDOUS COMBUSTION PRODUCTS

Carbon dioxide, Carbon monoxide Chlorine containing gases.

EXPLOSION HAZARDS May form explosive vapor-air

**EXTINGUISHING MEDIA WHICH
MUST NOT BE USED FOR SAFETY
REASONS** Full water jet

6. ACCIDENTAL RELEASE MEASURE

PERSONAL PRECAUTIONS Keep away from ignition sources on account of the organic solvent content and air room well. Do not inhale vapors.

ENVIRONMENTAL PRECAUTIONS Do not allow product to reach sewage system or waters. Prevent material from reaching sewage systems, holes or cellars. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

**METHODS FOR CLEANING UP /
TAKING UP** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, saw dust). Dispose of the material collected according to regulations. Provide adequate ventilation.

7. HANDLING AND STORAGE

HINTS FOR SAFE HANDLING Mildly irritating material. Avoid unnecessary exposure. Keep away from heat, sparks and flame. Wash thoroughly after handling. Keep container closed. Emptied container retains vapor and product residue. Observe precautions until container is cleaned. Drums of this material should be grounded when pouring. Do not cut or weld on or near this container. This product contains an ingredient that may release formaldehyde at heated cure temperatures.

**HINTS FOR PROTECTION AGAINST
FIRE AND EXPLOSION** Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

**HINTS FOR SEPARATION OF
INCOMPATIBLE PRODUCTS**

Do not store together with food.

STORAGE CONDITIONS

Store in a cool, dry, ventilated location. Keep away from heat, sparks, flame and other Sources of ignition. Keep container closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ADDITIONAL INFORMATION ON
ENGINEERING MEASURES**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapor below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

**CONSTITUENTS WITH
OCCUPATIONAL EXPOSURE
LIMITS REQUIRING
MONITORING**

Ethyl acetate (CAS 141-78-6)
Value: 400 ml/m³ / 1500 mg/m³ (TRGS 900)
Category: 2(I)
Version date 01.2006

Acetone (CAS 67-64-1)
Value: 500 ml/m³ / 1200 mg/m³ (TRGS 900)
Category: 2 (I)
Version date: 01.2006

Butanone (CAS 78-93-3)
Value: 200 ml/m³ / 600 mg/m³ (TRGS 900)
Category: 1 (I)
Version date: 01.2006

2-Propanol (CAS 67-63-0)
Value: 200 ml/m³ / 500 mg/m³ (TRGS 900)
Category: 2(II)
Version date: 01.2006

GENERAL HEALTH MEASURES

The usual precautionary measures for the handling of chemicals have to be observed. Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Immediately remove all contaminated clothing. Avoid contact with skin and eyes.

RESPIRATORY PROTECTION

Breathing protection equipment required in inadequately ventilated places and during spraying. For short term use: protection mask with filter – combination filter – type AX-P3 (for gases and vapours of organic compounds, boiling point below 65 °C / particles, colour code: brown / white)

HAND PROTECTION

Disposable gloves are suitable as protection against splashes and should be removed immediately after moistening.

EYE PROTECTION

Use tightly fitting safety glasses.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	liquid
COLOUR	light yellowish
ODOR	like solvent
SPECIFIC GRAVITY	0.83
SOLID (% BY WEIGHT)	20.30
FREEZING/MELTING POINT	0°C
BOILING POINT	> 56 °C
FLASH POINT	approx. - 22 °C; -8°F
LOWER EXPLOSION LIMIT	approx. 1 Vol (%)

UPPER EXPLOSION LIMIT	approx. 13 Vol (%)
VAPOUR PRESSURE AT 50°C	< 1100 h Pa
DENSITY AT 20°C	approx. 0.9 g/cm ³
EVAPORATION RATE	Not established
AUTOIGNITION TEMPERATURE	Not established
FLAMMABLE LIMITS - LEL (% in air)	Not Applicable
FLAMMABLE LIMITS - UEL (% in air)	Not Applicable

