

**SAFETY DATA SHEET:** According to EC-directive 2020/878/EC**Rubber Antioxidant 4020(6PPD)****HS Code: 29215190.90****1. 化学品及企业标示(CHEMICAL PRODUCT AND COMPANY IDENTIFICATION)**

产品标签名/ Product label name	N- (1,3-二甲基丁基) -N'-苯基 - 对苯二胺 N- (1,3-dimethylbutyl)-N' -phenyl-p-phenylene diamine 深圳市华起达实业有限责任公司 Meyor Industrial Co.,Ltd 深圳市罗湖区中兴路外贸集团大厦 2610-2611 室
供应商/ Supplier	RM 2610-2611 Foreign Trade Building, Zhong Xing Road Shen Zhen. China TEL:+86-755-82184166 FAX:+86-755-82187033
紧急电话/ Emergency telephone	+86-755-82190130
产品用途/ Intended use	橡胶防老剂/ Rubber Antioxidant

2. 成分/组成信息(COMPOSITION/INFORMATION ON INGREDIENTS)

化学名/ Chemical name	N- (1,3-二甲基丁基) -N'-苯基 - 对苯二胺 N- (1,3-dimethylbutyl)-N' -phenyl-p-phenylene diamine
CAS 编号/ CAS NO.	793-24-8
产品描述/ Chemical description	深褐色或紫罗兰色颗粒/ dark brown to violet pellet
TSCA NO.编码/ TSCA NO.	无/ none
EINECS 号码/ EINECS NO.	无/ none
其他信息/ Other information	Formula: C ₁₈ H ₂₄ N ₂

3. 危险性概述(HAZARDS IDENTIFICATION)**3.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

Classifications listed are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation:

H400, H410.

Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1	H410 Toxic to aquatic life with long lasting effects.
Skin Sens. 1	H317 May cause an allergic skin reaction.

Information concerning particular hazards for human and environment

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system



The classification is according to the latest editions of the EU-lists, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

3.2 Label elements

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H410.

The product is additionally classified and labelled according to the Globally Harmonized System (GHS) within the United States.

The product is classified and labeled according to the CLP regulation.

Hazard pictograms



This pictogram only applicable for EU regulations. Not for use in the United States (OSHA GHS)



GHS07
Eyes Irrit.2



GHS09
Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 1 H410 Toxic to aquatic life with long lasting

Signal word: Warning

Hazard-determining components of labeling: N- (1,3-dimethylbutyl)-N ' -phenyl-p-phenylene diaminedisulphide

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H410.

H319: Causes serious eye irritation

H410: Very toxic to aquatic life with long lasting effects

Precautionary statements

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

P273: Avoid release to the environment

P264: Wash thoroughly after handling.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P391: Collect spillage

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard description

WHMIS-symbols



D2B – Toxic material causing other toxic effects.



NFPA ratings (scale 0-4)



Health = 2

Fire = 1

Reactivity = 0

HMIS ratings (scale 0-4)

HEALTH	2
FIRE	1
REACTIVITY	0

Health = 2

Fire = 1

Reactivity = 0

HMIS Long Term Health Hazard Substances: Substance is not listed.

3.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

4. 急救措施(FIRST AID MEASURES)

症状和效果/ Symptoms and effects

Dust may be irritating to the respiratory tract and cause symptoms of bronchitis.

Repeated contact may cause skin sensitization.

粉尘可能吸入呼吸道，从而导致支气管炎。

经常接触可能导致皮肤过敏。

急救/ First aid

通常情况/ General

In all cases of doubt, or when symptoms persist, seek medical attention.

任何可疑情况，或有任何症状出现，请马上找医生咨询。

吸入/ Inhalation

Move to fresh air. If symptoms persist, seek medical advice.

呼吸新鲜空气。如果有持续症状，请马上就医。

Remove all contaminated clothing immediately. Wash off with plenty of soap and water.

皮肤/ Skin

Seek medical advice if irritation develops. Launder clothes before reuse.

立即移走所有被污染的衣物。用肥皂和清水冲洗。

如果出现愤怒、烦躁症状请立即就医。衣物重新使用前需洗涤干净。

Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to

眼睛/ Eye

Ensure thorough rinsing. Seek medical advice if irritation develops.

翻开眼睑用清水冲洗干净。

确保洗除残渣。如果出现愤怒症状请就医。

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

摄取/ Ingestion

如果吞食了，请立即叫医生。只有在医生指令下呕吐，当一个人昏迷时不要放任何东西在口中。

医生建议/ Advice to physician

Treat symptomatically. Monitor respiratory system function

5. 消防措施(FIRE-FIGHTING MEASURES)



灭火媒介/ Extinguishing media

Waterspray, water mist, foam, dry chemical powder, CO₂
喷射物, 水雾, 泡沫, 干粉灭火器, CO₂

不适用的灭火媒介

Waterjet.

/ Unsuitable extinguishing media

水注 (流)

特殊危险/ Special exposure hazards

Emits toxic fumes under fire conditions.

