SAFETY DATA SHEET



Date of issue/Date of revision 22 December 2019

Version 10

Section 1. Identification

Product name : 44GN007 BASE COMPONENT
Product code : 44GN007 BASE COMPONENT

Other means of identification

: Not available.

Product type

: Liquid.

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

Product use : Industrial applications.

Use of the substance/

mixture

: Coating.

Uses advised against: Not applicable.

Manufacturer : PPG Aerospace PRC-DeSoto

12780 San Fernando Road

Sylmar, CA 91342 Phone: 818 362 6711

Emergency telephone

number

: (412) 434-4515 (U.S.) (514) 645-1320 (Canada)

01-800-00-21-400 (Mexico)

Section 2. Hazards identification

OSHA/HCS status

Classification of the substance or mixture

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 4

SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1

RESPIRATORY SENSITIZATION - Category 1

SKIN SENSITIZATION - Category 1
GERM CELL MUTAGENICITY - Category 1

CARCINOGENICITY - Category 1A

TOXIC TO REPRODUCTION (Fertility) - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys,

respiratory tract) - Category 1

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Section 2. Hazards identification

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 27.9% (Oral), 51.9% (Dermal), 54.5% (Inhalation)

GHS label elements Hazard pictograms











Signal word Hazard statements

- : Danger
- : 🕅 ammable liquid and vapor.

Toxic in contact with skin.

Harmful if swallowed or if inhaled. Causes serious eve damage.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure. (kidneys, respiratory tract)

Precautionary statements

Prevention

: Description before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

Eet medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage

Disposal

- : Store locked up. Store in a well-ventilated place. Keep cool.
- : Dispose of contents and container in accordance with all local, regional, national and international regulations.

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Product code 44GN007 BASE COMPONENT
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Section 2. Hazards identification

Supplemental label elements

: Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. NTP, IARC and OSHA have classified chromium (+6) compounds as carcinogenic. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.

Hazards not otherwise classified

: Oxidising potential: Contact with combustible material may cause fire. Keep away from clothing, incompatible materials and combustible materials. This material increases the risk of fire and may aid combustion. Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : 44GN007 BASE COMPONENT

| Ingredient name | % | CAS number |
|---|-------------|------------|
| barium chromate | ≥20 - ≤29 | 10294-40-3 |
| Talc , not containing asbestiform fibres | ≥20 - ≤50 | 14807-96-6 |
| Polyaminoamide | ≥10 - ≤20 | 68082-29-1 |
| 2-butoxyethanol | ≥10 - ≤17 | 111-76-2 |
| Solvent naphtha (petroleum), light aromatic | ≥5.0 - ≤10 | 64742-95-6 |
| 1,2,4-trimethylbenzene | ≥1.0 - ≤4.8 | 95-63-6 |
| crystalline silica, respirable powder (<10 microns) | <1.0 | 14808-60-7 |
| cumene | <1.0 | 98-82-8 |
| strontium chromate | <1.0 | 7789-06-2 |
| potassium hydroxyoctaoxodizincatedichromate(1-) | <1.0 | 11103-86-9 |

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact

: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Inhalation

: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

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Section 4. First aid measures

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water

or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep

person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma

symptoms or breathing difficulties if inhaled.

Skin contact: Foxic in contact with skin. Causes skin irritation. Defatting to the skin. May cause an

allergic skin reaction.

Ingestion: Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

wheezing and breathing difficulties

asthma

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

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Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing media

: Use dry chemical, CO₂, water spray (fog) or foam.

: Do not use water jet.

Specific hazards arising from the chemical

: Mammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon oxides nitrogen oxides

metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

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Section 6. Accidental release measures

