SECTION 1. IDENTIFICATION

Product name : STAPA NDF 120 ALUMINUM PASTE

Product code : 052047G60

Manufacturer or supplier's details

Company name of supplier : ECKART GmbH

Address : Guentersthal 4
           Hartenstein 91235

Telephone : +499152770

Telefax : +499152777008

Emergency telephone : CHEMTREC: 800-424-9300
                     CHEMTREC: 1-703-527-3387 (International)

GBK Gefahrgut Buero GmbH, Ingelheim, Germany:
From outside US: (001) 352-323-3500
(First call in English, response in your language is possible)
US & Canada (toll free): 1-800-5355-053

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Flammable solids : Category 1

Skin irritation : Category 2

Carcinogenicity : Category 2

Specific target organ systemic toxicity - single exposure : Category 3 (Central nervous system)

GHS label elements
Hazard pictograms

Signal Word: Danger

Hazard Statements:
H228 Flammable solid.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.

Precautionary Statements:

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use for extinction: Special powder for metal fires.
P370 + P378 In case of fire: Use for extinction: Dry sand.

Storage:
SAFETY DATA SHEET

STAPA NDF 120 ALUMINUM PASTE

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:
P501 Dispose of contents/container to an approved waste disposal plant.

Hazardous ingredients which must be listed on the label:
Distillates (petroleum), hydrotreated light
Benzene, (1-methylethyl)-

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>&gt;= 50 - &lt; 70</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>64742-95-6</td>
<td>&gt;= 5 - &lt; 10</td>
</tr>
<tr>
<td>Benzene, 1,2,4-trimethyl-</td>
<td>95-63-6</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Benzene, (1-methylethyl)-</td>
<td>98-82-8</td>
<td>&gt;= 0.1 - &lt; 1</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice : Take the victim into fresh air.
                Do not leave the victim unattended.
                Move out of dangerous area.
                Show this material safety data sheet to the doctor in attendance.

If inhaled : Consult a physician after significant exposure.
             If unconscious, place in recovery position and seek medical advice.

In case of skin contact : Wash off immediately with soap and plenty of water.
                        If on skin, rinse well with water.
                        If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.
                        Flush eyes with water as a precaution.
Remove contact lenses.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.

If swallowed:  
Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed:  
Causes skin irritation.  
May cause drowsiness or dizziness.  
Suspected of causing cancer.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:  
Dry sand  
Special powder against metal fire

Unsuitable extinguishing media:  
Water  
Foam  
Carbon dioxide (CO2)  
ABC powder

Specific hazards during fire fighting:  
Do not allow run-off from fire fighting to enter drains or water courses.

Further information:  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters:  
Use personal protective equipment.  
Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:  
Evacuate personnel to safe areas.  
Use personal protective equipment.  
Avoid dust formation.  
Remove all sources of ignition.

Environmental precautions:  

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:
- Use mechanical handling equipment.
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
- Do not flush with water.
- Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion:
- Earthing of containers and apparatuses is essential.
- Take measures to prevent the build up of electrostatic charge.
- Use explosion-proof equipment.
- Keep away from open flames, hot surfaces and sources of ignition.

Advice on safe handling:
- Keep away from heat and sources of ignition.
- Avoid dust formation.
- Ensure adequate ventilation.
- Avoid formation of respirable particles.
- Do not breathe vapors/dust.
- Avoid exposure - obtain special instructions before use.
- For personal protection see section 8.
- Smoking, eating and drinking should be prohibited in the application area.
- Provide sufficient air exchange and/or exhaust in work rooms.
- Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage:
- Store in original container.
- Keep containers tightly closed in a cool, well-ventilated place.
- Keep container closed when not in use.
- Keep away from sources of ignition - No smoking.
- No smoking.
- Keep container tightly closed in a dry and well-ventilated place.
- Electrical installations / working materials must comply with the technological safety standards.
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Version 1.0
Revision Date: 04/02/2018
SDS Number: 10200023957
Date of last issue: -
Date of first issue: 04/02/2018

Technical measures/Precautions:
Protect from humidity and water.
Do not allow to dry.

Materials to avoid:
Do not store together with oxidizing and self-igniting products.
Never allow product to get in contact with water during storage.
Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Further information on storage stability:
No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>TWA (total dust)</td>
<td>50 Million particles per cubic foot</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable)</td>
<td>5 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (total dust)</td>
<td>15 mg/m³</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (total)</td>
<td>10 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (respirable fraction)</td>
<td>5 mg/m³</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (respirable fraction)</td>
<td>15 Million particles per cubic foot</td>
<td>OSHA Z-3</td>
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<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>1 mg/m³</td>
<td>ACGIH</td>
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<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³ (Aluminum)</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Total)</td>
<td>15 mg/m³ (Aluminum)</td>
<td>OSHA P0</td>
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<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>5 mg/m³ (Aluminum)</td>
<td>OSHA P0</td>
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<td></td>
<td></td>
<td>TWA (total)</td>
<td>15 mg/m³</td>
<td>OSHA Z-1</td>
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<tr>
<td>Compound</td>
<td>TWA (respirable fraction)</td>
<td>TWA (Total dust)</td>
<td>TWA (respirable dust fraction)</td>
<td>TWA (welding fumes)</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------</td>
<td>------------------</td>
<td>-------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>TWA 5 mg/m³ (Aluminum)</td>
<td>TWA 15 mg/m³ (Aluminum)</td>
<td>TWA 5 mg/m³ (Aluminum)</td>
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<tr>
<td></td>
<td></td>
<td>OSHA Z-1</td>
<td>OSHA P0</td>
<td>OSHA P0</td>
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<tr>
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</tr>
</tbody>
</table>
SAFETY DATA SHEET

