

SAFETY DATA SHEET



Date of issue : 10 February 2025

Version : 8

Section 1. Identification

Product code : 515-00744/1L

Product name : A611 REDUCED LIGHT OXIDE 1

Other means of identification : 30004485

Product type : Liquid.

Recommended use and restrictions

Use of the substance/
mixture : Coating.

Uses advised against : Not applicable.

Supplier's details : PPG INDUSTRIES NEW ZEALAND LTD
5 MONAHAN ROAD, MT WELLINGTON,
AUCKLAND
www.ppgnz.co.nz

Telephone: 0800 990 093; 09 573 1620

Emergency telephone
number (with hours of
operation) : New Zealand 0800 000 096 (24 hours) / Australia 1800 883 254 (24 hours)
For international shipping emergencies: 1-412-391-1618

Section 2. Hazards identification

HSNO Classification :  FLAMMABLE LIQUIDS - Category 2
ACUTE TOXICITY (oral) - Category 4
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2
REPRODUCTIVE TOXICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

Symbol :



GHS label elements

Signal word : Danger

Hazard statements :  Highly flammable liquid and vapour.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Section 2. Hazards identification

Prevention : Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapour. Wash thoroughly after handling.

Response : IF exposed or concerned: Get medical advice or attention. IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. 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 advice or attention.

Storage : Not applicable.

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

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and has been classified according to the Hazardous Substances (Classifications) Notice 2017.

This material is classified as DANGEROUS GOODS according to criteria in New Zealand Land Transport Rule: Dangerous Goods 2005.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : 30004485

CAS number/other identifiers

Product code : 515-00744/1L

Hazardous ingredients	%	CAS number
toluene	30 - 60	108-88-3
butanone	10 - <30	78-93-3
4-methylpentan-2-one	1 - <10	108-10-1
cyclohexanone	1 - <10	108-94-1
ethanol	1 - <10	64-17-5
xylene	<1	1330-20-7

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 or have an OEL and hence require reporting in this section.

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

Section 4. First aid measures

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.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

Section 4. First aid measures

Ingestion : If swallowed, seek medical advice immediately and show the 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 : No known significant effects or critical hazards.

Skin contact : Causes skin irritation. Defatting to the skin.

Ingestion : Harmful if swallowed.

Over-exposure signs/symptoms

Eyes : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Skin : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced foetal weight
increase in foetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

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

Specific treatments : Not available.

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

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

Not suitable : Do not use water jet.

Specific hazards arising from the chemical : Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

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

Section 5. Firefighting measures

Special precautions 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 : If specialised 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 spilt 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 material 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.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the 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 spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling :  Put on appropriate personal protective equipment (see Section 8). 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 vapour 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.

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 oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental

Section 7. Handling and storage

contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	Exposure limits
toluene	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) Absorbed through skin , Ototoxicant. WES-TWA 8 hours: 20 ppm. WES-TWA 8 hours: 75 mg/m ³ . WES-STEL 15 minutes: 377 mg/m ³ . WES-STEL 15 minutes: 100 ppm.
butanone	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) WES-TWA 8 hours: 150 ppm. WES-TWA 8 hours: 445 mg/m ³ . WES-STEL 15 minutes: 890 mg/m ³ . WES-STEL 15 minutes: 300 ppm.
4-methylpentan-2-one	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) WES-TWA 8 hours: 50 ppm. WES-TWA 8 hours: 205 mg/m ³ . WES-STEL 15 minutes: 307 mg/m ³ . WES-STEL 15 minutes: 75 ppm.
cyclohexanone	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) Absorbed through skin. WES-TWA 8 hours: 25 ppm. WES-TWA 8 hours: 100 mg/m ³ .
ethanol	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) Ototoxicant. WES-TWA 8 hours: 200 ppm. WES-TWA 8 hours: 380 mg/m ³ . WES-STEL 15 minutes: 1520 mg/m ³ . WES-STEL 15 minutes: 800 ppm.
xylene	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) [xylene (o-, m-, p-isomers)] Ototoxicant. WES-TWA 8 hours: 50 ppm. WES-TWA 8 hours: 217 mg/m ³ .

Recommended monitoring procedures : 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.

Section 8. Exposure controls/personal protection

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

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.

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

Recommended: butyl rubber, nitrile rubber

Eye protection : Chemical splash goggles.

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.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Red.

Odour : Hydrocarbon.

Odour threshold : Not available.

pH : Not applicable.

Melting point : Not available.

Boiling point : 78°C (172.4°F)

Flash point : Closed cup: -7°C (19.4°F)

Flammability (solid, gas) : Not available.

Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits : Not available.

Vapour pressure : Not available.

Relative density : 0.93

Solubility(ies) :

Media	Result
cold water	Not soluble

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity :  Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

Section 10. Stability and reactivity

Stability : Stable under recommended storage and handling conditions (see Section 7).

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

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Reactive or incompatible with the following materials:
oxidising materials
strong acids
strong alkalis

Hazardous decomposition products : Depending on conditions, decomposition products may include the following materials: carbon oxides

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

Section 11. Toxicological information

Information on likely routes of exposure

Inhalation : No known significant effects or critical hazards.

