

SUPER GRAPHITE

SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/undertaking

Product Name and/or Code : Super Graphite
Supplier/Manufacturer : Jotun (M) Sdn Bhd
Lot 7 Pesiaran Perusahaan
Seksyen 23, P.O. Box 7050
40300 Shah Alam, Selangor
Malaysia
Tel: +603 55421150
Fax: +603 55421207
Emergency telephone number : Office phone: +603 55421150
Product Use : Coatings ; Solvent-borne

2. Composition/Information on ingredients

Chemical name*	CAS no.	EC Number	%	Classification
Xylene	1330-20-7	215-535-7	10-25	R10 Xn; R20/21 Xi; R38
Ethylbenzene	100-41-4	202-849-4	2.5-10	N; R51/53
White Spirit, reg. (17-22% aromates)	64742-82-1	265-185-4	2.5-10	R10 Xn; R65 R65, 67
Benzene, 1,1'-[methylenebis(oxy-2,1-ethanedioxy)]bis	13879-32-8	237-644-9	2.5-10	N; R51/53
Solvent naptha (petroleum), light arom.	64742-95-6	265-199-0	1-2.5	R10 Xn; R65 Xi; R37 R66, 67
Lead			0-1	N; R51/53 Repr. Cat 1; R61 Xn; R20/22 R33
See Section 16 for the full text of the R Phrases declared above				

* Occupational Exposure Limit(s), if available, are listed in Section 8.

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Flammable.

Harmful by inhalation and in contact with skin

Irritating to skin

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



Harmful

4. First-aid measures

First-Aid measures

- General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
- Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious place in recovery position and seek medical advice.
- Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do **NOT** use solvents or thinners.
- Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
- Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.

SUPER GRAPHITE

5. Fire-fighting measures

- Extinguishing Media : Recommended: alcohol resistant foam, CO₂, powders, water spray.
Not be used : waterjet.
- Recommendations : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to sewers or waterways.

6. Accidental release measures

- Personal Precautions : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 & 8.
- Spill : Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses. Clean preferably with a detergent; avoid use of solvents. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling : Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapours in the air and avoid vapour concentration higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

To dissipate static electricity during transfer, earth drum and connect to receiving container with bonding strap. Operators should wear anti-static footwear and clothing and floors should be of the conducting type.

Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates and spray mist arising from the application of this preparation. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Put on appropriate personal protective equipment (see Section 8)

Never use pressure to empty : container is not a pressure vessel. Always keep in containers of same material as the original one.

Comply with the health and safety at work laws.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

- Storage : Store in accordance with local regulations. Observe label precautions. Store in a cool, well-ventilated area away from incompatible materials and ignition sources.

Keep away from: oxidizing agents, strong alkalis, strong acids.

No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Do not empty into drains.

8. Exposure controls / personal protection

- 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 vapour below the OEL, suitable respiratory protection must be worn.

Ingredient Name

Xylene

Occupational Exposure Limits

EH40-OES (United Kingdom (UK),2002). Skin Notes:OES

STEL: 441 mg/m³ 15 minute(s)

STEL: 100 ppm 15 minute(s)

TWA: 200 mg/m³ 8 hour(s)

TWA: 50 ppm 8 hour(s)

SUPER GRAPHITE

White Spirit, reg. (17-22% aromates)	EH40-MEL (United Kingdom (UK),2001) STEL: 850 mg/m ³ 15 min.(s) STEL: 150 ppm 15 min(s). TWA: 566 mg/m ³ 8 hour(s) TWA: 100 ppm 8 hour(s)
Benzene 1,1'-[methylenebis(oxy-2,1-ethanediyloxy)]bis Ethylbenzene	Not available EH40-OES (United Kingdom (UK),2002). Skin Notes:OES STEL: 552 mg/m ³ 15 minute(s) STEL: 125 ppm 15 minute(s) TWA: 441 mg/m ³ 8 hour(s) TWA: 100 ppm 8 hour(s)
Solvent naptha (petroleum), light arom.	EH40-MEL (United Kingdom (UK),2001) TWA: 120 mg/m ³ 8 hour(s) TWA: 25 ppm 8 hour(s)
Lead	Not available

Personal protective equipment

Respiratory system	: If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Use respiratory mask with charcoal and dust filter when spraying this product (as filter combination A2-P2). In confined spaces use compressed air or fresh air respiratory equipment. When use of roller or brush, consider use of charcoal filter (A2).
Skin and body	: Personnel should wear anti-static clothing made of natural fibre or high temperature resistant synthetic fibre.
Hands	: For prolonged or repeated handling, use gloves: polyvinyl alcohol or nitrile. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.
Eyes	: Use safety eyewear designed to protect against splash of liquids.

