# Material Safety Data Sheet

**Date of issue** 15 May 2013
**Version** 23

## 1 . Product and company identification

**Product name** : INT/EXT S/G ENAMEL WHITE BASE 2
**Code** : 78610
**Supplier** : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272
**Emergency telephone number** : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
**Technical Phone Number** : 1-800-441-9695 (8:00 am to 5:00 pm EST)

## 2 . Hazards identification

**Emergency overview** : DANGER!

COMBUSTIBLE LIQUID AND VAPOR. MAY BE HARMFUL IF INHALED OR SWALLOWED. ASPIRATION HAZARD. CAN ENTER LUNGS AND CAUSE DAMAGE. MAY CAUSE EYE IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

Keep away from heat, sparks and flame. Do not swallow. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

**Potential acute health effects**

**Inhalation** : May be harmful if inhaled.
**Ingestion** : May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.
**Skin** : May cause skin dryness and irritation.
**Eyes** : Moderately irritating to eyes.

**Over-exposure signs/symptoms**

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. 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.

**Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

**This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).**

**See toxicological information (Section 11)**

## 3 . Composition/information on ingredients

| Name | CAS number | % |
|---|---|---|



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## 3 . Composition/information on ingredients

| | | |
|---|---|---|
| Nepheline syenite | 37244-96-5 | 10 - 30 |
| Stoddard solvent | 8052-41-3 | 10 - 30 |
| titanium dioxide | 13463-67-7 | 10 - 30 |
| Limestone | 1317-65-3 | 10 - 30 |
| Distillates (petroleum), hydrotreated light | 64742-47-8 | 5 - 10 |
| 1,2,4-trimethylbenzene | 95-63-6 | 0.1 - 1 |
| 2-butanone oxime | 96-29-7 | 0.1 - 1 |

**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.**

## 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 Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

**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.

**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.

**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.

**Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

**Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 5 . Fire-fighting measures

**Flammability of the product** : Combustible liquid. 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.

**Extinguishing media**

**Suitable** : Use dry chemical, $CO_2$, water spray (fog) or foam.

**Not suitable** : Do not use water jet.

**Special exposure hazards** : 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.

**Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
metal oxide/oxides

**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.

## 6 . Accidental release measures

**Personal precautions** : 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 (see Section 8).



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# 6 . Accidental release measures

**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).

**Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. 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.

**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 or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

# 7 . Handling and storage

**Handling** : Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite. To avoid the risks of fires, all contaminated materials should be placed in a metal container filled with water and sealed. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material 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.

**Storage** : 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. Do not store above the following temperature: 120F / 49C.

# 8 . Exposure controls/personal protection

| Name | Result | ACGIH | OSHA | Ontario | Mexico | IPEL |
|---|---|---|---|---|---|---|
| Nepheline syenite | TWA | Not established | Not established | 10 mg/m³ TD | Not established | Not established |
| Stoddard solvent | TWA | 100 ppm | 500 ppm | 100 ppm | 100 ppm | Not established |
| | STEL | Not established | Not established | Not established | 200 ppm | Not established |



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# 8 . Exposure controls/personal protection

| | | | | | | |
|---|---|---|---|---|---|---|
| titanium dioxide | TWA | 10 mg/m³ | 15 mg/m³ TD | 10 mg/m³ TD | 10 mg/m³ (as Ti) | Not established |
| | STEL | Not established | Not established | Not established | 20 mg/m³ (as Ti) | Not established |
| Limestone | TWA | Not established | 5 mg/m³ R<br>15 mg/m³ TD | Not established | 10 mg/m³ | Not established |
| | STEL | Not established | Not established | Not established | 20 mg/m³ | Not established |
| Distillates (petroleum), hydrotreated light | TWA | 200 mg/m³ (as total hydrocarbon vapor) S | Not established | 200 mg/m³ S | Not established | Not established |
| 1,2,4-trimethylbenzene | TWA | 25 ppm | Not established | 25 ppm | 25 ppm | Not established |
| | STEL | Not established | Not established | Not established | 35 ppm | Not established |
| 2-butanone oxime | TWA | Not established | Not established | Not established | Not established | 3 ppm |
| | STEL | Not established | Not established | Not established | Not established | 10 ppm |

**Key to abbreviations**

| | | | | | |
|---|---|---|---|---|---|
| A | = | Acceptable Maximum Peak | S | = | Potential skin absorption |
| ACGIH | = | American Conference of Governmental Industrial Hygienists. | SR | = | Respiratory sensitization |
| C | = | 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 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances | | | |

**Consult local authorities for acceptable exposure limits.**

**Recommended monitoring procedures** : 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.

**Engineering measures** : 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.

**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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protection**

**Eyes** : Safety glasses with side shields.

**Hands** : 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.



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## 8 . Exposure controls/personal protection

**Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: nitrile rubber

**Respiratory** : 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. 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.