在火灾情况下释放的有毒烟气。

分解危险/燃烧产品/

Carbon monoxide (CO), carbon dioxide (CO₂), nitrous gases (NO_x).

Hazardous decomposition/

Combustion products

一氧化碳, 二氧化碳, 氮的氧化物。

保护设备/ Protective equipment

Wear self-contained breathing apparatus.

需佩戴空气呼吸器。

其他信息/ Other information

Do not allow run-off from fire fighting to enter drains or watercourses.

避免消防水接触下水道, 土地或水源。

6. 泄露应急处理(ACCIDENTAL RELEASE MEASURES)

个人防范/ Personal precautions

For personal protection see Section 8. Avoid dust generation.

对于个人防范请参照第 8 部分。避免粉尘的产生。

环境预防/ Environmental precautions

Avoid discharge into the environment.

避免流入环境之中。

清洁处理方法/ Methods for cleaning up

Collect as much as possible in a clean container for (preferable) reuse or disposal.

尽可能的将其收集在清洁的容器里以便回收或集中处理。

7. 操作处置与储存(HANDLING AND STORAGE)

操作处置/ Handling

Avoid contact with skin and eyes. Avoid dust generation.

Take precautionary measures against static discharges.

避免接触皮肤。避免粉尘。

做好静电预防。

火灾爆炸处理/

Fire and explosion prevention

Dust/air mixtures may ignite violently upon exposure to sparks or sources of ignition.

粉尘/空气 混合物可能会引起猛烈的爆炸。

Store in a dry and cool place. Store away from strong oxidizing materials. Avoid exposure to direct sunlight. Do not double stack.

储存要求/ Storage requirements

储存于干燥与阴凉的地方。远离强氧化物质, 避免太阳直照, 不要堆积。

8. 接触控制/个体防护(EXPOSURE CONTROLS/PERSONAL PROTECTION)

工程学控制/ Engineering controls

Avoid dust generation. Ensure good ventilation and local exhaustion of the working area.



避免粉尘产生。确保当地工作场所通风。

暴露限制/ Exposure limits

名称/ Name: N- (1,3-二甲基丁基) -N'-苯基 - 对苯二胺
N- (1,3-dimethylbutyl)-N' -phenyl-p-phenylene diamine

个人防护/ Personal protection

呼吸器/ Respiratory

Avoid breathing dust. In case of insufficient ventilation, wear suitable respiratory equipment.

避免吸入粉尘。在通风不畅的情况下请佩戴相应的呼吸器。

手/ Hand

Wear suitable gloves.

佩戴相应的长手套。

眼/ Eye

Wear safety goggles.

佩戴防护眼罩。

皮肤和身体/ Skin and body

Wear suitable protective clothing.

穿戴相应的保护服装。

9. 物理和化学特性(PHYSICAL AND CHEMICAL PROPERTIES)

外观/ Appearance	Dark brown to violet Granule 深褐色或紫罗兰色颗粒	颜色/ Colour	Dark brown to violet 深褐色或紫罗兰色
气味/ Odor	Amine-like 与胺相似	沸点/ Boiling point	161℃
终熔点/ Final Melting point	46-51℃	闪点/ Flash point	303°F/150.5℃
易燃性/ Flammability	Solid:substance:not (in)flammable.	爆炸极限/ Explosion limits	not applicable 不能提供
爆炸性/ Explosive properties	Dust: dust-explosion hazard (灰尘爆炸危险)	自燃温度/ Autoignition temperature	not applicable 不能提供
氧化性/ Oxidizing properties	not applicable 不适用	蒸汽压/ Vapour pressure	0.00343mmHg(25℃)
比重/ Density	0.986-1.000g/cm ³ (60℃)	体积密度/ Bulk density	not applicable 不能提供
溶解性/ Solubility in water	insoluble	在其它溶剂中的溶解性 Solubility in other solvents	Oil acetone benzene and toluene 油, 丙酮, 苯, 甲苯
颗粒强度(N)/ Strength of grain(N)	8-10	分解系数/ Partition coefficient	Log Pow = 3.5
n-octanol/water	not applicable 不能提供	相对蒸汽密度/ (air=1) Relative vapour density	not applicable 不能提供
粘性/ Viscosity	not applicable/不能提供	纯度/Assay content % ≥	95

10. 稳定性和反应性(STABILITY AND REACTIVITY)



稳定性/ Stability	Stable under recommended storage and handling conditions (see section 7).
应避免的情况/ Conditions to avoid	推荐的稳定储存和搬运条件（请参照第 7 部分） Temperatures above 300°C. Avoid contact with strong oxidants 温度 300 °C 以上。避免接触强氧化剂。
应避免的物质/ Materials to avoid	Strong oxidizers 强氧化剂。
腐烂分解毒害性产品/ Hazardous decomposition products	Thermal decomposition products: carbon monoxide (CO), carbon dioxide(CO ₂),nitrous gases (NOx). 热分解产品：一氧化碳，二氧化碳，氮的氧化物。

