

SAFETY DATA SHEET

in accordance with 2015/830/EU (REACH, Annex II) 29 CFR 1910.1200, WHMIS 2015 and Safe Work Australia

Revision date: 20 November 2019

Initial date of issue: 6 July 2007

SDS No. 168B-21

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

763 Rust Transformer® (Bulk)

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

Acid base coating. Stops rusting and prevents further corrosive damage to metal and forms a sound base for primer coating.

1.3. Details of the supplier of the safety data sheet

Company:

A.W. CHESTERTON COMPANY
860 Salem Street
Groveland, MA 01834-1507, USA
Tel. +1 978-469-6446 Fax: +1 978-469-6785
(Mon. - Fri. 8:30 - 5:00 PM EST)
SDS requests: www.chesterton.com
E-mail (SDS questions): ProductSDSs@chesterton.com
E-mail: customer.service@chesterton.com

Supplier:

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive,
Unit 105, Burlington, Ontario L7L 4X8 – Tel. 905-335-5055
EU: Chesterton International GmbH, Am Lenzenfleck 23,
D85737 Ismaning, Germany – Tel. +49-89-996-5460

1.4. Emergency telephone number

24 hours per day, 7 days per week
Call Infotrac: 1-800-535-5053
Outside N. America: +1 352-323-3500 (collect)
NSW Poisons Information Centre (Australia): 13 11 26

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

Flammable liquid, Category 3, H226
Skin corrosion, Category 1B, H314
Serious eye damage, Category 1, H318
Specific target organ toxicity – repeated exposure, Category 2, H373 (kidneys, oral)

2.1.2. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.3. Additional information

For full text of H-statements: see SECTIONS 2.2 and 16.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

Hazard pictograms:



Signal word:

Danger

Hazard statements:	H226	Flammable liquid and vapour.
	H314	Causes severe skin burns and eye damage.
	H373	May cause damage to the kidneys through prolonged or repeated exposure if swallowed.
Precautionary statements:	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P233	Keep container tightly closed.
	P240	Ground and bond container and receiving equipment.
	P243	Take action to prevent static discharges.
	P260	Do not breathe vapours/spray.
	P280	Wear protective gloves/clothing and eye/face protection.
	P301/330/333	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P303/361/353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P304/340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor.
	P314	Get medical advice/attention if you feel unwell.
	P363	Wash contaminated clothing before reuse.
	P403/235	Store in a well-ventilated place. Keep cool.
	P405	Store locked up.
	P501	Dispose of contents/container to an approved waste disposal plant.

Supplemental information: None

2.3. Other hazards

It will stain the skin after prolonged contact. The stain will fade in time or it can be removed by rinsing the hands with a dilute solution of bleach.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous Ingredients ¹	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Ethylene glycol	15-25	107-21-1 203-473-3	NA	Acute Tox. 4, H302 STOT RE 2, H373 (kidneys, oral)
Isopropanol	10-15	67-63-0 200-661-7	NA	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Tannic acid	10-15	1401-55-4 215-753-2	NA	[Acute Tox. 5, H303] [Aquatic Acute 3, H402]
Phosphinic acid	1-5	6303-21-5 228-60-15	NA	Met. Corr. 1, H290 [Acute Tox. 5, H303] Skin Corr. 1B, H314 Eye Dam. 1, H318
Phosphinic acid, barium salt	1-2	14871-79-5 238-942-1	NA	Acute Tox. 4, H302/332
Alcohols, C12-15, Ethoxylated Propoxylated	0.1-0.2	68551-13-3 614-582-4	NA	Acute Tox. 4, H302 Eye Dam. 1, H318 Skin Irrit. 2, H315 Aquatic Acute 1, H400

Any classification in brackets is a GHS building block that was not adopted by the EU, the US, Canada and Australia in their national implementations of GHS. For full text of H-statements: see SECTION 16.

¹ Classified according to: • 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F)
• 1272/2008/EC, GHS, REACH
• WHMIS 2015
• Safe Work Australia

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

Inhalation: Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.

Skin contact: Wash skin with plenty of water. Wash clothing before reuse. Consult physician.

Eye contact: Flush eyes for at least 30 minutes with large amounts of water. Consult physician.

Ingestion: Do not induce vomiting. If conscious, dilute stomach contents with large quantities of water. Contact physician immediately.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. Avoid contact with the product while providing aid to the victim. Do not breathe mist/vapours. See section 8.2.2 for recommendations on personal protective equipment.

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

Severe eye and skin irritant; may cause burns. Excessive inhalation of vapor may result in dizziness, headache and other central nervous system effects. Repeated overexposure to Ethylene Glycol can cause kidney and liver effects.

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

Treat symptoms.

