SAFETY DATA SHEET

in accordance with 1907/2006/EC (REACH, as amended by 830/2015/EU) and 29 CFR 1910.1200

Revision date: 12 February 2016 **Initial date of issue:** 29 March 2007 **SDS No.** 220A-13

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

1.1. Product identifier

995 Release Agent (Aerosol)

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

A highly effective, CFC-free release agent formulated for use in all mold applications ranging from sand core operations and investment casting to hard-to-release molding procedure with polyurethanes, rubber, filled thermosplastics and composites.

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): ProductMSDSs@chesterton.com
E-mail: customer.service@chesterton.com
EU: Chesterton International GmbH, Am Lenzenfleck 23,
D85737 Ismaning, Germany – Tel. +49-89-996-5460

Supplier:

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)

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

Aerosol 1, H222
STOT SE 3, H336
Skin Irrit. 2, H315
Aquatic Chronic 2, H411

2.1.2. Classification according to WHMIS 1988

B5: Flammable aerosols; A: Compressed gases; D2B: Toxic materials causing other effects.

2.1.3. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.4. 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:

H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P211	Do not spray on an open flame or other ignition source.
	P251	Do not pierce or burn, even after use.
	P260C	Avoid breathing vapours/spray.
	P262	Do not get in eyes, on skin, or on clothing.
	P280A	Wear protective gloves.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P410/412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

Supplemental information: None

2.3. Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous Ingredients[1]	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Naphtha (petroleum), light alkylate*	50-60	64741-66-8 265-068-8	NA	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411
Propane	30-40	74-98-6 200-827-9	NA	Flam. Gas 1, H220 Press. Gas

For full text of H-statements: see SECTION 16.
* Contains less than 0.1 % w/w Benzene.

[1] Classified according to: * 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F), California Proposition 65
* 1272/2008/EC, REACH
* WHMIS 2015
* Safe Work Australia [NOHSC: 1008 (2004)]

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 soap and water. Take off contaminated clothing and wash it before reuse. Contact physician if irritation persists.

Eye contact: Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.

Ingestion: Do not induce vomiting. If conscious, drink large quantities of water. Contact physician immediately.

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

Prolonged or repeated skin contact may defat the skin and cause skin irritation. Direct contact may cause mild eye irritation. Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system 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 or water spray

Unsuitable extinguishing media: Water jets

5.2. Special hazards arising from the substance or mixture

Pressurized containers, when heated, are a potential explosive hazard.

5.3. Advice for firefighters

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

Flammability Classification: NFPA: Storage Level III; 16 CFR 1500.3 Extremely flammable aerosol

HAZCHEM Emergency Action Code: 2 **Y**

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

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No Smoking. Utilize exposure controls and personal protection as specified in Section 8. Vapors are heavier than air and will collect in low areas. Vapor accumulations could flash and/or explode if ignited.

7.2. Conditions for safe storage, including any incompatibilities

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C (120°F). Do not pierce or burn, even after use.

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
Naphtha (petroleum), light alkylate**	–	–	–	–	–	–	–	–
Propane	1000	1800	1000	1800	–	–	–	–

** Chesterton recommended limit: 241 ppm, 1200mg/m^3
[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] Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003].

8.2. Exposure controls

8.2.1. Engineering measures

Use only in well-ventilated areas. If necessary, provide explosion-proof ventilation.

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/P).

Protective gloves: Chemical resistant gloves (e.g. Viton*, neoprene, nitrile). *DuPont's registered trademark.

Eye and face protection: Safety glasses

Other: Impervious clothing (e.g. Viton*, neoprene or nitrile) 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	low viscosity liquid	**Odour**	mild petroleum odor
Colour	clear	**Odour threshold**	not determined
Initial boiling point	116°C (240°F), product only	**Vapour pressure @ 20°C**	54 mm Hg
Melting point	not applicable	**% Aromatics by weight**	0%
% Volatile (by volume)	94.5%	**pH**	not applicable
Flash point	< 7°C (<45°F)	**Relative density**	0.6 kg/l
Method	PM Closed Cup, product only	**Weight per volume**	5.3 lbs/gal.
Viscosity	< 100 cps @ 25°C	**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	LEL: 1.2; UEL: 9.9	**Solubility in water**	< 1%
Flammability (solid, gas)	not determined	**Oxidising properties**	not determined
Explosive properties	not determined		

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, aldehydes and other toxic fumes (by combustion).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Primary route of exposure under normal use: Inhalation, skin and eye contact. Personnel with pre-existing skin and lung disorders are generally aggravated by exposure.