Small spill

Large spill

- : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Special precautions

: Ingestion of product or cured coating may be harmful. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. Keep away from combustible materials. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| barium chromate | ACGIH TLV (United States, 3/2019). |
| | TWA: 0.0002 mg/m³, (measured as Cr) 8 |
| | hours. Form: Inhalable fraction |
| | STEL: 0.0005 mg/m³, (measured as Cr) 15 |
| | minutes. Form: Inhalable fraction |
| | OSHA PEL (United States, 5/2018). |
| | TWA: 0.005 mg/m³, (as Cr) 8 hours. |
| | OSHA PEL Z2 (United States, 2/2013). |
| | CEIL: 1 mg/10m³ |
| | OSHA PEL (United States). |
| | TWA: 5 mg/m³ |
| Talc , not containing asbestiform fibres | ACGIH TLV (United States, 3/2019). |
| | TWA: 2 mg/m³ 8 hours. Form: Respirable |
| | OSHA PEL Z3 (United States). |
| | TWA: 2 mg/m³ |
| Polyaminoamide | None. |
| 2-butoxyethanol | ACGIH TLV (United States, 3/2019). |
| | TWA: 20 ppm 8 hours. |
| | OSHA PEL (United States, 5/2018). |
| | Absorbed through skin. |
| | TWA: 240 mg/m³ 8 hours. |
| | TWA: 50 ppm 8 hours. |
| Solvent naphtha (petroleum), light aromatic | None. |
| 1,2,4-trimethylbenzene | ACGIH TLV (United States, 3/2019). |
| | TWA: 123 mg/m³ 8 hours. |
| | TWA: 25 ppm 8 hours. |
| crystalline silica, respirable powder (<10 microns) | ACGIH TLV (United States, 3/2019). |
| | TWA: 0.025 mg/m ³ 8 hours. Form: |
| | Respirable |
| | OSHA PEL Z3 (United States, 6/2016). |
| | TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form: |
| | Respirable |
| | TWA: 250 mppcf / (%SiO2+5) 8 hours. Form: |
| | Respirable |
| | OSHA PEL (United States, 5/2018). |
| | TWA: 50 μg/m³ 8 hours. Form: Respirable |
| | dust |
| cumene | ACGIH TLV (United States, 3/2019). |
| | TWA: 50 ppm 8 hours. |
| | OSHA PEL (United States, 5/2018). |
| | Absorbed through skin. |
| | TWA: 245 mg/m ³ 8 hours. |
| | TWA: 50 ppm 8 hours. |
| strontium chromate | ACGIH TLV (United States, 3/2019). |
| | TWA: 0.0005 mg/m³, (measured as Cr) 8 |
| | hours. |
| | OSHA PEL Z2 (United States, 2/2013). |
| | CEIL: 1 mg/10m ³ |
| | |
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Section 8. Exposure controls/personal protection

potassium hydroxyoctaoxodizincatedichromate(1-)

OSHA PEL (United States, 5/2018). TWA: 0.005 mg/m³, (as Cr) 8 hours. ACGIH TLV (United States, 3/2019).

TWA: 0.0002 mg/m³, (measured as Cr) 8

hours. Form: Inhalable fraction

STEL: 0.0005 mg/m³, (measured as Cr) 15

minutes. Form: Inhalable fraction

TWA: 0.01 mg/m³, (measured as Cr) 8 hours.

OSHA PEL (United States, 5/2018). TWA: 0.005 mg/m³, (as Cr) 8 hours. OSHA PEL Z2 (United States, 2/2013).

CEIL: 1 mg/10m3

Key to abbreviations

S = Acceptable Maximum Peak = Potential skin absorption ACGIH = American Conference of Governmental Industrial Hygienists. SR = Respiratory sensitization

SS С = Ceiling Limit = Skin sensitization F = Fume STEL = Short term Exposure limit values

IPEL = Internal Permissible Exposure Limit TD = Total dust

OSHA = Occupational Safety and Health Administration. = Threshold Limit Value TLV

= Respirable TWA = Time Weighted Average R = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances Ζ

Consult local authorities for acceptable exposure limits.

procedures

Recommended monitoring: If this product contains ingredients with exposure limits, personal, workplace atmosphere 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. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

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.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection

: Chemical splash goggles and face shield.

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Section 8. Exposure controls/personal protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves

: butyl rubber

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: By spraying: air-fed respirator. By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. Color : Green.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 46.67°C (116°F)

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive : Not available.

(flammable) limits

Evaporation rate: Not available.Vapor pressure: Not available.Vapor density: Not available.

Relative density : 1.51
Density (lbs / gal) : 12.6

Solubility : Insoluble in the following materials: cold water.

Partition coefficient: n- : Not available.

octanol/water

Viscosity : Kinematic (40°C (104°F)): >0.21 cm²/s (>21 cSt)

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Section 9. Physical and chemical properties

VOC : 389 g/l **% Solid. (w/w)** : 74.5

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

Refer to protective measures listed in sections 7 and 8.

Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition products

: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|------------------------------|---------------------------------|------------|-------------------------|----------|
| 2-butoxyethanol | LD50 Dermal | Rabbit | 1060 mg/kg | - |
| | LD50 Oral | Rat - Male | 1480 mg/kg | - |
| Solvent naphtha (petroleum), | LD50 Dermal | Rabbit | 3.48 g/kg | - |
| light aromatic | | | | |
| | LD50 Oral | Rat | 8400 mg/kg | - |
| 1,2,4-trimethylbenzene | LC50 Inhalation Vapor | Rat | 18000 mg/m ³ | 4 hours |
| | LD50 Oral | Rat | 5 g/kg | - |
| cumene | LC50 Inhalation Vapor | Rat | 39000 mg/m ³ | 4 hours |
| | LD50 Dermal | Rabbit | 12.3 g/kg | - |
| | LD50 Oral | Rat | 1400 mg/kg | - |
| strontium chromate | LC50 Inhalation Dusts and mists | Rat | 0.27 to 0.51 mg/l | 4 hours |
| | LD50 Oral | Rat | 3118 mg/kg | - |

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|---|------------------|-------|---------------------|--------------------|
| 2-butoxyethanol | Skin - Moderate irritant Eyes - Irritant | Rabbit Rabbit | - | 4 hours 24 hours | 28 days 21 days |

Conclusion/Summary

| Skin | : There are no data available on the mixture itself. |
|------|--|
| Eyes | : There are no data available on the mixture itself. |

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Section 11. Toxicological information

Respiratory: There are no data available on the mixture itself.

Sensitization

Conclusion/Summary

Skin : There are no data available on the mixture itself.Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary: There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary: There are no data available on the mixture itself.

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|--|------|------|--|
| barium chromate | + | 1 | Known to be a human carcinogen. |
| 2-butoxyethanol | - | 3 | - |
| crystalline silica, respirable powder (<10 microns) | - | 1 | Known to be a human carcinogen. |
| cumene | - | 2B | Reasonably anticipated to be a human carcinogen. |
| strontium chromate | + | 1 | Known to be a human carcinogen. |
| potassium hydroxyoctaoxodizincatedichromate (1-) | + | 1 | Known to be a human carcinogen. |

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary: There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|---|------------|-------------------|------------------------------|
| ralc , not containing asbestiform fibres | Category 3 | Not applicable. | Respiratory tract irritation |
| Solvent naphtha (petroleum), light aromatic | Category 3 | Not applicable. | Narcotic effects |
| | Category 3 | Not applicable. | Respiratory tract irritation |
| 1,2,4-trimethylbenzene | Category 3 | Not applicable. | Respiratory tract irritation |
| cumene | Category 3 | Not applicable. | Respiratory tract irritation |
| strontium chromate | Category 3 | Not applicable. | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

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Section 11. Toxicological information

| Name | • • | Route of exposure | Target organs |
|---|------------|-------------------|-------------------------------|
| parium chromate | Category 1 | | kidneys and respiratory tract |
| crystalline silica, respirable powder (<10 microns) | Category 1 | Inhalation | Not determined |
| cumene | - 5 | Not determined | Not determined |
| potassium hydroxyoctaoxodizincatedichromate(1-) | Category 2 | Not determined | Not determined |

Target organs

: Contains material which causes damage to the following organs: brain, central nervous

system (CNS).

Contains material which may cause damage to the following organs: blood, kidneys, lungs, liver, spleen, lymphatic system, cardiovascular system, upper respiratory tract,

skin, bone marrow, eye, lens or cornea.

Aspiration hazard

| Name | Result |
|------|--|
| | ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma

symptoms or breathing difficulties if inhaled.

Skin contact: Foxic in contact with skin. Causes skin irritation. Defatting to the skin. May cause an

allergic skin reaction.

Ingestion : Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

wheezing and breathing difficulties

asthma

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

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Section 11. Toxicological information

Ingestion: Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Conclusion/Summary

: There are no data available on the mixture itself. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eve contact.

Short term exposure

Potential immediate

effects

Potential delayed effects

Long term exposure

Potential immediate

effects

Potential delayed effects

: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

: There are no data available on the mixture itself.

Potential chronic health effects

General: Causes damage to organs through prolonged or repeated exposure. Prolonged or

repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : May cause genetic defects.

