

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Product name : **TuffStuff 1284 Grey**  
Product form : mixture  
Other means of identification : none

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Use of the substance/mixture : Primer for boat hulls

**1.3. Details of the supplier of the safety data sheet**

Akzo Nobel Pty Limited  
51 McIntyre Road  
PO Box 26  
SUNSHINE NORTH, VIC, 3020, AUSTRALIA  
Office number +61 (03) 9313 4555  
Emergency number 1800 680 071

**1.4. Emergency telephone numbers**

**For Hazardous Materials [or Dangerous Goods] Incident spill, leaks, fire, Exposure, or Accident  
Call CHEMTREC 24 hours 7 days per week**

Emergency number : CHEMTREC Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

Emergency number : CHEMTREC Within USA and Canada: 1-800-424-9300 CCN155

Emergency number : Australia Poisons Information Centre 13 11 26

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

This material is hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

**Classification (GHS)**

Flammable Liquid 3 H226  
Skin Irritation 2 H315  
Eye Irritation 2A H319  
Skin Sensitisation 1 H317  
Aquatic Acute 2 H401  
Aquatic Chronic 2 H411

**2.2. Label elements**

**GHS**

Hazard pictograms (GHS) : 

Signal word (GHS) : **Danger**

Hazard statements (GHS) : H226 - Flammable liquid and vapor  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H401 - Toxic to aquatic life  
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS) P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P233 - Keep container tightly closed  
P240 - Ground/bond container and receiving equipment  
P241 - Use explosion-proof electrical/ventilating/lighting equipment

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P242 - Use only non-sparking tools  
P243 - Take precautionary measures against static discharge  
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors  
P264 - Wash hands, forearms and face thoroughly after handling  
P272 - Contaminated work clothing must not be allowed out of the workplace  
P273 - Avoid release to the environment  
P280 - Wear eye protection, protective gloves, protective clothing  
P302+P352 - If on skin: Wash with plenty of soap and water  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P321 - Specific treatment (see first aid instructions on this label)  
P332+P313 - If skin irritation occurs: Get medical advice/attention  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
P337+P313 - If eye irritation persists: Get medical advice/attention  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P370+P378 - In case of fire: Use carbon dioxide, dry powder, alcohol resistant foam or sand to extinguish  
P391 - Collect spillage  
P403+P235 - Store in a well-ventilated place. Keep cool  
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

### 2.3. Other hazards

None under normal conditions.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Substance type: Multi-constituent

Name	Product identifier	% w/w
Bisphenol A diglycidyl ether - bisphenol A copolymer	(CAS No) 25036-25-3	15 - 40
Xylenes (o-, m-, p- isomers)	(CAS No) 1330-20-7	15 - 40
Titanium dioxide	(CAS No) 13463-67-7	7 - 13
Trizinc diphosphate	(CAS No) 7779-90-0	7 - 13
Silane, dichlorodimethyl-, reaction products with silica	(CAS No) 68611-44-9	1 - 5
Methyl isobutyl ketone	(CAS No) 108-10-1	0.1 - < 1
Ethylbenzene	(CAS No) 100-41-4	0.1 - 1

## SECTION 4: First aid measures

Speed in treatment is essential. If poisoning occurs, contact a Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766 or a doctor. Have this SDS or the label with you.

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.

Skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention..

Eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.

Ingestion : IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention if you feel unwell.

First aid facilities : Eyewash and normal washroom facilities.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact: : Causes skin irritation. May cause an allergic skin reaction.

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Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.
Chronic symptoms	: Not applicable.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide. Dry powder. Alcohol-resistant foam. Sand.
Hazchem code:	•3Y

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Flammable liquid and vapor.
Explosion hazard	: No data available
Reactivity	: No dangerous reactions known under normal conditions of use.

### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear self-contained breathing apparatus and protective suit (see Section 8).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).
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#### 6.1.1. For non-emergency personnel

Protective equipment	: Wear protective equipment as described in Section 8.
Emergency procedures	: Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment	: Wear suitable protective clothing, gloves and eye or face protection. Wear approved supplied-air respirator, in case of emergency.
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### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Scoop solid spill into closing containers or bags. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Exclude sources of ignition and ventilate the area. Waste from this product may be hazardous.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Containers of this material may be hazardous when emptied. Do not breathe mist, spray. Use appropriate personal protection equipment (PPE).
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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep only in the original container in a cool, well ventilated place away from: Direct sunlight, Heat sources. Keep container closed when not in use.
Storage temperature	: Not available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No value assigned for this specific material by Safe Work Australia, however following are the exposure standards for the individual hazardous components as available and published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants and/or as set by overseas occupational exposure limits:

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<b>Xylenes (o-, m-, p- isomers) (1330-20-7)</b>	
Workplace Exposure Standards (Australia)	TWA 80 ppm (350 mg/m <sup>3</sup> ) STEL 150 ppm (655 mg/m <sup>3</sup> )
Workplace Exposure Limits (UK – HSE)	TWA 50 ppm (220 mg/m <sup>3</sup> ) STEL 100 ppm (441 mg/m <sup>3</sup> ) Note 'Sk' – can be absorbed through skin. Note 'BMGV' - 650 mmol methyl hippuric acid/mol creatinine in urine; Post shift
ACGIH TWA (ppm)	100 ppm
ACGIH STEL (ppm)	150 ppm
OSHA PEL (TWA) (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	100 ppm
OSHA PEL (STEL) (mg/m <sup>3</sup> )	655 mg/m <sup>3</sup>
OSHA PEL (STEL) (ppm)	150 ppm
<b>Ethylbenzene (100-41-4)</b>	
Workplace Exposure Standards (Australia)	TWA 100 ppm (434 mg/m <sup>3</sup> ) STEL 125 ppm (543 mg/m <sup>3</sup> )
ACGIH TWA (ppm)	20 ppm
Remark (OSHA)	upper respiratory tract irritation; kidney damage (nephropathy); cochlear impairment
OSHA PEL (TWA) (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	100 ppm
OSHA PEL (STEL) (mg/m <sup>3</sup> )	545 mg/m <sup>3</sup>
OSHA PEL (STEL) (ppm)	125 ppm
<b>Toluene (108-88-3)</b>	
Workplace Exposure Standards (Australia)	TWA 50 ppm (191 mg/m <sup>3</sup> ) STEL 150 ppm (574 mg/m <sup>3</sup> ) Note 'Sk' – can be absorbed through skin.
ACGIH TWA (ppm)	20 ppm
Remark (ACGIH)	Visual impair; female repro;
<b>Benzene (71-43-2)</b>	
Workplace Exposure Standards (Australia)	TWA 1 ppm (3.2 mg/m <sup>3</sup> ) 'Note' Carc. 1A – Known to have carcinogenic potential.
ACGIH TWA (ppm)	0.5 ppm
ACGIH STEL (ppm)	2.5 ppm
OSHA PEL (TWA) (ppm)	1 ppm
OSHA PEL (STEL) (ppm)	5 ppm (see 29 CFR 1910.1028)
OSHA PEL (Ceiling) (ppm)	25 ppm

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<b>Titanium dioxide (13463-67-7)</b>	
Workplace Exposure Standards (Australia)	TWA 10 mg/m <sup>3</sup> This value is for inspirable dust containing no asbestos and less than 1% crystalline silica.
ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> 'Note' (a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica
OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> total dust
<b>Silica: Crystalline, quartz (14808-60-7)</b>	
Workplace Exposure Standards (Australia)	TWA 0.05 mg/m <sup>3</sup> (respirable dust) Note 'Carc. 1A' – Known to have carcinogenic potential.
ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
OSHA PEL (TWA) (mg/m <sup>3</sup> )	(30)/(%SiO <sub>2</sub> + 2) total dust; (10)/(%SiO <sub>2</sub> + 2) respirable fraction
OSHA PEL (TWA) (ppm)	(250)/(%SiO <sub>2</sub> + 5) respirable fraction
<b>Methyl isobutyl ketone (108-10-1)</b>	
Workplace Exposure Standards (Australia)	TWA 50 ppm (205 mg/m <sup>3</sup> ) STEL 75 ppm (307 mg/m <sup>3</sup> ) Note 'Carc. 2' – Suspected carcinogen
ACGIH TWA (ppm)	20 ppm
ACGIH STEL (ppm)	75 ppm
OSHA PEL (TWA) (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	100 ppm

### 8.2. Exposure controls

#### Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

#### Personal protective equipment

: Gloves. Protective goggles. Protective clothing. Insufficient ventilation: wear respiratory protection.



#### Hand protection

: Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

#### Eye protection

: Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

#### Skin and body protection

: Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

#### Respiratory protection

: Wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment with gas filter (type A2). Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Grey
Odour	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Initial boiling point	: No data available
Boiling range	: No data available
Flash point	: 27.22 °C

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Flammability	:	No data available
Upper/lower flammability or explosive limits	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density (sg)	:	1.34 g/cm <sup>3</sup>
Solubility	:	No data available
Partition coefficient n-octanol/water	:	No data available
Auto ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	90 – 100 KU (1150 – 1650 cP)
Viscosity, kinematic	:	858 – 1213 (calculated)

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

None known.

### 10.4. Conditions to avoid

Sparks. Heat. Open flame. Extremely high or low temperatures. Direct sunlight.

