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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : Maleic hydrazide, 98% Product Code: M 1365 CAS-No.: 123-33-1

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet
Company identification
OTTO CHEMIE PVT LTD
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208.
Email <u>info@ottokemi.com</u>

1.4. Emergency telephone number Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Skin irritation (Category 2), H315 Eve irritation (Category 2), H319 Germ cell mutagenicity (Category 2), H341 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 For the full text of the H-Statements mentioned in this Section, see Section 16. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Warning Hazard statement(s) H315 Causes skin irritation. Causes serious eye irritation. H319 H335 May cause respiratory irritation. Suspected of causing genetic defects. H341 Precautionary statement(s) Obtain special instructions before use. P201 P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned. Get medical advice/ attention. Supplemental Hazard none Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Warning Hazard statement(s) H341 Suspected of causing genetic defects. Precautionary statement(s) P201 Obtain special instructions before use. P308 + P313 IF exposed or concerned: Get medical advice/ attention. Supplemental Hazard none Statements 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at

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levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances Formula : C4H4N2O2 Molecular weight : 112,09 g/mol CAS-No. : 123-33-1 EC-No. : 204-619-9

20110112010100			
Component	Classification	Concentration	
pyridazine-3,6-diol			
CAS-No. 123-33-1	Skin Irrit. 2; Eye Irrit. 2;	<= 100 %	
EC-No. 204-619-9	Muta. 2; STOT SE 3;		
	H315, H319, H341, H335		
Fan tha full taut of the LL Ctatere	ante mantiened in this Castien, and Castien 4	<u>^</u>	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance. If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2 Special hazards arising from the substance or mixture
Carbon oxides
Nitrogen oxides (NOx)
Combustible.
5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
5.4 Further information
No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
6.4 Reference to other sections
For disposal see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling Advice on safe handling Avoid contact with skin and eves. Avoid formation of dust and aerosols. Advice on protection against fire and explosion Provide appropriate exhaust ventilation at places where dust is formed. Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Keep container tightly closed in a dry and well-ventilated place. Store in cool place. Storage stability Recommended storage temperature 15 - 25 °C Moisture sensitive. Store under argon. Storage class Storage class (TRGS 510): 11: Combustible Solids 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated **SECTION 8: Exposure controls/personal protection** 8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eye/face protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Body Protection Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Control of environmental exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains. **SECTION 9: Physical and chemical properties** 9.1 Information on basic physical and chemical properties a) Physical state powder b) Color beige c) Odor No data available d) Melting Melting point/range: 298 - 300 °C - Decomposes on heating. point/freezing point e) Initial boiling point No data available and boiling range f) Flammability (solid, No data available

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gas)	Na data availabla			
g) Upper/lower	No data available			
flammability or				
explosive limits	200 °C algorithm			
h) Flash point i) Autoignition	300 °C - closed cup 375 °C			
temperature	375 C			
j) Decomposition	No data available			
temperature	NO data avallable			
k) pH	No data available			
I) Viscosity	Viscosity, kinematic: No data available			
1) VISCOSITY	Viscosity, dynamic: No data available			
m) Water solubility	No data available			
n) Partition coefficient:	No data available			
n-octanol/water				
o) Vapor pressure	No data available			
p) Density	1,6 g/cm3 at 25 °C			
Relative density	No data available			
q) Relative vapour	No data available			
density				
r) Particle	No data available			
characteristics				
s) Explosive properties	No data available			
t) Oxidizing properties	none			
9.2 Other safety information				
No data available				
and the				
SECTION 10: Stability and reactivity				
10.1 Reactivity				
No data available				
10.2 Chemical stability				
Stable under recommended storage conditions.				
10.3 Possibility of hazardous reactions				
No data available				
10.4 Conditions to avoid				
No data available				
10.5 Incompatible materials				
Strong acids and strong bases, Strong oxidizing agents				
10.6 Hazardous decomposition products In the event of fire: see section 5				
In the event of life, see section 5				
SECTION 11: Toxicological information				
11.1 Information on toxicological effects				
Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:				
Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg				
Inhalation LC50 Rat: > 50mg/L.				
	FECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.			
Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).				
Special Remarks on Toxicity				
to Animals: Not available.				
Special Remarks on Chronic Effects on Humans:	Not available.			
Special Remarks on other Toxic Effects on Huma	ns: Not available			

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h Remarks: (ECOTOX Database) Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 108 mg/l - 48 h

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Remarks: (ECOTOX Database) Toxicity to algae IC50 - Chlorella pyrenoidosa - 10 Remarks: (ECOTOX Database) 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment This substance/mixture contains no components of bioaccumulative and toxic (PBT), or very persister levels of 0.1% or higher. 12.6 Endocrine disrupting properties No data available 12.7 Other adverse effects Biological effects: Herbicide Hazard for drinking water supplies. Discharge into the environment must be avoided. SECTION 13: Disposal considerations 13.1 Waste treatment methods Product Offer surplus and non-recyclable solutions to a lice mix the material with a combustible solvent and bu with an afterburner and scrubber. Waste material the Directive on waste 2008/98/EC as well as othe chemicals in original containers. No mixing with of like the product itself. Contaminated packaging Dispose of as unused product.	considered to be either persistent, at and very bioaccumulative (vPvB) at ensed disposal company. Dissolve or urn in a chemical incinerator equipped must be disposed of in accordance with er national and local regulations. Leave	
SECTION 14: Transport information 14.1 UN number ADR/RID: - 14.2 UN proper shipping name	IMDG: -	IATA: -
ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods 14.3 Transport hazard class(es) ADR/RID: -	IMDG: -	IATA: -
14.4 Packaging group ADR/RID: -	IMDG: -	IATA: -
14.5 Environmental hazards		
ADR/RID: no 14.6 Special precautions for user No data available Further information Not classified as dangerous in the meaning of trar	IMDG Marine pollutant: no	IATA: no
SECTION 15: Regulatory information 15.1 Safety, health and environmental regulations substance or mixture This material safety data sheet complies with the r		

1907/2006.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

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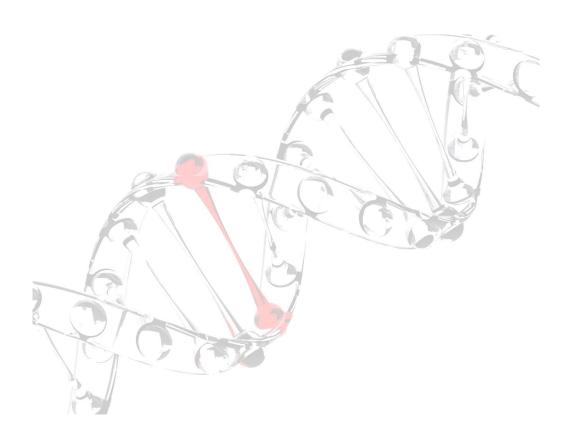
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Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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