9. Physical and chemical properties

Physical state	: Liquid
Odour	: Characteristic
Colour	: Grey
Flash point	: Closed cup : 16°C (60.8°F)
pH	: Not applicable
Density	: 1.50 g/cm ³
Vapour density	: The highest known value is 3.7 (Air =1)
Solubility	: Insoluble in cold water

10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7).

Hazardous Decomposition Products: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Keep away from the following materials in order to avoid strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

11. Toxicological information

There are no data available on the preparation itself.

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

SUPER GRAPHITE

12. Ecological information

There are no data available on the preparation itself.
Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional methods of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment.

Ecotoxicity Data

Ingredient Name

<u>Ingredient Name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
Xylene	Oncorhynchus mykiss (LC50)	96 hours	3.3 mg/l
	Oncorhynchus mykiss (LC50)	96 hours	8.2 mg/l
	Lepomis macrochirus (LC50)	96 hours	8.6 mg/l
	Lepomis macrochirus (LC50)	96 hours	12 mg/l
	Lepomis macrochirus (LC50)	96 hours	13.3 mg/l
	Pimephales promelas (LC50)	96 hours	13.4 mg/l
Ethylbenzene	Daphia magna (EC50)	48 hours	2.93 mg/l
	Daphia magna (EC50)	48 hours	2.97 mg/l
	Selenastrum capricornutum (EC50)	48 hours	7.20 mg/l
	Oncorhynchus mykiss (LC50)	96 hours	4.20 mg/l
	Pimephales promelas (LC50)	96 hours	9.09 mg/l
	Poecilia reticulata (LC50)	96 hours	9.60 mg/l
White Spirit, reg. (17-22% aromates)	Fish (LC50)	96 hours	< 10 mg/l
	Daphia magna (EC50)	48 hours	< 10 mg/l
	Algae (IC50)	72 hours	< 10 mg/l
Benzene, 1,1'-[methylenebis(oxy-2,1-ethanediyloxy)]bis Solvent naphtha (petroleum), light arom.	Not available		
	Fish (LC50)	96 hours	< 10 mg/l
	Daphia magna (EC50)	48 hours	< 10 mg/l
	Algae (IC50)	72 hours	< 10 mg/l




13. Disposal considerations

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

European Waste Catalogue (EWC) : 08 00 00 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS

14. Transport information

International transport regulations

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Label	Additional Information
ADR/RID Class	1263	Paint	3	III		<u>Hazard identification number</u> 30
IMDG Class	1263	Paint. Marine pollutant (solvent naphtha (petroleum), light arom.	3	III		<u>Emergency Schedules (EmS)</u> F-E, S-E <u>Marine pollutant</u> P
IATA-DGR Class	1263	Paint	3	III		-

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

15. Regulatory information

National Regulations : The product is labelled as follows, in accordance with local regulations

Indication of danger : Harmful

SUPER GRAPHITE



Hazard symbols

Harmful

Risk Phrases

: R10 – Flammable
R38 – Irritating to skin
R20/21 – Harmful by inhalation and in contact with skin
R52/53 – Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety Phrases

: S16 – Keep away from sources of ignition – No smoking
S23 – Do not breathe vapour / spray
S36/S37 – Wear suitable protecting clothing and gloves
S51 - Use only in well-ventilated areas.
S61 – Avoid release to the environment. Refer to special instructions / Safety data sheets
Contains lead. Should not be used on the surfaces liable to be chewed or sucked by children

16. Other information

CEPE Classification : 1
Full text of R-Phrases with no. appearing in Section 2 : R11 – Highly flammable
R10 – Flammable
R61 – May cause harm to the unborn children
R20 – harmful by inhalation
R20/21 – Harmful by inhalation and in contact with skin
R20/22 – Harmful by inhalation and if swallowed
R41 – Risk of serious damage to eyes
R65 – Harmful; may cause lung damage if swallowed
R37 – Irritating respiratory system
R38 – Irritating to skin
R33 – Danger of cumulative effects
R66 – Repeated exposure may cause skin dryness or cracking
R67 – Vapours may cause drowsiness and dizziness
R51/53 – Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R52/53 – Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

HISTORY

Date of issue : 05.01.2003
Date of previous issue : No previous validation
Version : 1
Prepared by : Carol Liew

Notice to Reader

The information of this SDS is based on the present state of our knowledge and on current EU and national laws. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfill the demand laid down in the local rules and legislation. The information in this SDS is meant as a description of the safety requirements of our product : it is not to be considered as a guarantee of the products properties.

- Indicates information that has changed from previously issued version.

Changes have been made in international and national regulations that influences the following information in the Safety datasheets: Environmental labelling, sensitizers, carcinogenic effects and effects from solvents.