Acute toxicity -

Oral: Based on available data on components, the classification criteria are not met.

Substance	Test	Result
Naphtha (petroleum), light alkylate	LD50, rat	> 5000 mg/kg

Dermal: Based on available data on components, the classification criteria are not met.

Substance	Test	Result
Naphtha (petroleum), light alkylate	LD50, rabbit	> 2000 mg/kg

Inhalation:

Substance	Test	Result
Naphtha (petroleum), light alkylate	LC50, rat, 4 hours	> 21 mg/l (vapor)
Propane	LC50, rat, 4 hours	658 mg/l

Skin corrosion/irritation: Causes skin irritation.

Substance	Test	Result
Naphtha (petroleum), light alkylate	Skin irritation, rabbit	Moderate irritation

Serious eye damage/ irritation: May cause mild eye irritation.

Respiratory or skin sensitisation:

Substance	Test	Result
Naphtha (petroleum), light alkylate	Skin sensitization, OECD 406	Not sensitizing

Germ cell mutagenicity: Naphtha (petroleum), light alkylate: not expected to be a germ cell mutagen, based on test data.

Carcinogenicity: As per 29 CFR 1910.1200 (Hazard Communication), 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 Regulation (EC) No 1272/2008.

Reproductive toxicity: Naphtha (petroleum), light alkylate: not expected to be a reproductive toxicant, based on data from similar materials.

STOT-single exposure: May cause drowsiness or dizziness.

STOT-repeated exposure: Naphtha (petroleum), light alkylate: not expected to cause organ damage from prolonged or repeated exposure, based on test data.

Aspiration hazard: Not classified as an aspiration toxicant due to the aerosol spray pattern.

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

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment, based on data from similar materials.

12.2. Persistence and degradability

Naphtha (petroleum), light alkylate: expected to be inherently biodegradable (ready biodegradability, 28 days: 22%). Propane: can degrade rapidly in air.

12.3. Bioaccumulative potential

Propane: bioconcentration in aquatic organisms is not expected to be significant.

12.4. Mobility in soil

Liquid. Solubility in water: < 1%. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

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 absorbed material in an approved area. Incinerate pressurized containers at an approved facility. 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

ADR/RID/ADN/IMDG/ICAO: UN1950
TDG: UN1950
US DOT: UN1950

14.2. UN proper shipping name

ICAO: Aerosols, Flammable
IMDG: Aerosols
ADR/RID/ADN: Aerosols, *flammable*
TDG: Aerosols, *flammable*
US DOT: Aerosols, *flammable*

14.3. Transport hazard class(es)

ADR/RID/ADN/IMDG/ICAO:	2.1
TDG:	2.1
US DOT:	2.1

14.4. Packing group

ADR/RID/ADN/IMDG/ICAO:	NOT APPLICABLE
TDG:	NOT APPLICABLE
US DOT:	NOT APPLICABLE

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: Shipped as Consumer Commodity ORM-D in packaging having a rated capacity gross weight of 66 lb. or less (49 CFR 173.306(i)). ERG NO. 126

IMDG: EmS. F-D, S-U, Shipped as Limited Quantity

ADR: Classification code 5F, Tunnel restriction code (E), Shipped as Limited Quantity

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 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers. Directive 94/33/EC on the protection of young people at work Directive 96/82/EC on the control of major-accident hazards involving dangerous substances (Petroleum products, qualifying quantities: 2 500 t, 25 000 t).

15.1.2. National regulations

US EPA SARA TITLE III

312 Hazards:	**313 Chemicals:**
Immediate	None
Fire	
Pressure Release	

Other national regulations: National implementation of the EC Directive 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:

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
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)
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)
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)
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 Substances Information System (HSIS)
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
Aerosol 1, H222	On basis of components
STOT SE 3, H336	Calculation method
Skin Irrit. 2, H315	Calculation method
Aquatic Chronic 2, H411	Calculation method

Relevant H-statements:

H220: Extremely flammable gas.
H225: Highly flammable liquid and vapour.
H315: Causes skin irritation.
H304: May be fatal if swallowed and enters airways.
H336: May cause drowsiness or dizziness.
H411: Toxic to aquatic life with long lasting effects.

Hazard pictogram names: Flame, exclamation mark, environment

Changes to the SDS in this revision: Sections 2.1, 3, 5.1, 11,12.2, 15.1.2, 16.

Revision date: 12 February 2016

Further information: *R65: not applicable according to criteria.

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.