Teratogenicity : Suspected of damaging the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

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Date of issue 22 December 2019 Version 10

| Product code | 44GN007 | BASE | COMPONENT |
|---------------------|---------|-------------|-----------|
| Product name | 44GN007 | BASE | COMPONENT |

Section 11. Toxicological information

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/ I) |
|---|------------------|-------------------|--------------------------------|----------------------------------|---|
| 44GN007 BASE COMPONENT | 1347.8 | 550.7 | N/A | 13.4 | 4 |
| barium chromate | 500 | 300 | N/A | 11 | N/A |
| 2-butoxyethanol | 1480 | 1060 | N/A | 11 | 1.5 |
| Solvent naphtha (petroleum), light aromatic | 8400 | 3480 | N/A | N/A | N/A |
| 1,2,4-trimethylbenzene | 5000 | N/A | N/A | 18 | 1.5 |
| cumene | 1400 | 12300 | N/A | 39 | N/A |
| strontium chromate | 500 | N/A | N/A | N/A | 0.05 |
| potassium hydroxyoctaoxodizincatedichromate(1-) | 500 | N/A | N/A | N/A | N/A |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|------------------------|---------|----------|
| 2-butoxyethanol Solvent naphtha (petroleum), light aromatic | Acute LC50 1474 mg/l | Fish | 96 hours |
| | Chronic NOEC >100 mg/l | Fish | 21 days |
| | Acute LC50 8.2 mg/l | Fish | 96 hours |

Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| 2-butoxyethanol | - | - | Readily |

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|--------|-----------|
| 2-butoxyethanol | 0.81 | - | low |
| 1,2,4-trimethylbenzene | 3.63 | 120.23 | low |
| cumene | 3.66 | 35.48 | low |

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

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Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

| | DOT | IMDG | IATA |
|-----------------------------|------------------------------|---|--|
| UN number | UN1263 | UN1263 | UN1263 |
| UN proper shipping name | PAINT | PAINT | PAINT |
| Transport hazard class (es) | 3 | 3 | 3 |
| Packing group | III | III | III |
| Environmental hazards | No. | | Yes. The environmentally hazardous substance mark is not required. |
| Marine pollutant substances | Not applicable. | varium chromate, Solvent naphtha (petroleum), light aromatic) | Not applicable. |
| Product RQ (lbs) | 8664.7 | Not applicable. | Not applicable. |
| RQ substances | (strontium chromate, xylene) | Not applicable. | Not applicable. |

Additional information

DOT

: This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.

IMDG

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA

: The environmentally hazardous substance mark may appear if required by other transportation regulations.

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Product code 44GN007 BASE COMPONENT Product name 44GN007 BASE COMPONENT

14. Transport information

Special precautions for user : Transport within user's premises: 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.

Section 15. Regulatory information

United States

United States inventory (TSCA 8b): All components are listed or exempted.

United States - TSCA 12(b) - Chemical export notification:

barium chromate Annual notification

SARA 302/304

SARA 304 RQ : Not applicable. **Composition/information on ingredients**

No products were found.

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 3

ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 4

SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1

RESPIRATORY SENSITIZATION - Category 1

SKIN SENSITIZATION - Category 1

GERM CELL MUTAGENICITY - Category 1

CARCINOGENICITY - Category 1A

TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys, respiratory

tract) - Category 1

HNOC - Avoid contact with organic materials.

HNOC - Defatting irritant

Composition/information on ingredients

| Name | % | Classification |
|-----------------|-----------|---|
| parium chromate | ≥20 - ≤29 | ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 4 RESPIRATORY SENSITIZATION - Category 1B SKIN SENSITIZATION - Category 1B GERM CELL MUTAGENICITY - Category 1B CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys, respiratory tract) - Category 1 HNOC - Avoid contact with organic materials. |

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Section 15. Regulatory information

