

SAFETY DATA SHEET HN 500-2 (Part B)

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name HN 500-2 (Part B)
Other Part RL 500PF (Part A)

Recommended use of the chemical and restrictions on use

Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier

Chemco International Ltd East Shawhead Industrial Estate

Coatbridge ML5 4XD Scotland United Kingdom +44 (0) 1236 606060 +44 (0) 1236 606070 sales@chemcoint.com

Emergency telephone number

Emergency telephone +44 (0) 7932944040

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361f

Environmental hazards Not Classified

Label elements

Pictogram







Signal word Danger

Hazard statements H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction. H361f Suspected of damaging fertility.

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Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe vapor/ spray. P261 Avoid breathing vapor/ spray.

P264 Wash contaminated skin thoroughly after handling.

P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P302+P352 If on skin: Wash with plenty of water.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/ shower.

P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.

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.

P310 Immediately call a poison center/ doctor.

P321 Specific treatment (see medical advice on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/ container in accordance with national regulations.

Contains

benzyl alcohol, 3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-

phenylenebis(methylamine), bisphenol A, 3-aminopropyldimethylamine, 2,4,6-

tris(dimethylaminomethyl)phenol

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

benzyl alcohol 30-60%

CAS number: 100-51-6

Classification

Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2A - H319

3-aminomethyl-3,5,5-trimethylcyclohexylamine

10-30%

CAS number: 2855-13-2

Classification

Acute Tox. 4 - H302

Acute Tox. 4 - H312

Skin Corr. 1B - H314

Skin Sens. 1 - H317

Aquatic Chronic 3 - H412

m-phenylenebis(methylamine)

CAS number: 1477-55-0

Classification

Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412

bisphenol A 10-30%

CAS number: 80-05-7

Classification

Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361f STOT SE 3 - H335

3-aminopropyldimethylamine

10-30%

10-30%

CAS number: 109-55-7

Classification

Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Corr. 1B - H314 Skin Sens. 1 - H317

2,4,6-tris(dimethylaminomethyl)phenol

10-30%

CAS number: 90-72-2

Classification

Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

General information

Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. Chemical burns must be treated by a physician.

Inhalation

Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.

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Ingestion Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water

or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing

such as collar, tie or belt.

Skin Contact It is important to remove the substance from the skin immediately. Take off immediately all

contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention. Chemical burns must be treated by a physician.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 10 minutes.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue. If it is

suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth

resuscitation.

Most important symptoms and effects, both acute and delayed

General information See Section 11 for additional information on health hazards. The severity of the symptoms

described will vary dependent on the concentration and the length of exposure.

Inhalation A single exposure may cause the following adverse effects: Corrosive to the respiratory tract.

Symptoms following overexposure may include the following: Severe irritation of nose and

throat.

Ingestion May cause sensitization or allergic reactions in sensitive individuals. May cause chemical

burns in mouth, esophagus and stomach. Symptoms following overexposure may include the

following: Severe stomach pain. Nausea, vomiting.

Skin contact May cause skin sensitization or allergic reactions in sensitive individuals. Causes severe

burns. Symptoms following overexposure may include the following: Pain or irritation.

Redness. Blistering may occur.

Eye contact Causes serious eye damage. Symptoms following overexposure may include the following:

Pain. Profuse watering of the eyes. Redness.

Indication of immediate medical attention and special treatment needed

Notes for the doctorTreat symptomatically. May cause sensitization or allergic reactions in sensitive individuals.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry

powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing

nedia

Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

Severe corrosive hazard. Water used for fire extinguishing, which has been in contact with the

product, may be corrosive.

Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Very toxic or corrosive gases or vapors.

Advice for firefighters

Protective actions during firefighting

Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Regular protection may not be safe. Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Avoid inhalation of dust and vapors. Use suitable respiratory protection if ventilation is inadequate. Avoid contact with skin and eyes. Avoid contact with contaminated tools and objects.

Environmental precautions

Environmental precautions

Slightly soluble in water. Aquatic toxicity is unlikely to occur. However, large or frequent spills may have hazardous effects on the environment. Absorb spillage with non-combustible, absorbent material. Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. This product is corrosive. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labeled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. This product is corrosive. Immediate first aid is imperative. Suspected of damaging fertility. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in accordance with local regulations. Keep only in the original container. Keep container

tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Utilize retaining walls to prevent soil and water pollution in the event of spillage. The

storage area floor should be leak-tight, jointless and not absorbent.

Storage class Corrosive storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

m-phenylenebis(methylamine)

Ceiling exposure limit: ACGIH 0.1 mg/m³

Sk

ACGIH = American Conference of Governmental Industrial Hygienists.

Sk = Danger of cutaneous absorption.

Exposure controls

Protective equipment













Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimize worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimize exposure.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body

protection

Appropriate footwear and additional protective clothing complying with an approved standard

should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures Provide eyewash station and safety shower. Contaminated work clothing should not be

allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried

out. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protection Respiratory protection complying with an approved standard should be worn if a risk

assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable

filter cartridges should comply with OSHA 1910.134.

Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance Liquid.

Color Yellowish.

Odor Ammonia.

Melting point Not determined.

Initial boiling point and range > 135°C

Flash point > 80°C PMCC (Pensky-Martens closed cup).

Relative density 1.02g/cm³ @ 20°C

Solubility(ies) Immiscible with water.

Viscosity 600 -800 mPa s @ 25°C

Other information None.

10. Stability and reactivity

Reactivity There are no known reactivity hazards associated with this product.

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the

prescribed storage conditions.

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Possibility of hazardous

reactions

No potentially hazardous reactions known.

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

Materials to avoid No specific material or group of materials is likely to react with the product to produce a

hazardous situation.

Hazardous decomposition

products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Corrosive gases or vapors.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD50) Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 11,000.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀)

Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Skin Corr. 1B - H314 Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Eye Dam. 1 - H318 Corrosive to skin. Corrosivity to eyes is assumed.

Respiratory sensitization

Respiratory sensitization Based on available data the classification criteria are not met.

Skin sensitization

Skin sensitization May cause skin sensitization or allergic reactions in sensitive individuals.

Germ cell mutagenicity

Genotoxicity - in vitroBased on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

IARC carcinogenicityNone of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility Suspected of damaging fertility.

Reproductive toxicity -

development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

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Aspiration hazardBased on available data the classification criteria are not met.

General information May damage fertility. The severity of the symptoms described will vary dependent on the

concentration and the length of exposure.

Inhalation Corrosive to the respiratory tract. Symptoms following overexposure may include the

following: Severe irritation of nose and throat.

Ingestion May cause sensitization or allergic reactions in sensitive individuals. May cause chemical

burns in mouth, esophagus and stomach. Symptoms following overexposure may include the

following: Severe stomach pain. Nausea, vomiting.

Skin Contact May cause skin sensitization or allergic reactions in sensitive individuals. Causes severe

burns. Symptoms following overexposure may include the following: Pain or irritation.

Redness. Blistering may occur.

Eye contact Causes serious eye damage. Symptoms following overexposure may include the following:

Pain. Profuse watering of the eyes. Redness.

Route of entry Ingestion Inhalation Skin and/or eye contact

Target Organs No specific target organs known.

Medical considerations Skin disorders and allergies.

12. Ecological Information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have

hazardous effects on the environment.

Toxicity Based on available data the classification criteria are not met.

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Mobility in soil

Mobility The product is partly soluble in water and may spread in the aquatic environment. The product

is non-volatile.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

General information The generation of waste should be minimized or avoided wherever possible. Reuse or recycle

products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners

may retain some product residues and hence be potentially hazardous.

Disposal methods Dispose of surplus products and those that cannot be recycled via a licensed waste disposal

> contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents.

Incineration or landfill should only be considered when recycling is not feasible.

14. Transport information

General For limited quantity packaging/limited load information, consult the relevant modal

documentation using the data shown in this section.

UN Number

2735 UN No. (TDG)

UN No. (IMDG) 2735

UN No. (ICAO)

UN No. (DOT) UN2735

2735

UN proper shipping name

Proper shipping name (TDG) AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis (methylamine))

Proper shipping name (IMDG) AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis (methylamine))

Proper shipping name (ICAO) AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis (methylamine))

Proper shipping name (DOT) AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis (methylamine))

Transport hazard class(es)

DOT hazard class 8

DOT hazard label 8

TDG class 8

TDG label(s) 8

IMDG Class 8

ICAO class/division 8

Transport labels



DOT transport labels



Packing group

TDG Packing Group Ш

IMDG packing group Ш

ICAO packing group Ш

DOT packing group Ш

Packing Instruction (Pass &

852

856

Cargo)

Packing Instruction (Cargo)

Environmental hazards

Environmentally Hazardous Substance



Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-A, S-B

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed or exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

The following ingredients are listed or exempt:

bisphenol A

1.0 %

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

The following ingredients are listed or exempt:

bisphenol A

Known to the State of California to cause developmental and female reproductive toxicity.

California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed or exempt:

bisphenol A

Present.

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

m-phenylenebis(methylamine)

Present.

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

m-phenylenebis(methylamine)

Present.

bisphenol A

Present.

3-aminopropyldimethylamine

Present.

benzyl alcohol

Present.

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

m-phenylenebis(methylamine)

Present.

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

m-phenylenebis(methylamine)

Present.

benzyl alcohol

Present.

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Present.

m-phenylenebis(methylamine)

Present.

bisphenol A

Present.

3-aminopropyldimethylamine

Present.

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Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

m-phenylenebis(methylamine)

Present.

bisphenol A

Present.

3-aminopropyldimethylamine

Present.

benzyl alcohol

Present.

Inventories

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

16. Other information

Training advice Read and follow manufacturer's recommendations. Only trained personnel should use this

material.

Revision date 3/16/2017

SDS No. 4580

Hazard statements in full H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation. H361f Suspected of damaging fertility.

H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.