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ISO 9001: 2015

MATERIAL SAFETY DATA SHEET

1. Identification

1.1 GHS Product identifier

Dicyandiamide, 98%

Code D 1605

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Reagents.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008

2.2 Label elements

Pictograms or hazard symbols None

Signal word No signal word

Hazard statements None

Precautionary statements None

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

SECTION 3: Composition/information on ingredients

3.1 Substances

Components: Dicyandiamide

Percent: >98.0%(T)

CAS RN: 461-58-5

EC-No: 207-312-8

Synonyms: Cyanoguanidine

Chemical Formula: C₂H₄N₄

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion: Get medical advice/attention if you feel unwell. Rinse mouth.

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

4.2 Most important symptoms and effects, both acute and delayed

No data available

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: Dry chemical, foam, water spray, carbon dioxide.

5.2 Special hazards arising from the

substance or mixture

Carbon monoxide, carbon dioxide etc

5.3 Advice for firefighters Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of

fire in the surroundings: Remove movable containers if safe to do so. When extinguishing fire, be sure to wear personal protective equipment

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc

6.2 Environmental precautions Prevent product from entering drains

6.3 Methods and materials for containment and cleaning up

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

6.4 Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters No data available

8.2 Exposure controls Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Safety glasses. A face-shield, if the situation requires.

Skin and body protection: Protective clothing. Protective boots, if the situation requires.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state (20°C): Solid

Form: Crystal - Powder or crystalline or chunks

Colour: White - White

Odour: Odorless

pH: No data available Melting point/freezing point: 211°C

Boiling point/range: No data available Flash point: No data available (Calculated value: >60°C)

Flammability or explosive limits:

Lower: No data available

Upper: No data available Vapour pressure: 0.2Pa/25°C

Relative density: No data available Solubility(ies):

[Water] Slightly soluble (4.13g/100mL, 25°C)

[Other solvents]

Soluble: Dimethylformamide(DMF), Hot methanol

Slightly soluble: Ethanol

Insoluble: Ether, Benzene, Chloroform

Partition coefficient:

n-octanol/water:-1.15

Autoignition temperature: No data available Decomposition temperature: No data available Dynamic Viscosity: No data available

Kinematic viscosity: No data available

9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity No data available

10.2 Chemical stability Stable under proper conditions.

10.3 Possibility of hazardous reactions No special reactivity has been reported.

10.4 Conditions to avoid No data available

10.5 Incompatible materials Oxidizing agents, Strong acids, Strong bases

10.6 Hazardous decomposition products Carbon monoxide, carbon dioxide etc

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute Toxicity: orl-rat LD50:>20000 mg/kg

ipr-mus LD50:>4 g/kg

Skin corrosion/irritation:

Serious eye damage/irritation:

Germ cell mutagenicity:

Carcinogenicity:

Reproductive toxicity:

RTECS Number: ME9950000

*We judged that this product was not classified into Class 6.1 Toxic Substance of current edition of IATA Dangerous Goods Regulations (DGR) according to acute toxicity values and/or Quantitative Structure-Activity Relationship (QSAR).

SECTION 12: Ecological information

12.1 Toxicity

Fish: 48h LC50:>1000 ppm (Oryzias latipes)

96h LC50:>100 mg/L (Oryzias latipes)

Crustacea: 48h EC50:>1000 mg/L (Daphnia magna)

Algae: 72h EC50:940 mg/L (Selenastrum capricornutum)

12.2 Persistence and degradability 0 % (by BOD) , 0.6 % (by TOC) , 0.7 % (by UV-VIS)

12.3 Bioaccumulative potential <0.3 (conc. 2.0 ppm) , <3.1 (conc. 0.2 ppm)

12.4 Mobility in soil

Log Pow: -1.15

Soil adsorption (Koc): 6

Henry's Law (PaM 3/mol): 2.3 x 10⁻⁵ 12.5 Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

12.6 Other adverse effects No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent

and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

SECTION 14: Transport information

14.1 UN number Not listed

14.2 UN proper shipping name

ADR/RID Not listed

IMDG/IMO Not listed

ICAO/IATA Not listed

14.3 Transport hazard class(es)

ADR/RID Does not correspond to the classification standard of the United Nations

IMDG/IMO Does not correspond to the classification standard of the United Nations

ICAO/IATA Does not correspond to the classification standard of the United Nations

14.4 Packaging group

ADR/RID -

IMDG/IMO -

ICAO/IATA - 14.5 Environmental hazards

Marine pollutant - 14.6 Special precautions for user No data available This substance is not regulated by

IATA/ICAO/ARD/RID/IMO/IMDG and is considered to be Non Hazardous for transport by

Air/Rail/Road/Sea

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Water Hazard Classes (WGK) : Class 1 - Low hazard to waters

Substance of Very High Concern (SVHC) according to the

REACH Regulations (EC) No.1907/2006

Not listed

15.2 Chemical safety assessment A chemical safety assessment has not been carried out.

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.