STAPA NDF 120 ALUMINUM PASTE

Benzene, (1-methylethyl)- 98-82-8 TWA 50 ppm ACGIH

<table>
<thead>
<tr>
<th></th>
<th>TWA</th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>50 ppm</td>
<td>245 mg/m³</td>
<td>NIOSH REL</td>
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</tr>
<tr>
<td></td>
<td>50 ppm</td>
<td>245 mg/m³</td>
<td>OSHA Z-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50 ppm</td>
<td>245 mg/m³</td>
<td>OSHA P0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Personal protective equipment

Respiratory protection : Use suitable breathing protection if workplace concentration requires.

Hand protection

Material : Solvent-resistant gloves (butyl-rubber)

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The exact break through time can be obtained from the protective glove producer and this has to be observed. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Recommended preventive skin protection Skin should be washed after contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Safety glasses

Skin and body protection : Long sleeved clothing

Skin and body protection : Safety shoes

Hygiene measures : Wash hands before breaks and at the end of workday.
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Pasty solid
Color : silver
Odor : No data available
Odor Threshold : No data available
pH : No data available
Melting point/freezing point : No data available
Boiling point/boiling range : 170 °C
Flash point : 43 °C
Evaporation rate : No data available
Flammability (solid, gas) : The substance or mixture is a flammable solid with the category 1.
Auto-flammability : not auto-flammable
Upper explosion limit / Upper flammability limit : No data available
Lower explosion limit / Lower flammability limit : No data available
Vapor pressure : No data available
Relative density : No data available
Solubility(ies) : No data available
Partition coefficient: n-octanol/water : No data available
Autoignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Explosive properties : Not explosive Vapors may form explosive mixture with air.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.
Chemical stability : No decomposition if stored and applied as directed.
Possibility of hazardous reactions : Reacts with alkalis, acids, halogenes and oxidizing agents. Contact with acids and alkalis may release hydrogen. Mixture reacts slowly with water resulting in evolution of hydrogen. Vapors may form explosive mixture with air. Stable under recommended storage conditions.
Conditions to avoid: Do not allow to dry. Heat, flames and sparks.

Incompatible materials: Acids

- Bases
- Oxidizing agents
- Highly halogenated compounds

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Ingredients:
Solvent naphtha (petroleum), light arom.:
Acute oral toxicity: LD50 (Rat): 3,492 mg/kg
Acute dermal toxicity: LD50 (Rabbit): > 3,160 mg/kg

Benzene, 1,2,4-trimethyl-:
Acute inhalation toxicity: Assessment: The component/mixture is moderately toxic after short term inhalation.

Skin corrosion/irritation
Causes skin irritation.

Ingredients:
Distillates (petroleum), hydrotreated light:
Result: Skin irritation

Serious eye damage/eye irritation
Not classified based on available information.

Respiratory or skin sensitization
Skin sensitization
Not classified based on available information.

Respiratory sensitization
Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.
Carcinogenicity
Suspected of causing cancer.

**IARC**
Group 2B: Possibly carcinogenic to humans
Benzene, (1-methylethyl) - 98-82-8

**OSHA**
No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.

**NTP**
Reasonably anticipated to be a human carcinogen
Benzene, (1-methylethyl) - 98-82-8

Reproductive toxicity
Not classified based on available information.

**STOT-single exposure**
May cause drowsiness or dizziness.

**Ingredients:**
**Distillates (petroleum), hydrotreated light:**
Assessment: May cause drowsiness or dizziness.

**Solvent naphtha (petroleum), light arom.:**
Assessment: May cause respiratory irritation., May cause drowsiness or dizziness.

**Benzene, 1,2,4-trimethyl-:**
Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

**Benzene, (1-methylethyl)-:**
Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

**STOT-repeated exposure**
Not classified based on available information.

**Aspiration toxicity**
Not classified based on available information.
Ingredients:

Distillates (petroleum), hydrotreated light:
May be fatal if swallowed and enters airways.

Solvent naphtha (petroleum), light arom.:
May be fatal if swallowed and enters airways.

Benzene, (1-methylethyl)-:
May be fatal if swallowed and enters airways.

Further information

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:

Distillates (petroleum), hydrotreated light:

Ecotoxicology Assessment
Acute aquatic toxicity : Harmful to aquatic life.
Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Solvent naphtha (petroleum), light arom.:

Ecotoxicology Assessment
Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Benzene, 1,2,4-trimethyl-:

Ecotoxicology Assessment
Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Benzene, (1-methylethyl)-:

Ecotoxicology Assessment
Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Persistence and degradability
No data available
SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. In accordance with local and national regulations.

Contaminated packaging: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum. In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR
UN/ID No. : UN 1325
Proper shipping name : Flammable solid, organic, n.o.s. (Aluminium pigment paste)
Class : 4.1
Packing group : II
Labels : Flammable Solid
Packing instruction (cargo aircraft) : 448
Packing instruction (passenger aircraft) : 445

IMDG-Code
UN number : UN 1325
Proper shipping name : FLAMMABLE SOLID, ORGANIC, N.O.S. (Aluminium pigment paste)
Class : 4.1
Packing group : II
Labels : 4.1
EmS Code : F-A, S-G
Marine pollutant : no
Remarks : IMDG Code segregation group 15 - Powdered metals

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
Not applicable for product as supplied.

**Domestic regulation**

**49 CFR**
- UN/ID/NA number : UN 1325
- Proper shipping name : Flammable solids, organic, n.o.s.
  (Aluminum pigment paste)
- Class : 4.1
- Packing group : II
- Labels : FLAMMABLE SOLID
- ERG Code : 133
- Marine pollutant : no

**SECTION 15. REGULATORY INFORMATION**

**EPCRA - Emergency Planning and Community Right-to-Know**

**CERCLA Reportable Quantity**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene, dimethyl-</td>
<td>1330-20-7</td>
<td>100</td>
</tr>
</tbody>
</table>

**SARA 304 Extremely Hazardous Substances Reportable Quantity**
This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards**
- Flammable (gases, aerosols, liquids, or solids)
- Skin corrosion or irritation
- Specific target organ toxicity (single or repeated exposure)
- Carcinogenicity

**SARA 313**
- The following components are subject to reporting levels established by SARA Title III, Section 313:
  - Aluminum 7429-90-5 \(\geq 50 - < 70 \%\)
  - Benzene, 1,2,4-trimethyl- 95-63-6 \(\geq 1 - < 5 \%\)
Clean Air Act
This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307
The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

- Benzene, dimethyl- 1330-20-7 0.165 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

- Benzene, dimethyl- 1330-20-7 0.165 %

US State Regulations
Massachusetts Right To Know
Aluminum 7429-90-5
Distillates (petroleum), hydrotreated light 64742-47-8
Solvent naphtha (petroleum), light arom. 64742-95-6
Benzene, 1,2,4-trimethyl- 95-63-6
Fatty acids, C14-18 and C16-18-unsatd. 67701-06-8

Pennsylvania Right To Know
Aluminum 7429-90-5
Distillates (petroleum), hydrotreated light 64742-47-8
Solvent naphtha (petroleum), light arom. 64742-95-6
Benzene, 1,2,4-trimethyl- 95-63-6
Benzene, dimethyl- 1330-20-7
Benzene, (1-methylethyl)- 98-82-8

California Prop. 65
WARNING: This product can expose you to chemicals including lead and cadmium, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

WARNING: This product can expose you to chemicals including Distillates (petroleum), hydrotreated light, Benzene, (1-methylethyl)-, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California List of Hazardous Substances

Aluminum 7429-90-5

Distillates (petroleum), hydrotreated light 64742-47-8

Benzene, 1,2,4-trimethyl- 95-63-6

California Permissible Exposure Limits for Chemical Contaminants

Aluminum 7429-90-5

Distillates (petroleum), hydrotreated light 64742-47-8

Benzene, 1,2,4-trimethyl- 95-63-6

The ingredients of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

TSCA : On TSCA Inventory

TSCA list
No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA P0 : USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
OSHA Z-1: USA. Occupational Exposure Limits (OSHA) - Table Z-1
Limits for Air Contaminants
OSHA Z-3: USA. Occupational Exposure Limits (OSHA) - Table Z-3
Mineral Dusts
ACGIH / TWA: 8-hour, time-weighted average
NIOSH REL / TWA: Time-weighted average concentration for up to a 10-hour
workday during a 40-hour workweek
NIOSH REL / ST: STEL - 15-minute TWA exposure that should not be exceeded
at any time during a workday
OSHA P0 / TWA: 8-hour time weighted average
OSHA Z-1 / TWA: 8-hour time weighted average
OSHA Z-3 / TWA: 8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of
Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation,
and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the
German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic
Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely
Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule;
ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x%
growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP
- Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International
Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International
Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half
maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory
of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -
International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO
- International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -
Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population
(Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships;
MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National
Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No
Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National
Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for
Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution
Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of
Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA
- Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the
European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and
Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition
Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet;
TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States);
UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous
Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date: 04/02/2018
The information provided in this Material 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

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