### 10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agents

### 10.6. Hazardous decomposition products

## Carbon dioxide. Carbon monoxide. SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

No toxicological data is available for the formulation. The acute toxicity of the ingredients are presented below:

<b>Xylenes (o-, m-, p- isomers) (1330-20-7)</b>	
LD50 oral rat	3500 mg/kg
<b>Ethylbenzene (100-41-4)</b>	
LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	15400 mg/kg
LC50 inhalation rat (mg/l)	17.2 mg/l/4h
<b>Toluene (108-88-3)</b>	
LD50 oral rat	2600 mg/kg
LD50 dermal rabbit	12000 mg/kg
LC50 inhalation rat (mg/l)	12.5 mg/l/4h
<b>Benzene (71-43-2)</b>	
LD50 dermal rabbit	> 8200 mg/kg
LC50 inhalation rat (mg/l)	44.66 mg/l/4h (vapor)
<b>Titanium dioxide (13463-67-7)</b>	
LD50 oral rat	> 10000 mg/kg (Source: IUCLID)
<b>Trizinc diphosphate (7779-90-0)</b>	
LD50 oral rat	5000 mg/kg
<b>Silica: Crystalline, quartz (14808-60-7)</b>	
LD50 oral rat	500 mg/kg
<b>Methyl isobutyl ketone (108-10-1)</b>	
LD50 oral rat	2080 mg/kg
LD50 dermal rabbit	3000 mg/kg
<b>Xylenes (o-, m-, p- isomers) (1330-20-7)</b>	

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Acute Toxicity - oral	:	Not Applicable, Not classified
Acute Toxicity – dermal	:	Not Applicable, Not classified
Acute Toxicity - inhalation	:	Not Applicable, Not classified
Skin damage/irritation	:	Causes skin irritation.
Eye damage/irritation	:	Causes serious eye damage.
Respiratory or skin sensitization	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not Applicable, Not classified
Carcinogenicity	:	Not Applicable, Not classified
Reproductive toxicity	:	Not Applicable, Not classified
Specific target organ toxicity (single exposure)	:	Not Applicable, Not classified
Specific target organ toxicity (repeated exposure)	:	Not Applicable, Not classified
Aspiration hazard	:	Not Applicable, Not classified
Chronic health effects:	:	Not Applicable, Not classified

### SECTION 12: Ecological information

#### 12.1. Ecotoxicity

No ecotoxicity data is available for the formulation.

General: Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

#### 12.2. Persistence and degradability

No data available

#### 12.3. Bioaccumulative potential

No data available

#### 12.4. Mobility in soil

No data available

#### 12.5. Other adverse effects

PBT/vPvB assessment not available as chemical safety assessment not required/ not conducted

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without a permit.

Disposal recommendations : Refer to Waste Management Authority. Crush and dispose of empty containers in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

### SECTION 14: Transport information

#### 14.1. Road and Rail Transport - Australian Dangerous Goods Code (ADG Code) 7<sup>th</sup> Edition for transport by Road and Rail

UN number	:	1263
UN proper shipping name	:	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler, and liquid lacquer base)
Hazard Classes	:	Class 3 - Flammable liquid
Packing group	:	III
Hazchem Code	:	•3Y

#### 14.2. Marine Transport - International Maritime Dangerous Goods Code (IMDG Code) for transport by sea

UN Number	:	1263
UN proper shipping name	:	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler, and liquid lacquer base)
Hazard Class	:	3- Flammable liquid
Packaging Group	:	III
EmS-No.(1)	:	F-E
EmS-No.(2)	:	S-E
Marine Pollutant	:	Yes

#### 14.3. Air Transport (IATA Code) - the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air

UN Number	:	1263
UN proper shipping name	:	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler, and liquid lacquer base)

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Hazard Class	:	3- Flammable liquid
Packaging Group	:	III

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison Schedule (SUSMP)	:	5
AICIS	:	All the constituents of this material are either listed on the Australian Inventory of Industrial Chemicals (AIIC), not required due the nature of the chemical as they are excluded as an industrial chemical or have been assessed under the Industrial Chemicals Act 1989 as amended.

### SECTION 16: Other information

General Information	:	None
Reason(s) for Issue:	:	First issue and general compliance with Australian WHS Regulations for the preparation of safety data sheets.
Other information	:	None

Key abbreviations or acronyms used:

- ADG Code - Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
- AICIS – Australian Industrial Chemicals Introduction Scheme (formerly NICNAS)
- AIIC - Australian Inventory of Industrial Chemicals
- APVMA – Agricultural Pesticides and Veterinary Medicines Australia
- GHS - Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition) 2017
- HSE (UK) – Health and Safety Executive (UK)
- IARC - International Agency for Research on Cancer
- Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (July 2020)
- STEL - Short term exposure limit means the average airborne concentration of a substance calculated over a 15-minute period. The STEL should not be exceeded at any time during a normal eight hour working day.
- SUSMP - Standard for the Uniform Scheduling of Medicines & Poisons
- SWA - Safe Work Australia, formerly ASCC and NOHSC
- TGA – Therapeutic Goods Australia
- TWA - Time-weighted average means the average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.
- WHS – Workplace Health and Safety

The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this material under normal conditions. Any use of the material which is not in conformance with this Data Sheet or which involves using this material in combination with any other material or any other process is the responsibility of the user. All materials present unknown health hazards and should be used with caution. Although certain hazards are described herein, the manufacturer and its agents cannot guarantee that these are the only hazards which exist. Further, the manufacturer and its agents assume no responsibility for personal injury or property damage to vendors, users, or third-parties caused by this material. User assumes all risks associated with the use of this material. No warranty, express or implied, is made and New Nautical Coatings, Inc assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.