



GRP SDN. BHD. (52323-A)

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SAFETY DATA SHEET (SDS)

1. Product & Company Identification

Product Details:

Product name : Dunlop GP S(II) Contact Adhesive
Physical form : Liquid
Odour : Typical aromatic-like

Company Details:

Manufacturer : GRP Sdn Bhd
Address : Lot 9, Solok Sultan Hishamuddin 7, Kawasan Perusahaan 20,
Selat Kelang Utara, 42000 Port Klang, Selangor D.E.
Tel : + 60-3-3176 5146
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Website : <http://www.grp.com.my>

2. Hazards Identification

Hazard Pictogram



Signal Word: Danger

Classification: Flammable liquid Category 2

Acute toxicity (oral) Category 4

Acute toxicity (dermal) Category 4

Acute toxicity (inhalation) Category 4

Skin corrosion or irritation Category 2

Skin sensitization Category 1

Hazard Statement: H225 Highly flammable liquid and vapour

H302 Harmful if swallowed

H312 Harmful if in contact with skin

H332 Harmful if inhaled

H315 Causes skin irritation

H317 May cause allergic skin reaction

H336 May cause drowsiness or dizziness

Precautionary Statement – Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.

P233 Keep container tightly closed.

P235 Keep cool.

P241 Use explosion-proof electrical/ventilating/lighting/.../ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash hand thoroughly after handling.

P270 Do not eat, drink, or smoke when using this product.

P271 Use only outdoors or in a well ventilated area.

Precautionary Statement – Response

P301 + P305 + P311 Call a POISON CENTER or doctor/physician

P302 + P303 + P304 + P312 Call a POISON CENTER or doctor/physician if you feel unwell

P301 + P305 + P313 Get medical advice/attention

P302 + P303 + P304 + P333 + P313 Get medical advice/attention if you feel unwell

P303 + P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing

P302 + P352 Wash with plenty of soap and water

P302 + P303 + P353 Rinse skin with water/shower

P303 + P361 + P353 Remove immediately all contaminated clothing. Rinse skin with water/shower

P370 + P378 Use fire extinguisher for extinction e.g. carbon dioxide, chemical powder

Precautionary Statement – Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed

P403 + P235 Store in a well-ventilated place. Keep cool

Precautionary Statement – Disposal

P501 Dispose in accordance with local/regional/national/international regulation

3. Composition / Hazardous Components

<u>Chemical Name</u>	<u>CAS No.</u>	<u>WT%</u>	<u>Symbol</u>
Toluene	108-88-3	20 - 40	Xn
Petroleum hydrocarbon distillate	64742-89-8	20 - 40	F, Xn

4. First-aid Measures

Take off all contaminated clothing immediately.

Inhalation :

Move person to fresh air. Keep warm and at rest. Do not allow to smoke. Obtain medical advice.

Skin:

Wipe off excess and wash with soap and water. Proprietary skin cleansers may help removal from skin- Do not use solvents. Obtain medical advice if skin irritation persists.

Eyes:

Flush immediately with plenty of water or saline eye wash solution and continue rinsing for ten minutes. Obtain medical advice.

Ingestion:

Clear material from mouth and throat and obtain immediate medical attention.

Do not induce vomiting.

5. Fire Fighting Measures

Specific Hazards:

Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. The vapour is heavier than air, spreads along the ground and distant ignition is possible.

Extinguishing Media:

Carbon dioxide, chemical powder, foam, water fog.

Unsuitable Extinguishing Media:

Do not use water jet

Protective Equipment for Firefighters

Wear full protective clothing and self-contained breathing apparatus if significant amounts are involved.

6. Accidental release measures

Observe all relevant local and international regulation

Protective measures:

Avoid contact with spilled material. Immediately remove all contaminated clothing. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays.

Clean Up Methods

For small quantity(< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal.

For large quantity(> 1 drum), transfer by mechanical such as vacuum truck to a salvage tank for recovery of safe disposal

Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely.

Remove contaminated soil and dispose of safely. Vapour may form explosive mixture with air.

7. Handling and Storage

General Precautions:

Avoid breathing vapours or contact with material. Only use in well ventilated areas. Wash thoroughly after handling.

Handling

Avoid contact with skin, eyes, and clothing. Exposure to solvent vapours should be controlled by general and/or local exhaust ventilation. Where this is not practicable, suitable respirators must be worn. The solvent vapours are highly flammable and heavier than air. Keep away from sources of ignition-flames, sparks, hot surfaces, electrical equipment, heating appliances. Extinguish pilot lights. Maintain efficient ventilation/extraction using flame-proof equipment where necessary. Equipment/machinery should be earthed to prevent static electricity build-up. Replace container lid firmly after use.

Storage:

Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. Storage Temperature: Ambient

Additional Information

Ensure that all local regulations regarding handling and storage facilities are followed.