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media**

Suitable extinguishing media: Carbon dioxide, dry chemical, foam, water fog or water spray

Unsuitable extinguishing media: High volume water jet

5.2. Special hazards arising from the substance or mixture

None

5.3. Advice for firefighters

Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

Flammability Classification: –

HAZCHEM Emergency Action Code: 3 Z

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Provide adequate ventilation. Utilize exposure controls and personal protection as specified in Section 8.

6.2. Environmental Precautions

Keep out of sewers, streams and waterways.

6.3. Methods and material for containment and cleaning up

Contain spill to a small area. Keep away from sources of ignition - No smoking. If removal of ignition sources is not possible, then flush material away with water. Pick up with absorbent material (sand, sawdust, clay, etc.) and place in a suitable container for disposal.

6.4. Reference to other sections

Refer to section 13 for disposal advice.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Wash skin thoroughly after handling. Utilize exposure controls and personal protection as specified in Section 8. Keep container closed when not in use. Ground and bond container and receiving equipment. Take action to prevent static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated area.

7.3. Specific end use(s)

No special precautions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limit values**

Ingredients	OSHA PEL ¹		ACGIH TLV ²		UK WEL ³		AUSTRALIA ES ⁴	
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Ethylene glycol*	N/A	N/A	25 (vapor) STEL: 50	STEL: 10 (aerosol)	20 (vapor) STEL: 40	52 (vapor) 104 10 (aerosol)	20 (vapor) STEL: 40	52 (vapor) 104 10 (aerosol)
Isopropanol	400	980	200 STEL: 400	– –	400 STEL: 500	999 1,250	400 STEL: 500	983 1,230
Tannic acid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Phosphinic acid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Phosphinic acid, barium salt	(as Ba)	0.5	(as Ba)	0.5	N/A	0.5	N/A	0.5
Alcohols, C12-15, Ethoxylated Propoxylated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*European Union Occupational Exposure Limit Value: Inhalable fraction and vapor: 20 ppm, 52 mg/m³ (8-hr TWA); 40 ppm, 104 mg/m³ (STEL)

¹ United States Occupational Health & Safety Administration permissible exposure limits

² American Conference of Governmental Industrial Hygienists threshold limit values

³ EH40 Workplace exposure limits, Health & Safety Executive

⁴ Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants

Biological limit values

Isopropanol:

Control parameter	Biological specimen	Sampling Time	Limit value	Basis
Acetone	Urine	End of shift at end of workweek	40 mg/l	ACGIH

Derived No Effect Level (DNEL) according to Regulation (EC) No 1907/2006:**Workers**

Substance	Route of exposure	Potential health effects	DNEL
Isopropanol	Inhalation	Chronic effects, systemic	500 mg/m ³
	Dermal	Chronic effects, systemic	888 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:

Substance	Environmental protection target	PNEC
Isopropanol	Fresh water	140.9 mg/l
	Marine water	140.9 mg/l
	Water, intermittent release	140.9 mg/l
	Freshwater sediments	552 mg/kg dry wt.
	Marine sediments	552 mg/kg dry wt.
	Microorganisms in sewage treatment	2251 mg/l
	Soil (agricultural)	28 mg/kg dry wt.

8.2. Exposure controls**8.2.1. Engineering measures**

Use only in well-ventilated areas. If product is sprayed: 5 to 15 air changes per hour.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed. If exposure limits are exceeded, use approved organic vapor respirator (e.g., EN filter type A-P2).

Protective gloves: Chemical resistant gloves

Isopropanol:

Contact type	Glove material	Layer thickness	Breakthrough time*
Full	Nitrile rubber	0.40mm	>480 min.
Splash	Neoprene	0.65mm	>120 min.

*Determined according to EN374 standard.

Eye and face protection: Safety goggles.

Other: Impervious clothing as necessary to prevent skin contact.

8.2.3. Environmental exposure controls

Refer to sections 6 and 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid	Odour	sweet odor
Colour	dark brown	Odour threshold	not determined
Initial boiling point	100°C (212°F)	Vapour pressure @ 20°C	not determined
Melting point	not determined	% Aromatics by weight	0%
% Volatile (by volume)	66%	pH	1.5
Flash point	34°C (93°F)	Relative density	1.07 kg/l
Method	PM Closed Cup	Weight per volume	8.9 lbs/gal.
Viscosity	not determined	Coefficient (water/oil)	> 1
Autoignition temperature	not determined	Vapour density (air=1)	> 1
Decomposition temperature	no data available	Rate of evaporation (ether=1)	< 1
Upper/lower flammability or explosive limits	not determined	Solubility in water	complete
Flammability (solid, gas)	not applicable	Oxidising properties	not applicable
Explosive properties	not applicable		

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Refer to sections 10.3 and 10.5.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

10.4. Conditions to avoid

Open flames and red hot surfaces.

