

**MATERIAL SAFETY DATA SHEET:** According to EC-directive 2001/58/EC**Rubber Accelerator NOBS (MBS)****HS Code: 38121000.00****1. 化学品及企业标示(CHEMICAL PRODUCT AND COMPANY IDENTIFICATION)**

产品标签名/ Product label name	N-氧化二乙烯-2-苯并噻唑磺酰胺 N-Oxydiethylene-2-benzothiazole sulfonamide 深圳市华起达实业有限责任公司 Meyor Industrial Co.,Ltd
供应商/ Supplier	深圳市罗湖区中兴路, 外贸集团大厦 2610-2611 室 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	橡胶硫化促进剂/ Rubber Vulcanization accelerator

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

化学名/ Chemical name	N-氧化二乙烯-2-苯并噻唑磺酰胺 N-Oxydiethylene-2-benzothiazole sulfonamide
CAS 编号/ CAS NO.	102-77-2
产品描述/ Chemical description	浅黄色颗粒 Light yellow granule
TSCA NO.编码/ TSCA NO.	无/ none
EINECS 号码/ EINECS NO.	无/ none
其他信息/ Other information	C ₁₁ H ₁₂ N ₂ S ₂ O

3. 危险性鉴定(HAZARDS IDENTIFICATION)

3.1.Classification of the substance or mixture	Skin irritation, Category 2
	Eye irritation, Category 2
	Skin sensitization, Category 1
	Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 2

3.2.GHS label elements, including precautionary statements

Pictogram(s)





Signal word	Warning
Hazard statement(s)	H315 Causes skin irritation
	H319 Causes serious eye irritation
	H317 May cause an allergic skin reaction
	H411 Toxic to aquatic life with long lasting effects
Precautionary statement(s) Prevention	P264 Wash ... thoroughly after handling.
Response	P280 Wear protective gloves/protective clothing/eye protection/face protection.
	P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
	P272 Contaminated work clothing should not be allowed out of the workplace.
	P273 Avoid release to the environment.
	P302+P352 IF ON SKIN: Wash with plenty of water/...
	P321 Specific treatment (see ... on this label).
	P332+P313 If skin irritation occurs: Get medical advice/attention.
	P362+P364 Take off contaminated clothing and wash it before reuse.
	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.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.	
P391 Collect spillage.	
HMIS Classification	
NFPA Rating	

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。
皮肤/ Skin	Remove all contaminated clothing immediately. Wash off with plenty of soap and water. 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。

眼睛/ Eye	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to 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。
摄取/ Ingestion	Rinse mouth, give water to drink. 请漱口，喝水。
医生建议/ Advice to physician	No specific recommendations. 无详细建议。

5. 消防措施(FIRE-FIGHTING MEASURES)

灭火媒介/ Extinguishing media	Waterspray, water mist, foam, dry chemical powder, CO ₂ 喷物，水雾，泡沫，干粉灭火器，CO ₂
不适用的灭火媒介 / Unsuitable extinguishing media	Waterjet. 水柱（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。
分解腐烂危险/燃烧产品/ Hazardous decomposition/ combustion products	Carbon monoxide (CO), Sulfur oxides (SO _x), nitrous gases (NO _x). 一氧化碳，硫的氧化物，氮的氧化物。
保护设备/ Protective equipment	Wear self contained breathing apparatus. 需配戴空气呼吸器。
其他信息/ Other information	Do not allow run-off from fire fighting to enter drains or water courses. 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)

个人防护/ Personal precautions	For personal protection see Section 8. Avoid dust generation. 对于个人防护请参照第 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. Avoid dust generation. 避免接触皮肤。避免粉尘。
火灾爆炸处理/ Fire and explosion prevention	Dust/air mixtures may ignite violently upon exposure to sparks or sources of ignition.



储存要求/ Storage requirements

Kst: 169 bar.m/s.
Maximum corrected explosion pressure: 8.1 bar.
粉尘/空气 混合物可能会引起猛烈的爆炸。
Kst: 169 bar.m/s.
最大修正爆炸压力: 8.1 bar。
Store in a dry and cool place.
储存于干燥与阴凉的地方。

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-氧化二乙烯-2-苯并噻唑磺酰胺
N-Oxydiethylene-2-benzothiazole sulfonamide

OES-TWA 5.0 mg/m³

个体防护/ 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	Light yellow granule 浅黄色颗粒	颜色/ Colour	Light-yellow 浅黄
气味/ Odour	----	沸点/ Boiling point	----
熔点/ Melting point	≥80℃	闪点/ Flash point	Approx. 176 °C
易燃性/ Flammability	----	爆炸极限/ Explosion limits	----
爆炸性/ Explosive properties	Dust explosion hazard	自燃温度/ Auto ignition temperature	380℃
氧化性/ Oxidizing properties	----	蒸汽压/ Vapour pressure	----
比重/ Density	1.36 g/cm ³ (20℃)	体积密度/ Bulk density	
溶解性/ Solubility in water	Insoluble in water 不溶于水	在其它溶剂中的溶解性 Solubility in other solvents	in most organic solvents 在多数有机溶剂中溶解