8. Exposure control / Personal protection

Occupational exposure limits

This product consist of few substances with the following recognised or recommended OEL value(s):

Substance	Source	Types	ppm	mg/m3
Toluene	ACGIH	TWA	50 ppm	188 mg/m3
Petroleum Hydrocarbon Distillate	ACGIH MY OEL HSPA OELs	TWA (8 h) SKIN_DES	175 ppm	
Ethyl Acetate	ACGIH	TLV-TWA	400 ppm	1440 mg/m3

Local exhaust : Recommended
General ventilation : Recommended
Hand protection : Suitable protective gloves.
Eye protection : Safety/protective glasses.
Flammability : Combustible

9. Physical and Chemical Properties

Form : Liquid
Specific gravity : 0.86 ± 0.02
Colour : Yellow, golden brown
Viscosity : Please refer Technical Data Sheet
Odour : Typical aromatic-like
Volatile, % volume (25°C) : 75 ± 5%
Solubility in water : Insoluble
Boiling point : 66 - 115°C
Flash point : <-20°C
Ignition temperature : 350°C

Note: the above information is not intended for use in preparing specification.

10. Stability and Reactivity

Stability : Stable under normal conditions of use.
Condition to avoid : Avoid heat, sparks, open flames and other ignition sources
Material to avoid : Strong oxidising agents
Hazardous decomposition products : No hazardous changes over an indefinite period of normal storage.

11. Toxicological Information

Inhalation :

Inhalation is the most significant route of exposure to solvents. Acute or immediate symptoms of over exposure include mild respiratory tract irritation, light headedness, headache, drowsiness, tiredness leading to unconsciousness on extreme over exposure.

Toluene : Toluene is harmful by inhalation and may also be absorbed through the skin. The main health effect short and long term is upon the central nervous system, giving rise to symptoms such as dizziness, headache, impaired co-ordination and reaction times and fatigue.

Petroleum Hydrocarbon Distillate : This solvent consists essentially of a mixture of aliphatic hydrocarbons with a maximum n-hexane content of 5%. There is no clear evidence of long term effects associated with the use of this type of low n-hexane solvent under normal controlled conditions.

Skin :

Solvents have a defatting action on the skin. The combined effect of solvents and resin present in the adhesive may irritate the skin and a few susceptible individuals could develop an allergy to the resin.

12. Ecological Information

The petroleum hydrocarbon distillate is classified by the solvent producers as Dangerous for the Environment * with Risk Phrase R51/53 Toxic to aquatic organisms, may cause long - term adverse effects in the aquatic environment. * Classification tests carried out by the solvent producers.

Acute Toxicity

- | | |
|--------------------------|---------------------------------------------------|
| 1) Fish | : Expected to be toxic: 1 < LC/EC/IC50 <= 10 mg/l |
| 2) Aquatic Invertebrates | : Expected to be toxic: 1 < LC/EC/IC50 <= 10 mg/l |
| 3) Algae | : Expected to be toxic: 1 < LC/EC/IC50 <= 10 mg/l |
| 4) Microorganisms | : Expected to be toxic: 1 < LC/EC/IC50 <= 10 mg/l |

Mobility : Adsorbs to soil and has low mobility

Floats on water

Persistence/degradability : Readily biodegradable

Oxidises rapidly by photo-chemical reactions in air

Bioaccumulation : Has the potential to bioaccumulate.

13. Disposal considerations

Material Disposal:

Recover or recycle if possible. Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to contaminate soil or water.

Container Disposal:

Drain container thoroughly. After draining, vent in a safe place away from sparks and fire.

Residues may cause an explosion hazard.

Local Legislation:

Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

14. Transport Information

IMDG

Identification number : UN 1133

Proper shipping name : Adhesive containing flammable liquid

Class/Division : 3

Packing group : II

Marine pollutant : No

IATA(Country variations may apply)

UN No. : 1133
Proper shipping name : Adhesive containing flammable liquid
Class/Division : 3
Packing group : II

15. Regulatory Information

The regulatory information is not intended to be comprehensive. Other regulations may apply to this product.

Supply Classification and Labelling *

Symbol (s)	F, Xn	
Indication(s) of dangerous	HIGHLY FLAMMABLE. HARMFUL	
Risk Phrase	HIGHLY FLAMMABLE.	R11
	Harmful by inhalation, in contact with skin and if swallowed	R20/21/22/48
	Irritating to eyes, respiratory system and skin	R36/37/38
	Possible risk of impaired fertility	R62
	Possible risk of harm to the unborn child	R63
	Harmful: may cause lung damage if swallowed	R65
	Vapours may cause drowsiness and dizziness	R67
Safety Phrases	Keep away from sources of ignition - No smoking	S16
	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice	S26
	After contact with skin wash immediately with plenty of soap	S28
	If swallowed seek medical advice immediately (show the container or label)	S46
	Use only in well ventilated areas	S51
	Do not empty into drains	S29
	Take precautionary measures against static discharges	S33

* References to Legislation

1. Occupational safety and Health (Classification, Packaging and Labelling of Hazardous Chemical) Regulations 1997
2. Occupational Safety and Health (Use and Standard of Exposure of Chemical Hazardous to Health) Regulations 2000

16. Other Information

This information is accurate to the best of knowledge of GRP SDN. BHD.
These data are offered in good faith as typical values and not as a product specification.
No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review recommendations in the specific content of the intended use and determine whether they are appropriate.