10.5. Incompatible materials

Strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide and other toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Primary route of exposure under normal use: Inhalation, skin and eye contact.

Acute toxicity -

Oral: May be harmful if swallowed. ATE-mix = 4,673 mg/kg.

Substance	Test	Result
Ethylene glycol	LD50, rat	7,712 mg/kg
Ethylene glycol	Human lethal dose, estimated	1,400 – 1,600 mg/kg
Isopropanol	LD50, rat	5,045 mg/kg
Isopropanol	Human lethal dose	3,570 mg/kg
Tannic acid	LD50, rat	2,260 mg/kg
Tannic acid	LD50, rabbit	5,000 mg/kg
Phosphinic acid	LD50, rat, read-across	> 2,000 mg/kg
Phosphinic acid	LD50, rat, OECD 401	<= 5,000 mg/kg
Alcohols, C12-15, Ethoxylated Propoxylated	LD50, rat	1,400 mg/kg

Dermal:

Substance	Test	Result
Ethylene glycol	LD50 dermal, rabbit	> 22,300 mg/kg (20 ml/kg)
Isopropanol	LD50 dermal, rabbit	12,800 mg/kg
Tannic acid	LD50 dermal, mouse	5,000 mg/kg

Inhalation: Excessive inhalation of vapor may result in dizziness, headache and other central nervous system effects.

Substance	Test	Result
Ethylene glycol	LC50, rat	> 20 mg/l
Isopropanol	LC50 inhalation, rat, 4 hours	46.5 mg/l (vapor)

Skin corrosion/irritation: Severe skin irritant; may cause burns.

Substance	Test	Result
Phosphinic acid	OECD 435	Corrosive

Serious eye damage/irritation: Severe eye irritant; may cause burns.

Substance	Test	Result
Isopropanol	Eye irritation, rabbit	Moderate irritation

Respiratory or skin sensitisation:

Substance	Test	Result
Isopropanol	Skin sensitization, guinea pig (OECD 406)	Not sensitizing

Germ cell mutagenicity: Ethylene glycol, Isopropanol, Phosphinic acid: based on available data, the classification criteria are not met. Tannic acid, Phosphinic acid, barium salt: data lacking.

Carcinogenicity: This product contains no carcinogens as listed by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), the Occupational Safety and Health Administration (OSHA) or the European Chemicals Agency (ECHA).

Reproductive toxicity: Ethylene glycol, Isopropanol: based on available data, the classification criteria are not met. Tannic acid, Phosphinic acid, Phosphinic acid, barium salt: data lacking.

STOT – single exposure: Isopropanol: may cause drowsiness or dizziness. Ethylene glycol, Phosphinic acid, Phosphinic acid, barium salt: based on available data, the classification criteria are not met. Tannic acid: data lacking.

STOT – repeated exposure: Repeated overexposure to Ethylene Glycol can cause kidney and liver effects. Isopropanol, Phosphinic acid: based on available data, the classification criteria are not met. Tannic acid, Phosphinic acid, barium salt: data lacking.

Aspiration hazard: Not classified as an aspiration toxicant.

Other information: None known

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

12.1. Toxicity

Many aquatic species are intolerant of pH levels below 4. Tannic acid: 96 h LC50 (fish), 37 mg/l. Alcohols, C12-15, Ethoxylated Propoxylated: LC50/EC50 between 0.1 and 1 mg/l in the most sensitive species.

12.2. Persistence and degradability

Ethylene glycol, Isopropanol: oxidizes rapidly by photochemical reactions in air; inherently biodegradable. Phosphinic acid, Phosphinic acid, barium salt: inorganic substances. Alcohols, C12-15, Ethoxylated Propoxylated: readily biodegradable (OECD 301B, 28 days > 60%).

12.3. Bioaccumulative potential

Ethylene glycol, Isopropanol: low potential for bioaccumulation (BCF < 100).

12.4. Mobility in soil

Liquid. Soluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Ethylene glycol, Isopropanol: expected to have very high mobility in soils.

12.5. Results of PBT and vPvB assessment

Not available

12.6. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Incinerate or landfill absorbed material with a properly licensed facility. Treatment standards for ignitable, corrosive waste and barium must be met for disposal if applicable. Check local, state and national/federal regulations and comply with the most stringent requirement. This product is classified as a hazardous waste according to 2008/98/EC.