PH 值/ pH value		分解系数/ Partition coefficient	Log Pow = 3.49 (25 °C)
粘性/ Viscosity	----	相对蒸汽密度/ (air=1) Relative vapour density	---
纯度/ Assay content % ≥	95	颗粒强度(N) Strength of grain(N)	0.6-2.5

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). 推荐的稳定储存和搬运条件 (请参照第 7 部分)
应避免的情况/ Conditions to avoid	Heating > 130 °C: May catch fire. 大于 130 °C:可能导致火灾。
应避免的物质/ Materials to avoid	Nitrosating agents 亚硝基化剂。 Thermal decomposition products: carbon monoxide (CO), nitrous gases (NOx), Sulfur oxides (SOx). MORPHOLINE (Harmful by inhalation, in contact with skin and if swallowed, Corrosive)
腐烂分解毒性产品/ Hazardous decomposition products	热分解产品: 一氧化碳, 氮的氧化物, 硫的氧化物, 吗啉(吸入, 通过皮肤接触或吞食有害)。

11. 毒理学资料(TOXICOLOGICAL INFORMATION)

名称/ Name	N-氧化二乙烯-2-苯并噻唑磺酰胺/ N-Oxydiethylene-2-benzothiazole sulfonamide
敏感性毒害/ Acute toxicity	
口头的/ Oral LD50	老鼠/ rat: >7940mg/kg.
皮肤的/ Dermal LD50	兔子/ rabbit: >7940 mg/kg.
易愤怒/ Irritation	
皮肤/ Skin	Slightly irritating to skin but not sufficient for classification. 对皮肤有轻微刺激但未达到分级阶段。
眼睛/ Eye	Slightly irritating to eyes but not sufficient for classification. 对眼有轻微刺激但未达到分级阶段。

12. 生态学资料(ECOLOGICAL INFORMATION)

名称/ Name	N-氧化二乙烯-2-苯并噻唑磺酰胺/ N-Oxydiethylene-2-benzothiazole sulfonamide
生态学/ Ecotoxicity	
鱼/ fish	96h-LC50 (Lepomis macrochirus): 4.4 mg/l. 96h-LC50 (Oncorhynchus mykiss): 1.3 mg/l. 96h-LC50 (Pimephales promelas): 3.5 mg/l.



水蚤/ daphnia	48h-EC50 (Daphnia magna): 4.0mg/l.
藻类/ algae	96h-IC50 (Selenastrum capricornutum): 2.0mg/l.
初级生物/ Degradation Abiotic	Hydrolysis: 100% (7 days)
其它信息/Other information	48h-LC50 (Midge): 5.3 mg/l

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	9	RID 等级/ RID class	9
ADR/RID 包装组成/	----	危害鉴定号/	90
ADR/RID packing group		Hazard Identification No.	
物质鉴定号/	3077	UN 号	3077
Substance Identification No.		UN number	
适当海运名称/	Environmentally hazardous substance, solid, n.o.s. (N-Oxydiethylene-2-benzothiazole sulfonamide)		
Proper Shipping Name	环境危害物质, 固体, n.o.s (N-氧化二乙烯-2-苯并噻唑磺酰胺)		
海运/ Sea transport (IMDG-code/ IMO)			
正确的技术名称	----	IMDG 等级	----
Correct technical name		IMDG Class	
UN 号码/ UN Number	----	包装组成	----
		Packaging group	
EMS 号/ EMS Number	----		----
空运/ Air transport (ICAO-TI/ IATA-DGR)			
ICAO-TI/IATA-DGR 等级	9	UN 号	3077

**ICAO-TI/IATA-DGR Class****UN number**

包装组成

Environmentally hazardous substance, Solid

Packing group

对环境有害的物质, 固体。

正确的技术名称

Environmentally hazardous substance, solid, n.o.s.

Correct technical name

(N-Oxydiethylene-2-benzothiazole sulfonamide)

环境危害物质, 固体, n.o.s

(N-氧化二乙烯-2-苯并噻唑磺酰胺)

15. 法规信息(REGULATORY INFORMATION)

化学品描述/ Chemical description

N-Oxydiethylene-2-benzothiazole sulfonamide

N-氧化二乙烯-2-苯并噻唑磺酰胺

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

危险性短语/ R(isk) phrase(s)

R 43 May cause sensitization by skin contact

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R 43 可能导致皮肤接触加剧。

R 50/53 对水生有机体有剧毒, 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

S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets

安全性短语/ S(afety) phrase(s)

S 24 避免接触皮肤。

S 37 配戴相应的手套。

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。

Wassergefährdungsklasse (WGK)

2 (VwVwS Anhang 3, Nr. 6608)

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

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



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make sure that the information is appropriate and complete for his special use of this product. 关产品用于适当的地方。

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