11. 毒理学资料(TOXICOLOGICAL INFORMATION)

名称/ Name	N-（1,3-二甲基丁基）-N'-苯基 - 对苯二胺 N- (1,3-dimethylbutyl)-N' -phenyl-p-phenylene diamine
敏感性毒害/ Acute toxicity	
口头的/ Oral LD50	老鼠/ rat: 900 mg/kg.
皮肤的/ Dermal LD50	兔子/ rabbit: >7940mg/kg.
易愤怒/ Irritation	
皮肤/ Skin	May cause an allergic skin reaction. 可能导致皮肤过敏。
眼睛/ Eye	May cause redness, swelling, pain and tearing. 可能导致眼红肿，肿胀，疼痛。

12. 生态学资料(ECOLOGICAL INFORMATION)

名称/ Name	N-（1,3-二甲基丁基）-N'-苯基 - 对苯二胺 N- (1,3-dimethylbutyl)-N' -phenyl-p-phenylene diamine
生态学/ Ecotoxicity	
鱼/ fish	96h-LC50 (Rainbow trout): 0.34 mg/l. 96h-LC50 (Bluegill sunfish): 0.43 mg/l. 96h-LC50 (Fathead minnow): 0.41mg/l.
水蚤/ daphnia	48h-EC50 (Daphnia magna): 1.10 mg/l.

藻类/ algae	96h-EC50 (Cell number): 0.50 mg/l.
Fate	
初级生物/ Degradation	不能被轻易分解/ Not readily biodegradable.
Biotic	

13. 废弃处理(DISPOSAL CONSIDERATIONS)



产品/ Product

Avoid discharge into the environment.
Small quantities: According to local regulations.
Large quantities: Consult Meyors Chemical for special advice.
避免流入环境。
小量: 根据当地规定。
大量: 请联系美尔化工获取建议。

包装污染/ Contaminated packaging

According to local regulations.
根据当地规定。

其他信息/ Other information

Waste code number: Please refer to your specific industry in the European Waste Catalogue.
消耗物代码: 请联系欧洲在消耗物领域的特殊工业。

14. 运输信息(TRANSPORT INFORMATION)

陆运/ Land transport (ADR/ RID)

ADR 等级/ ADR class	not restricted	RID 等级/ RID class	not restricted
ADR/RID 包装组成/		危害鉴定号/	----
ADR/RID packing group		Hazard Identification No.	
物质鉴定号/		UN 号	
Substance Identification No.		UN number	
适当海运名称/	N- (1,3-dimethylbutyl)-N' -phenyl-p-phenylene diamine		
Proper Shipping Name	N- (1,3-二甲基丁基) -N'-苯基 - 对苯二胺		

海运/ Sea transport (IMDG-code/ IMO)

正确的技术名称	----	IMDG 等级	none
Correct technical name		IMDG Class	
UN 号码/ UN Number	Not relevant	包装组成	
EMS 号/ EMS Number	Not relevant	Packaging group	----

空运/ Air transport (ICAO-TI/ IATA-DGR)

ICAO-TI/IATA-DGR 等级	not restricted	UN 号	
ICAO-TI/IATA-DGR Class		UN number	
包装组成			
Packing group			
正确的技术名称	(N- (1,3-dimethylbutyl)-N' -phenyl-p-phenylene diamine)		
Correct technical name	(N- (1,3-二甲基丁基) -N'-苯基 - 对苯二胺)		

15. 法规信息(REGULATORY INFORMATION)

化学品描述/ Chemical description

N- (1,3-dimethylbutyl)-N' -phenyl-p-phenylene diamine
N- (1,3-二甲基丁基) -N'-苯基 - 对苯二胺

标签根据 EC 指标/ Labelling according to EC directives



EC 号/ EC-number	See section 2 查看第 2 部分
分级标准/ Classification based on	Annex-1 to directive 67/548/EEC 根据 67/548/EEC 指示 R 43 May cause sensitization by skin contact May cause long-term adverse effects in the aquatic environment
危险性短语/ R(isk) phrase(s)	R 43 可能导致皮肤接触加剧。 可能导致对水生环境的长期影响。 S 24 Avoid contact with skin S 37 Wear suitable gloves S 60 This material and its container must be disposed of as hazardous waste
安全性短语/ S(afety) phrase(s)	S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets S 24 避免接触皮肤。 S 37 佩戴相应的手套。 S 60 这种物质和其容器必须按照有害物质的原则进行相应处理。 S 61 避免释放到环境，参照相关指令或安全数据表。
其他信息/ Other information	To be displayed on the label: "EC label". 显示在"EC label"标签上。

16. 其他信息(OTHER INFORMATION)

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

这些信息仅仅涉及以上提到的产品，如果用于其他产品或其他过程，本公司不付任何法律责任。这些信息是我们当前最新最好的资料编写而成，值得信任，但我们不能绝对保证没有错误。它仅仅起到提醒使用者自己使这些信息指导相关产品用于适当的地方。