| Tolo mot of the | | >20 <50 | EDECIFIC TARCET ORGAN TOVICITY (CINICI E EVROCURE) |
|-------------------|--------------------------|-------------|--|
| | taining asbestiform | ≥∠0 - ≤50 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) |
| fibres | :J. | >40 <00 | (Respiratory tract irritation) - Category 3 |
| Polyaminoam | | ≥10 - ≤20 | SERIOUS EYE DAMAGE - Category 1 |
| 2-butoxyethan | 101 | ≥10 - ≤17 | FLAMMABLE LIQUIDS - Category 4 |
| | | | ACUTE TOXICITY (oral) - Category 4 |
| | | | ACUTE TOXICITY (dermal) - Category 4 |
| | | | ACUTE TOXICITY (inhalation) - Category 4 |
| | | | SKIN IRRITATION - Category 2 |
| | | | EYE IRRITATION - Category 2A |
| Solvent napht | ha (petroleum), | ≥5.0 - ≤10 | FLAMMABLE LIQUIDS - Category 3 |
| light aromatic | | | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) |
| | | | (Respiratory tract irritation) - Category 3 |
| | | | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) |
| | | | (Narcotic effects) - Category 3 |
| | | | ASPIRATION HAZARD - Category 1 |
| | | | HNOC - Defatting irritant |
| 1,2,4-trimethy | lhenzene | ≥1.0 - ≤4.8 | FLAMMABLE LIQUIDS - Category 3 |
| 1,2,1 annouty | 1501120110 | _1.0 _1.0 | ACUTE TOXICITY (inhalation) - Category 4 |
| | | | SKIN IRRITATION - Category 2 |
| | | | EYE IRRITATION - Category 2A |
| | | | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) |
| | | | |
| | | | (Respiratory tract irritation) - Category 3 |
| | | .4.0 | HNOC - Defatting irritant |
| crystalline silic | | <1.0 | CARCINOGENICITY - Category 1A |
| powder (<10 r | microns) | | SPECIFIC TARGET ORGAN TOXICITY (REPEATED |
| | | | EXPOSURE) (inhalation) - Category 1 |
| cumene | | <1.0 | FLAMMABLE LIQUIDS - Category 3 |
| | | | ACUTE TOXICITY (oral) - Category 4 |
| | | | CARCINOGENICITY - Category 1B |
| | | | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) |
| | | | (Respiratory tract irritation) - Category 3 |
| | | | SPECIFIC TARGET ORGAN TOXICITY (REPEATED |
| | | | EXPOSURE) - Category 2 |
| | | | ASPIRATION HAZARD - Category 1 |
| | | | HNOC - Defatting irritant |
| strontium chro | omate | <1.0 | ACUTE TOXICITY (oral) - Category 4 |
| | | | ACUTE TOXICITY (inhalation) - Category 2 |
| | | | SKIN SENSITIZATION - Category 1B |
| | | | GERM CELL MUTAGENICITY - Category 2 |
| | | | CARCINOGENICITY - Category 1B |
| | | | TOXIC TO REPRODUCTION (Fertility) - Category 2 |
| | | | TOXIC TO REPRODUCTION (Unborn child) - Category 2 |
| | | | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) |
| | | | (Respiratory tract irritation) - Category 3 |
| potassium | | <1.0 | ACUTE TOXICITY (oral) - Category 4 |
| | odizincatedichromate | 1.0 | SKIN SENSITIZATION - Category 1B |
| , , | ouiziiicaleulciiioiiiale | | |
| (1-) | | | CARCINOGENICITY - Category 1A |
| | | | SPECIFIC TARGET ORGAN TOXICITY (REPEATED |
| | | | EXPOSURE) - Category 2 |

SARA 313

<u>Chemical name</u> <u>CAS number</u> <u>Concentration</u>

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Product name 44GN007 BASE COMPONENT

Section 15. Regulatory information

 Supplier notification
 : barium chromate
 10294-40-3
 10 - 30

 2-butoxyethanol
 111-76-2
 10 - 30

 1,2,4-trimethylbenzene
 95-63-6
 1 - 5

 strontium chromate
 7789-06-2
 0.1 - 1

 potassium hydroxyoctaoxodizincatedichromate(1-)
 11103-86-9
 0.1 - 1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

California Prop. 65

MARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health: 3 * Flammability: 2 Physical hazards: 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health: 3 Flammability: 2 Instability: 0

Date of previous issue : 12/10/2019

Organization that prepared

the MSDS

: EHS

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available
SGG = Segregation Group

UN = United Nations

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

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SAFETY DATA SHEET



Date of issue/Date of revision 12 April 2019

Version 5

Section 1. Identification

Product name : 44GN007CAT CURING SOLUTION COMPONENT
Product code : 44GN007CAT CURING SOLUTION COMPONENT

Other means of identification

: Not available.

Product type : Liquid.

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

Product use : Industrial applications.

Use of the substance/

mixture

: Coating.

Uses advised against: Not applicable.