10. STABILITY AND REACTIVITY

STABILITY	Stable under normal conditions.
HAZARDOUS REACTION	No dangerous reactions known.
HAZARDOUS POLYMERIZATION	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS	No dangerous decomposition products during appropriate storage and handling. If not properly handled and stored: carbon monoxide, carbon dioxide chlorine may form. Containing gases may form when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

EXPERIENCE MADE IN PRACTICE	On the skin: irritant to skin and mucous membranes On the eye: irritant Sensitization: no sensitizing effect known
OTHERS	Hexane, n Oral LD50 Rat =28710 mg/kg Inhalation LC50 Rat =48000 ppm/4H Methylcyclopentane Not established

Toluene Oral LD50 Rat = 636 mg/kg
Inhalation LC50 Rat =49000 mg/cu m/4H
Dermal LD50 Rabbit = 14.1 ml/kg
Heptane
Inhalation LC50 Rat =103000 mg/cu m/4H
Chlorinated paraffin Oral LD50 Rat >21500 ml/kg
Dermal LD50 Rabbit > 10 ml/kg
Cyclohexane Oral LD50 Rat =12705 mg/kg
Calcium carbonate Oral LD50 Rat = 6250 mg/kg

12. ECOLOGICAL INFORMATION

ADDITIONAL ECOLOGICAL INFORMATION Do not allow to enter drains/surface water/ground- water.

13. DISPOSAL CONSIDERATIONS

This product meets the definition of hazardous waste. It is ignitable waste class D001. Disposal via incineration is recommended. Dispose of in a manner consistent with federal and local regulations.

LAND DISPOSAL RESTRICTIONS Toluene

DISPOSAL PRODUCT Dispose waste according to applicable local, state and federal regulations.

DISPOSAL PACKAGES Packaging must be emptied of all residues. Packaging with traces of cured product can be re-cycled. Packaging with uncured product must be disposed of in the same manner as the medium.

14. TRANSPORT INFORMATION

LAND TRANSPORT (GGVSE/ADR)

UN-NO. 1133
PROPER SHIPPING NAME Adhesives
CLASS F1
PACKING GROUP III

HAZARD LABEL	3[Y]
NO. FOR HAZARD DESIGNATION	33
REMARK	Special provision 640 D, LQ6, Tunnel restriction code: D1E
EPG No.	3C1

MARINE TRANSPORT (IMDG)

UN-NO.	1133
PROPER SHIPPING NAME	Adhesives
CLASS OR DIVISION	3
PACKING GROUP	III
HAZARD LABEL	3[Y]
EMS NO.	F-E, S-D
STOWING AND SEGREGATION	Category B
MARINE POLLUTANT	The product is not to be classified as 'marine pollutant' (IMDG 3.2)
EPG No.	3C1

AIR TRANSPORT (ICAO-TI / IATA-DGR)

UN-NO.	1133
PROPER SHIPPING NAME	Adhesives.
DANGEROUS GOODS CLASS	3
PACKING GROUP	III
HAZARD LABEL	3[Y]
EPG No.	3C1

15. REGULATORY INFORMATION

LABELLING	F	Highly flammable
HAZARD(OUS) SYMBOL(S) AND INDICATION(S) OF DANGER	Xi	Irritant
	N	Dangerous for the environment
R-PHRASES	11	Highly flammable
	51/53	Toxic to aquatic organisms, may cause long term adverse effects on the aquatic environment

	36/38	Irritating to eyes and skin
	67	Vapors may cause drowsiness and dizziness
S-PHRASES	16	Keep away from sources of ignition - no smoking
	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
	29	Do not empty into drains.
	33	Take precautionary measures against static discharges
	51	Use only in well-ventilated areas
	61	Avoid release to the environment. Refer to special instructions/safety data sheets.
INTERNATIONAL REGULATIONS		According to test results of used raw materials R 51/53 is assigned.

16. OTHER INFORMATION

RELEVANT R-PHRASES	11	Highly flammable
	36	Irritating to eyes
	38	Irritating to skin
	50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
	51/53	Toxic to aquatic organisms, may cause long term adverse effects on the aquatic environment
	65	Harmful: may cause lung damage if swallowed
	66	Repeated exposure may causes skin dryness or cracking
	67	Vapors may cause drowsiness and dizziness