SECTION 14: TRANSPORT INFORMATION**14.1. UN number**

ADG/ADR/RID/ADN/IMDG/ICAO: UN2924

TDG: UN2924

US DOT: UN2924

14.2. UN proper shipping name

ADG/ADR/RID/ADN/IMDG/ICAO: FLAMMABLE LIQUID, CORROSIVE N.O.S. (ISOPROPANOL / TANNIC ACID)

TDG: FLAMMABLE LIQUID, CORROSIVE N.O.S. (ISOPROPANOL / TANNIC ACID)

US DOT: FLAMMABLE LIQUID, CORROSIVE N.O.S. (ISOPROPANOL / TANNIC ACID)

14.3. Transport hazard class(es)

ADG/ADR/RID/ADN/IMDG/ICAO: 3, (8)

TDG: 3, (8)

US DOT: 3, (8)

14.4. Packing group

ADG/ADR/RID/ADN/IMDG/ICAO: III

TDG: III

US DOT: III

14.5. Environmental hazards

NO ENVIRONMENTAL HAZARDS

14.6. Special precautions for user

NO SPECIAL PRECAUTIONS FOR USER

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

NOT APPLICABLE

14.8. Other information

US DOT: ERG NO. 132

May be shipped as Limited Quantities in packaging having a rated capacity gross weight of 66 lb. or less and in inner packages not over 5 Liters (49 CFR 173.150(b),(3)).

IMDG: EmS F-E, S-C, IMDG segregation group 1-Acids

ADR: Classification code FC, Tunnel restriction code (D/E)

ADG HAZCHEM CODE: ●3W HIN: 38

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU regulations**

Authorisations under Title VII: Not applicable

Restrictions under Title VIII: None

Other EU regulations: Directive 94/33/EC on the protection of young people at work.
Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances (hazard category P5, Flammable Liquids).

15.1.2. National regulations**US EPA SARA TITLE III****312 Hazards:**

Flammable liquid
Skin corrosion
Serious eye damage
Specific target organ toxicity – repeated exposure

313 Chemicals:

Ethylene glycol	107-21-1	15-25%
Phosphinic acid, barium salt	14871-79-5	1-2%

Other national regulations: National implementations of the EC Directives referred to in section 15.1.1.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms: ADG: Australian Dangerous Goods Code
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE: Acute Toxicity Estimate
BCF: Bioconcentration Factor
cATpE: Converted Acute Toxicity point Estimate
CLP: Classification Labelling Packaging Regulation (1272/2008/EC)
ES: Exposure Standard
GHS: Globally Harmonized System
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
LC50: Lethal Concentration to 50 % of a test population
LD50: Lethal Dose to 50% of a test population
LOEL: Lowest Observed Effect Level
N/A: Not Applicable
NA: Not Available
NOEC: No Observed Effect Concentration
NOEL: No Observed Effect Level
OECD: Organization for Economic Co-operation and Development
PBT: Persistent, Bioaccumulative and Toxic substance
(Q)SAR: Quantitative Structure-Activity Relationship
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)
REL: Recommended Exposure Limit
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
STOT RE: Specific Target Organ Toxicity, Repeated Exposure
STOT SE: Specific Target Organ Toxicity, Single Exposure
TDG: Transportation of Dangerous Goods (Canada)
TWA: Time Weighted Average
US DOT: United States Department of Transportation
vPvB: very Persistent and very Bioaccumulative substance
WEL: Workplace Exposure Limit
WHMIS: Workplace Hazardous Materials Information System
Other abbreviations and acronyms can be looked up at www.wikipedia.org.

Key literature references and sources for data: Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)
 Chemical Classification and Information Database (CCID)
 European Chemicals Agency (ECHA) - Information on Chemicals
 Hazardous Chemical Information System (HCIS)
 National Institute of Technology and Evaluation (NITE)
 Swedish Chemicals Agency (KEMI)
 U.S. National Library of Medicine Toxicology Data Network (TOXNET)

Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 [CLP] / GHS:

Classification	Classification procedure
Flam. Liq. 3, H226	On basis of test data
Skin Corr. 1B, H314	On basis of test data
Eye Dam. 1, H318	On basis of test data
STOT RE 2, H373	Calculation method

Relevant H-statements: H225: Highly flammable liquid and vapour.
 H302: Harmful if swallowed.
 H303: May be harmful if swallowed.
 H314: Causes severe skin burns and eye damage.
 H315: Causes skin irritation.
 H318: Causes serious eye damage.
 H319: Causes serious eye irritation.
 H332: Harmful if inhaled.
 H336: May cause drowsiness or dizziness.
 H373: May cause damage to organs through prolonged or repeated exposure.
 H400: Very toxic to aquatic life.
 H402: Harmful to aquatic life.

Hazard pictogram names: Flame, corrosion, health hazard

Further information: None

Date of last revision: 20 November 2019

Changes to the SDS in this revision: Sections 1.3, 2.1, 2.2, 3, 7.1, 8.1, 11, 12.1, 12.2, 15.1.2, 16.

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.