Ingestion :  Harmful if swallowed.

Skin contact :  Causes skin irritation. Defatting to the skin.

Eye contact : Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Section 11. Toxicological information

- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
 dryness
 cracking
 reduced foetal weight
 increase in foetal deaths
 skeletal malformations
- Eye contact** : Adverse symptoms may include the following:
 pain or irritation
 watering
 redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity

Product/ingredient name	Result	Dose / Exposure
toluene	Rabbit - Dermal - LD50	8.39 g/kg
	Rat - Oral - LD50	5580 mg/kg
	Rat - Inhalation - LC50 Vapour	49 g/m ³ [4 hours]
butanone	Rabbit - Dermal - LD50	6480 mg/kg
	Rat - Oral - LD50	2737 mg/kg
4-methylpentan-2-one	Rat - Oral - LD50	2.08 g/kg
	Rabbit - Dermal - LD50	>5000 mg/kg
	Rat - Inhalation - LC50 Vapour	11 mg/l [4 hours]
cyclohexanone	Rat - Oral - LD50	1800 mg/kg
	Rabbit - Dermal - LD50	1100 mg/kg
	Rat - Inhalation - LC50 Gas.	8000 ppm [4 hours]
ethanol	Rat - Oral - LD50	7 g/kg
	Rat - Dermal - LD50	17100 mg/kg
	Rat - Inhalation - LC50 Vapour	124700 mg/m ³ [4 hours]
xylene	Rat - Oral - LD50	4.3 g/kg
	Rabbit - Dermal - LD50	1.7 g/kg

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

Irritation/Corrosion

Product/ingredient name	Result
xylene	Rabbit - Skin - Moderate irritant Amount/concentration applied: 500 mg Duration of treatment/exposure: 24 hours

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.

Sensitisation

Not available.

Conclusion/Summary

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

Potential chronic health effects

Section 11. Toxicological information

General : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Chronic toxicity

Not available.

Carcinogenicity

Not available.

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

Mutagenicity

Not available.

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

Reproductive toxicity

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

Specific target organ toxicity

	Category	Route of exposure	Target organs
toluene	Category 2	-	-
butanone	Category 2	-	-
xylene	Category 2	-	-

Aspiration hazard

Not available.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	1201.48 mg/kg
Dermal	6445.11 mg/kg
Inhalation (gases)	171869.5 ppm
Inhalation (vapours)	27.28 mg/l

Other information :

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

Section 12. Ecological information

Ecotoxicity :  No known significant effects or critical hazards.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Dose / Exposure
 4-methylpentan-2-one	Acute - LC50	Fish	>179 mg/l [96 hours]
ethanol	Acute - EC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	7640 mg/l [48 hours]

Persistence/degradability

Product/ingredient name	Test	Result	Dose / Inoculum
 4-methylpentan-2-one	OECD 301F	83% [28 days] - Readily	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
 toluene	-	-	Readily
4-methylpentan-2-one	-	-	Readily
ethanol	-	-	Readily
xylene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
 toluene	2.73	8.32	Low
butanone	0.3	-	Low
4-methylpentan-2-one	1.9	-	Low
cyclohexanone	0.86	-	Low
ethanol	-0.35	-	Low
xylene	3.12	7.4 to 18.5	Low

Mobility in soil

Soil/water partition coefficient : Not available.

Other adverse effects : No known significant effects or critical hazards.

Do not allow to enter drains or watercourses.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised 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

Section 13. Disposal considerations

liners may retain some product residues. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Not suitable: : Do not allow to enter drains or watercourses.

The classification of the product may meet the criteria for a hazardous waste. 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

	NZ	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3 	3 	3 
Packing group	II	II	II
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

NZ : None identified.

Hazchem code : •3YE

IMDG : None identified.

IATA : None identified.

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.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted.

HSNO Approval Number : HSR002662 Flammable

Emergency Management Regulations : Level 1: Labelling required when 1L is present in a workplace.

Level 2: MSDS required when any amount is present in a workplace. At least 2 x 4.5 kg powder fire extinguishers required when 250L is present in a workplace.

Level 3: Emergency Response Plans and Secondary Containment required when 1000L is stored.

Flammable Signage required when 250L is present in a workplace.

Toxic Signage required when 10000L is present in a workplace.

Classes 1 to 5 Control Regulations : Hazardous Atmosphere Zones required for quantities greater than: 100L (closed), 25L (decanting), 5L (open occasionally), 1L (open continuously). Hazardous Substances Location Certificate required for quantities greater than: 250L (containers up to 5L), 100L (containers >5L), 50L (open containers).

Approved Handler : Yes - For quantities greater than 500L in containers up to 5L; or 250 L in containers >5L.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

Date of issue : 10 February 2025

Date of previous issue : 2/24/2023

Indicates information that has changed from previously issued version.

Key to abbreviations : STEL = Short Term Exposure Limit
TWA = Time-Weighted Average
WES = Work Exposure Standard

References : Not available.

Organisation that prepared the SDS : EHS

Disclaimer

Section 16. Other information

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.