**Skin** : 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.

**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.

## 9 . Physical and chemical properties

**Physical state** : Liquid.
**Flash point** : Closed cup: 48.89°C (120°F)
**Explosion limits** : Lower: 1.5%
**Color** : Not available.
**Odor** : Not available.
**pH** : Not available.
**Boiling/condensation point** : >37.78°C (>100°F)
**Melting/freezing point** : Not available.
**Specific gravity** : 1.34
**Density ( lbs / gal )** : 11.18
**Vapor pressure** : 0.36 kPa (2.7 mm Hg) [room temperature]
**Vapor density** : Not available.
**Volatility** : 43% (v/v), 24.72% (w/w)
**Evaporation rate** : 0.44 (butyl acetate = 1)
**Partition coefficient: n-octanol/water** : Not available.
**% Solid. (w/w)** : 75.28

## 10 . Stability and reactivity

**Stability** : Stable under recommended storage and handling conditions (see Section 7).
**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
**Materials to avoid** : Reactive or incompatible with the following materials:,acids,oxidizing materials,strong alkalis
**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
**Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.



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# 11 . Toxicological information

## Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| Stoddard solvent | LD50 Oral | Rat | >5 g/kg | - |
| titanium dioxide | LD50 Oral | Rat | >10 g/kg | - |
| 1,2,4-trimethylbenzene | LD50 Oral | Rat | 5 g/kg | - |
| | LC50 Inhalation | Rat | 18000 mg/m3 | 4 hours |
| 2-butanone oxime | LD50 Oral | Rat | 930 mg/kg | - |
| | LD50 Dermal | Rabbit | 200 uL/kg | - |

**Conclusion/Summary** : Not available.

## Chronic toxicity

**Conclusion/Summary** : Not available.

**Defatting irritant** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Target organs** : Contains material which causes damage to the following organs: brain.
Contains material which may cause damage to the following organs: kidneys, lungs, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, testes.

## Carcinogenicity

**Carcinogenicity** : Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

## Classification

| Product/ingredient name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| titanium dioxide | A4 | 2B | - | - |
| Distillates (petroleum), hydrotreated light | A3 | - | - | - |

**Carcinogen Classification code:**
**ACGIH: A1, A2, A3, A4, A5**
**IARC: 1, 2A, 2B, 3, 4**
**NTP: Proven, Possible**
**OSHA: +**
**Not listed or regulated as a carcinogen: -**

# 12 . Ecological information

**Environmental effects** : No known significant effects or critical hazards.

## Aquatic ecotoxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| Distillates (petroleum), hydrotreated light | Acute LC50 2200 ug/L Fresh water | Fish - Bluegill - Lepomis macrochirus | 4 days |
| 1,2,4-trimethylbenzene | Acute LC50 7720 to 8280 ug/L Fresh water | Fish - Fathead minnow - Pimephales promelas | 96 hours |
| 2-butanone oxime | Acute LC50 843000 to 914000 ug/L Fresh water | Fish - Fathead minnow - Pimephales promelas | 96 hours |

# 13 . Disposal considerations



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## 13 . Disposal considerations

**Waste disposal** : 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

| Regulation | UN number | Proper shipping name | Classes | PG* | Additional information |
|---|---|---|---|---|---|
| UN | 1263 | PAINT | 3 | III | - |
| IMDG | 1263 | PAINT | 3 | III | - |
| DOT | 1263 | PAINT | 3 | III | **Remarks**<br>USA Only: Can be reclassified as Combustible Liquid. Non-Bulk highway shipments (Less than or Equal to 450Liters) can be shipped as non-regulated. |

PG* : Packing group

Reportable quantity RQ : CERCLA: Hazardous substances.: No products were found.

## 15 . Regulatory information

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

**Australia inventory (AICS)** : At least one component is not listed.

**Canada inventory ( DSL )** : At least one component is not listed in DSL but all such components are listed in NDSL.

**China inventory (IECSC)** : At least one component is not listed.

**Europe inventory ( REACH )** : Please contact your supplier for information on the inventory status of this material.

**Japan inventory (ENCS)** : At least one component is not listed.

**Korea inventory (KECI)** : All components are listed or exempted.

**New Zealand ( NZIoC )** : Substance Use Restricted

**Philippines inventory (PICCS)** : At least one component is not listed.

**United States**

**U.S. Federal regulations** :

**SARA 302/304**: propylene oxide

CERCLA: Hazardous substances.: No products were found.

**SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:**

| Chemical name | CAS # | Acute | Chronic | Fire | Reactive | Pressure |
|---|---|---|---|---|---|---|



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## 15 . Regulatory information

| | | | | | | |
|---|---|---|---|---|---|---|
| **Stoddard solvent** | **8052-41-3** | Y | N | Y | N | N |
| **titanium dioxide** | **13463-67-7** | N | Y | N | N | N |
| **Limestone** | **1317-65-3** | N | N | N | N | N |
| **Distillates (petroleum), hydrotreated light** | **64742-47-8** | N | N | N | N | N |
| **2-butanone oxime** | **96-29-7** | Y | Y | Y | Y | N |
| | **Product as-supplied :** | Y | Y | Y | N | N |

**Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.**

**Canada**

**WHMIS (Canada)** : Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

**Mexico**

**Classification**

**Flammability** : 2 **Health** : 2 **Reactivity** : 0

## 16 . Other information

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

**Health** : 2 * **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 are not required on MSDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

**The customer is responsible for determining the PPE code for this material.**

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

**Health** : 2 **Flammability** : 2 **Instability** : 0

**Date of previous issue** : **5/8/2013.**

**Organization that prepared the MSDS** : EHS

**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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