ThermoFisher SCIENTIFIC

SAFETY DATA SHEET

Revision Date 16-Jul-2015

Revision Number 1

| | 1. Identification |
|--|--|
| Product Name | Urea Broth, Rapid (Lyoph) |
| Cat No. : | R20388 |
| Synonyms | No information available |
| Recommended Use | Laboratory chemicals. |
| Uses advised against Details of the supplier of the safety | No Information available <u>y data sheet</u> |
| Company Remel 12076 Santa Fe Drive Lenexa, KS 66215 United States Telephone: 1-800-255-6730 Fax:1-800-621-8251 | Emergency Telephone Number INFOTRAC - 24 Hour Number: 1-800-535-5053 Outside of the United States, call 24 Hour Number: 001-352-323-3500 (Call Collect) |

2. Hazard(s) identification

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

Label Elements None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|-----------|---------|----------|
| Urea | 57-13-6 | 5.66 |

4. First-aid measures

| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention. |
|---|---|
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur. |
| Inhalation | Move to fresh air. Get medical attention immediately if symptoms occur. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. |
| Most important symptoms/effects Notes to Physician | None reasonably foreseeable. Treat symptomatically |

| | 5. Fire-fighting measures |
|--|--|
| Suitable Extinguishing Media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point Method - | No information available No information available |
| Autoignition Temperature Explosion Limits | No information available |
| Upper Lower Sensitivity to Mechanical Impac Sensitivity to Static Discharge | No data available No data available t No information available No information available |

Specific Hazards Arising from the Chemical Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

None known

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

| <u>NFPA</u> | Health 1 | Flammability 0 | Instability 0 | Physical hazards N/A |
|---------------|-----------------------------------|---|--|---|
| | | 6. Accidental re | lease measures | |
| | Precautions nental Precautions | • | n. Use personal protective equentiation of the environment. | uipment. |
| Methods Up | for Containment a | nd Clean Soak up with inert absorbe sawdust). Provide adequat | | el, acid binder, universal binder, |
| | | 7. Handling | and storage | |
| Handling | | | equipment. Ensure adequate vo gestion and inhalation. Avoid o | entilation. Avoid contact with skin, dust formation. |
| Storage | | Keep containers tightly clo | sed in a dry, cool and well-ven | tilated place. |
| | | 8. Exposure controls | / personal protecti | on |
| Exposure | e Guidelines | This product does not cont established by the region s | - | ith occupational exposure limits |

| Engineering Measures | Ensure adequate ventilation, especially in confined areas. |
|-------------------------------|---|
| Personal Protective Equipment | |
| Eye/face Protection | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. |
| Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure. |
| Respiratory Protection | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. |

9. Physical and chemical properties

| | · · · |
|--|--------------------------|
| Physical State | Liquid |
| Appearance | No information available |
| Odor | No information available |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | No data available |
| Boiling Point/Range | No information available |
| Flash Point | No information available |
| Evaporation Rate | No information available |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | No information available |
| Vapor Density | No information available |
| Relative Density | No information available |
| Solubility | No information available |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | No information available |
| Decomposition Temperature | No information available |
| Viscosity | No information available |
| VOC Content(%) | 5.66 |
| | |

10. Stability and reactivity

| Reactive Hazard | None known, based on information available | |
|---|---|--|
| Stability | Stable under normal conditions. | |
| Conditions to Avoid | Incompatible products. Excess heat. Avoid dust formation. | |
| Incompatible Materials | Strong oxidizing agents | |
| Hazardous Decomposition Products None under normal use conditions | | |
| Hazardous Polymerization | Hazardous polymerization does not occur. | |
| Hazardous Reactions | None under normal processing. | |