Manufacturer : PPG Aerospace PRC-DeSoto

12780 San Fernando Road

Sylmar, CA 91342 Phone: 818 362 6711

Emergency telephone

number

: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico)

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4

SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 30.6% (Oral),

45.8% (Dermal), 84% (Inhalation)

GHS label elements

Hazard pictograms :





Signal word : Warning

United States Page: 1/13

Product code 44GN007CAT CURING SOLUTION

Date of issue 12 April 2019

Version 5

COMPONENT

Product name 44GN007CAT CURING SOLUTION COMPONENT

Section 2. Hazards identification

Hazard statements

: Flammable liquid and vapor.

Harmful if inhaled.

Causes serious eve irritation.

Causes skin irritation.

May cause an allergic skin reaction.

Precautionary statements

Prevention

: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage Disposal : Store in a well-ventilated place. Keep cool.

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

: Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Emits toxic fumes when heated.

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Product name

: 44GN007CAT CURING SOLUTION COMPONENT

| Ingredient name | % | CAS number |
|------------------------|-----------|------------|
| Epoxy resin (MW ≤ 700) | ≥50 - ≤75 | 25068-38-6 |
| Epoxy Resin (MW<=700) | ≥20 - ≤50 | 25036-25-3 |
| nitroethane | ≥10 - ≤17 | 79-24-3 |

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

| United States P | age: 2/13 |
|-----------------|-----------|
|-----------------|-----------|

Product code 44GN007CAT CURING SOLUTION Date of issue 12 April 2019 Version 5

COMPONENT

Product name 44GN007CAT CURING SOLUTION COMPONENT

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids

apart for at least 10 minutes and seek immediate medical advice.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained

personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water

or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep

person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Harmful if inhaled.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

See toxicological information (Section 11)

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Product code 44GN007CAT CURING SOLUTION

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COMPONENT

Product name 44GN007CAT CURING SOLUTION COMPONENT

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use dry chemical, CO2, water spray (fog) or foam.

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon oxides

nitrogen oxides

halogenated compounds

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Special precautions

: Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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Product code 44GN007CAT CURING SOLUTION Date of issue 12 April 2019

COMPONENT

Product name 44GN007CAT CURING SOLUTION COMPONENT

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|------------------------|-------------------------------------|
| Epoxy resin (MW ≤ 700) | None. |
| Epoxy Resin (MW<=700) | None. |
| nitroethane | ACGIH TLV (United States, 3/2018). |
| | TWA: 100 ppm 8 hours. |
| | TWA: 307 mg/m ³ 8 hours. |
| | OSHA PEL (United States, 5/2018). |
| | TWA: 100 ppm 8 hours. |
| | TWA: 310 mg/m ³ 8 hours. |

Key to abbreviations

| Α | = Acceptable Maximum Peak | S | Potential skin absorption |
|-------|--|------|--|
| ACGIH | = American Conference of Governmental Industrial Hygienists. | SR | Respiratory sensitization |
| С | = Ceiling Limit | SS | = Skin sensitization |
| F | = Fume | STEL | Short term Exposure limit values |
| IPEL | = Internal Permissible Exposure Limit | TD | = Total dust |
| OSHA | Occupational Safety and Health Administration. | TLV | = Threshold Limit Value |
| R | = Respirable | TWA | = Time Weighted Average |
| Z | = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances | | - |

Consult local authorities for acceptable exposure limits.

procedures

Recommended monitoring: If this product contains ingredients with exposure limits, personal, workplace atmosphere 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. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

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.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection

: Chemical splash goggles.

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COMPONENT

Product name 44GN007CAT CURING SOLUTION COMPONENT

Section 8. Exposure controls/personal protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be

worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the

protection time of the gloves cannot be accurately estimated.

Gloves : butyl rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before

handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing

should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection: Respirator selection must be based on known or anticipated exposure levels, the

hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying

with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: 30.56°C (87°F)

Material supports : Yes.

combustion.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive : Not available.

(flammable) limits

Evaporation rate: Not available.Vapor pressure: Not available.Vapor density: Not available.

Relative density : 1.16 Density (lbs / gal) : 9.68

Solubility : Insoluble in the following materials: cold water.

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Section 9. Physical and chemical properties

Partition coefficient: n-

octanol/water

: Not available.

Viscosity : Kinematic (40°C (104°F)): >0.21 cm²/s (>21 cSt)

VOC : 176 g/l **% Solid. (w/w)** : 83.98

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

Refer to protective measures listed in sections 7 and 8.

Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition

products

: Decomposition products may include the following materials: carbon monoxide, carbon

dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|------------------------------------|---------------|----------------------|----------|
| poxy resin (MW ≤ 700) | LD50 Dermal LD50 Oral | Rabbit Rat | >2 g/kg >2 g/kg | - |
| nitroethane | LC50 Inhalation Vapor LD50 Oral | Rat Rat | 6025 ppm 1.1 g/kg | 4 hours |

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|----------------------|---------|-------|----------|-------------|
| , , , , | Skin - Mild irritant | Rabbit | - | - | - |
| | Eyes - Mild irritant | Rabbit | - | - | - |

Conclusion/Summary

Skin: There are no data available on the mixture itself.Eyes: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

Sensitization

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Section 11. Toxicological information

| 3 | Route of exposure | Species | Result |
|------------------------|-------------------|---------|-------------|
| Epoxy resin (MW ≤ 700) | skin | Mouse | Sensitizing |

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary: There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary: There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary: There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

<u>Target organs</u>: Contains material which causes damage to the following organs: brain.

Contains material which may cause damage to the following organs: blood, kidneys,

liver, upper respiratory tract, skin, eyes, central nervous system (CNS).

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation: Harmful if inhaled.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

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Section 11. Toxicological information

Conclusion/Summary

There are no data available on the mixture itself. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate : There are no data available on the mixture itself.

effects

Potential delayed effects: There are no data available on the mixture itself.

Long term exposure

Potential immediate: There are no data available on the mixture itself.

effects

Potential delayed effects: There are no data available on the mixture itself.

Potential chronic health effects

General: Once sensitized, a severe allergic reaction may occur when subsequently exposed to

Carcinogenicity: very low levels.

No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|---------------------|--------------|
| | 4995.3 mg/kg |
| Inhalation (vapors) | 11.48 mg/l |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|-----------------------|---------|----------|
| Poxy resin (MW ≤ 700) | Chronic NOEC 0.3 mg/l | Daphnia | 21 days |

Persistence and degradability

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|-------------------|----------|
|-------------------|----------|

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Section 12. Ecological information

| Product/ingredient name | Test | Result | | Dose | | Inoculum |
|-------------------------|-------------------|-------------|------------|------|----------|------------|
| Epoxy resin (MW ≤ 700) | OECD 301F | 5 % - 28 da | ys | - | | - |
| Product/ingredient name | Aquatic half-life | | Photolysis | | Biodegi | radability |
| Epoxy resin (MW ≤ 700) | - | | - | | Not read | dily |

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| Epoxy resin (MW ≤ 700) | 3 | 31 | low |
| nitroethane | 0.18 | - | low |

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

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14. Transport information

| | DOT | IMDG | IATA |
|-----------------------------|-----------------|---|--|
| UN number | UN1263 | UN1263 | UN1263 |
| UN proper shipping name | PAINT | PAINT | PAINT |
| Transport hazard class (es) | 3 | 3 | 3 |
| Packing group | III | III | III |
| Environmental hazards | No. | Yes. | Yes. The environmentally hazardous substance mark is not required. |
| Marine pollutant substances | Not applicable. | Epoxy resin (MW ≤ 700), Epoxy Resin (MW<=700)) | Not applicable. |

Additional information

DOT : None identified.

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA : The environmentally hazardous substance mark may appear if required by other transportation

regulations.

Special precautions for user : Transport within user's premises: 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.

Section 15. Regulatory information

United States

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 3

ACUTE TOXICITY (inhalation) - Category 4

SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1

Composition/information on ingredients

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Section 15. Regulatory information

| Name | % | Classification |
|------------------------|-----------|---|
| Epoxy resin (MW ≤ 700) | | SKIN IRRITATION - Category 2 |
| | | EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B |
| Epoxy Resin (MW<=700) | ≥20 - ≤50 | COMBUSTIBLE DUSTS |
| | | SKIN IRRITATION - Category 2 |
| | | EYE IRRITATION - Category 2A |
| | | SKIN SENSITIZATION - Category 1B |
| nitroethane | | FLAMMABLE LIQUIDS - Category 3 |
| | | ACUTE TOXICITY (oral) - Category 4 |
| | | ACUTE TOXICITY (inhalation) - Category 4 |

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health: 3 Flammability: 3 Physical hazards: 3

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health: 3 Flammability: 3 Instability: 3

Date of previous issue : 3/14/2018

Organization that prepared

the MSDS

: EHS

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

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