11. Toxicological information

Acute Toxicity

| Product Information Oral LD50 | n | Based on ATE data | | | | |
|---|------------------------------------|--|--|---------------------|---------------------|------------------|
| Dermal LD50 | | Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. | | | /kg. | |
| Vapor LC50 Component Informa | ation | Based on ATE data, the classification criteria are not met. ATE > 20 mg/l. | | | | |
| Component | | LD50 Oral LD50 Dermal LC50 Inhalation | | | nhalation | |
| Urea | | 8471 mg/kg (Rat) | | Not listed | | t listed |
| Toxicologically Syr | ergistic | No information available | | | | |
| Products | | | | | | |
| Delayed and immed | liate effects as | well as chronic effec | cts from short an | d long-term expo | <u>sure</u> | |
| Irritation | | No information ava | ilable | | | |
| Sensitization | | No information ava | ilable | | | |
| Carcinogenicity | | The table below inc | dicates whether ea | ach agency has list | ed any ingredient a | as a carcinogen. |
| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
| Urea | 57-13-6 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Mutagenic Effects | | No information ava | ilable | | | |
| | | | | | | |
| Reproductive Effec | ts | No information ava | ilable. | | | |
| Reproductive Effec Developmental Effe | | No information ava | | | | |
| • | | | ilable. | | | |
| Developmental Effe | octs sure | No information ava | ilable. | | | |
| Developmental Effe Teratogenicity STOT - single expo | octs sure | No information ava No information ava None known | ilable. ilable. | | | |
| Developmental Effe Teratogenicity STOT - single expo STOT - repeated ex Aspiration hazard Symptoms / effects | ects sure posure | No information ava No information ava None known None known | ilable. ilable. ilable | | | |
| Developmental Effe Teratogenicity STOT - single expo STOT - repeated ex Aspiration hazard | sure posure s,both acute and | No information ava No information ava None known None known No information ava | ilable. ilable. ilable ilable | | | |

12. Ecological information

Ecotoxicity Do not empty into drains.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|--------------------------|-----------------------|---------------------------------|--|---|
| Urea | Not listed | 16200 - 18300 mg/L LC50 96 h | = 23914 mg/L EC50 Photobacterium phosphoreum 5 min | 10000 mg/L EC50 > 24 h 3910 mg/L EC50 = 48 h |
| Persistence and Degradal | bility No information | on available | | |

Bioaccumulation/ Accumulation

No information available.

Mobility

No information available.

| Component | log Pow |
|-----------|---------|
| Urea | -1.59 |
| | |

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| | 14. Transport information |
|--------------------|----------------------------|
| DOT | Not regulated |
| DOT TDG IATA | Not regulated |
| IATA | Not regulated |
| IMDG/IMO | Not regulated |
| | 15. Regulatory information |

All of the components in the product are on the following Inventory lists: X = listed

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|-----------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Urea | Х | Х | - | 200-315-5 | - | | Х | Х | Х | Х | Х |

Legend: X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

| TSCA 12(b) | Not applicable |
|------------|----------------|
|------------|----------------|

| SARA 313 | Not applicable |
|----------|----------------|
|----------|----------------|

| SARA 311/312 Hazardous Categori Acute Health Hazard Chronic Health Hazard Fire Hazard Sudden Release of Pressure Ha Reactive Hazard | No No No |
|--|--|
| Clean Water Act | Not applicable |
| Clean Air Act | Not applicable |
| OSHA Occupational Safety and Heal Not applicable | th Administration |
| CERCLA Not applicable | |
| California Proposition 65 | This product does not contain any Proposition 65 chemicals |
| State Right-to-Know | Not applicable |
| U.S. Department of Transportation | |

| Reportable Quantity (RQ): | Ν |
|-----------------------------|---|
| DOT Marine Pollutant | Ν |
| DOT Severe Marine Pollutant | Ν |

U.S. Department of Homeland Security

This product contains the following DHS chemicals:

| Component | DHS Chemical Facility Anti-Terrorism Standard | | | |
|-----------|---|--|--|--|
| Urea | 2000 lb STQ | | | |

Other International Regulations

Mexico - Grade

No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

Non-controlled

| | 16. Other information |
|------------------|--|
| Prepared By | Regulatory Affairs |
| | Thermo Fisher Scientific |
| | Email: EMSDS.RA@thermofisher.com |
| Revision Date | 16-Jul-2015 |
| Print Date | 16-Jul-2015 |
| Revision Summary | This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) |
| Disclaimer | |

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS