



SAFETY DATA SHEET

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

Revision date: 29 March 2016

Initial date of issue: 6 July 2007

SDS No. 220B-14

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

1.1. Product identifier

995 Release Agent (Bulk)

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 thermoplastics 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]

Flam. Liq. 2, H225
Asp. Tox. 1, H304
Skin Irrit. 2, H315
STOT SE 3, H336
Aquatic Chronic 2, H411

2.1.2. Classification according to 29 CFR 1910.1200 / WHMIS 2015

Flam. Liq. 2, H225
Asp. Tox. 1, H304
Repr. 2, H361f
Skin Irrit. 2, H315
Skin Sens. 3, H336
Aquatic Chronic 2, H411

2.1.3. Classification according to WHMIS 1988

B2: Flammable liquids; D2B: Toxic materials causing other effects

2.1.4. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.5. Additional information

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

2.2. Label elements**2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]****Hazard pictograms:****Signal word:** Danger

Hazard statements: H225 Highly flammable liquid and vapour.
 H304 May be fatal if swallowed and enters airways.
 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.
 P261 Avoid breathing vapours/spray.
 P280 Wear protective gloves and eye protection.
 P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P331 Do NOT induce vomiting.
 P403/233 Store in a well-ventilated place. Keep container tightly closed.

Supplemental information: None**2.2.2. Labelling according to 29 CFR 1910.1200 / WHMIS 2015****Hazard pictograms:****Signal word:** Danger

Hazard statements: H225 Highly flammable liquid and vapour.
 H304 May be fatal if swallowed and enters airways.
 H361F Suspected of damaging fertility.
 H315 Causes skin irritation.
 H336 May cause drowsiness or dizziness.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements: P201 Obtain special instructions before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P261 Avoid breathing vapours/spray.
 P280 Wear protective gloves/clothing and eye protection.
 P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P331 Do NOT induce vomiting.
 P302/352 IF ON SKIN: Wash with plenty of soap and water.
 P362/364 Take off contaminated clothing and wash it before reuse.
 P308/313 IF exposed or concerned: Get medical advice/attention.
 P403/233 Store in a well-ventilated place. Keep container tightly closed.

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), hydrotreated light*	55-65	64742-49-0 265-151-9	NA	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411
Distillates (petroleum), hydrotreated light	15-25	64742-47-8 265-149-8	NA	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 3, H412

Octamethylcyclotetrasiloxane	0.1-0.15	556-67-2 209-136-7	NA	Repr. 2, H361f Aquatic Chronic 4, H413
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*Contains less than 0.1 % w/w Benzene.
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), 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 immediately.

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

Direct eye contact may cause eye irritation. Excessive inhalation of vapors will irritate the eyes and respiratory tract and cause dizziness, headache and other central nervous system effects. Prolonged or repeated skin contact may defat the skin and cause skin irritation. Aspiration into the lungs may cause chemical pneumonitis or pulmonary oedema.

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

None

5.3. Advice for firefighters

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

Flammability Classification: –

HAZCHEM Emergency Action Code: 2 **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

Keep container closed when not in use. Ground and bond product transfer. Vapors are heavier than air and will collect in low areas. Vapor accumulations could flash and/or explode if ignited. Utilize exposure controls and personal protection as specified in Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry 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
Naphtha (petroleum), hydrotreated light	500	2000	342*	1400*	–	–	–	–
Distillates (petroleum), hydrotreated light	500	–	212*	1200*	–	–	–	–
Octamethylcyclotetrasiloxane	–	–	–	–	–	–	–	–

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 Executive⁴ 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.

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 (e.g. Viton*, neoprene, nitrile). *DuPont's registered trademark.

Heptane:

Contact type	Glove material	Layer thickness	Breakthrough time *
Full	Nitrile rubber	0.40 mm	> 480 min.
Splash	neoprene	0.65 mm	> 60 min.

*Determined according to EN374 standard.

Eye and face protection: Safety glasses**Other:** Impervious clothing (e.g. Viton*, neoprene or nitrile) as necessary to prevent skin contact. *DuPont's registered trademark.**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	petroleum
Colour	clear	Odour threshold	not determined
Initial boiling point	93.3°C (200°F)	Vapour pressure @ 20°C	not determined
Melting point	not determined	% Aromatics by weight	< 0.3%
% Volatile (by volume)	88.41%	pH	not applicable
Flash point	< 7°C (<45°F)	Relative density	0.75 kg/l
Method	Closed Cup	Weight per volume	6.23 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	negligible
Flammability (solid, gas)	not applicable	Oxidising properties	not applicable
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, heat, sparks 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.

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 dermatitis are generally aggravated by exposure.

Acute toxicity -**Oral:**

Direct eye contact may cause eye irritation. Excessive inhalation of vapors will irritate the eyes and respiratory tract and cause dizziness, headache and other central nervous system effects.

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

Dermal:

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

Inhalation:

Excessive inhalation of vapors will irritate the eyes and respiratory tract and cause dizziness, headache and other central nervous system effects.

Substance	Test	Result
Naphtha (petroleum), hydrotreated light	LC50, rat, 4 h	> 23.3 mg/l (vapor)
Distillates (petroleum), hydrotreated light	LC50, rat, 4 h	> 5.28 mg/l

Skin corrosion/irritation: Causes skin irritation.

Substance	Test	Result
Naphtha (petroleum), hydrotreated light	Skin irritation, rabbit	Moderately irritating (read-across)

Serious eye damage/irritation: Based on available data on components, the classification criteria are not met.

Respiratory or skin sensitisation: Not expected to cause skin sensitization. Based on test data from similar products, review of component data, or a combination of these sources. Naphtha (petroleum), hydrotreated light, Distillates (petroleum), hydrotreated light: not expected to be a respiratory sensitizer.

Germ cell mutagenicity: Naphtha (petroleum), hydrotreated light, Distillates (petroleum), hydrotreated light

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: Octamethylcyclotetrasiloxane has caused impaired fertility in animal inhalation studies. Naphtha (petroleum), hydrotreated light, Distillates (petroleum), hydrotreated light: based on available data, the classification criteria are not met.

STOT-single exposure: May cause drowsiness or dizziness.

STOT-repeated exposure: Naphtha (petroleum), hydrotreated light, Distillates (petroleum), hydrotreated light: based on available data, the classification criteria are not met.

Aspiration hazard: May be fatal if swallowed and enters airways.

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. Naphtha (petroleum), hydrotreated light: 48 h EL50 (for daphnia) = 3 mg/l (read-across).

12.2. Persistence and degradability

Distillates (petroleum), hydrotreated light, Naphtha (petroleum), hydrotreated light, vapor phase: degradation is expected in the atmospheric environment within days to weeks. Distillates (petroleum), hydrotreated light: inherently biodegradable. Naphtha (petroleum), hydrotreated light: expected to be readily biodegradable.

12.3. Bioaccumulative potential

Naphtha (petroleum), hydrotreated light, Distillates (petroleum), hydrotreated light: Octanol/water partition coefficient (log Kow), some components may bioaccumulate in fish and aquatic organisms. Distillates (petroleum), hydrotreated light: the octanol/water partition coefficient (log Kow) for this substance is expected to be in the range of 2.1 to 5.

12.4. Mobility in soil

Liquid. Solubility in water: negligible. Floats on water. The hazardous ingredients will rapidly evaporate to the air if released into the environment. Naphtha (petroleum), hydrotreated light: not expected to partition to sediment and wastewater solids. 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 with a properly licensed 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:	UN1268
TDG:	UN1268
US DOT:	UN1268

14.2. UN proper shipping name

ADR/RID/ADN/IMDG/ICAO: PETROLEUM DISTILLATES, N.O.S. (NAPHTHA (PETROLEUM) LIGHT ALKYLATE)
TDG: PETROLEUM DISTILLATES, N.O.S. (NAPHTHA (PETROLEUM) LIGHT ALKYLATE)
US DOT: PETROLEUM DISTILLATES, N.O.S. (NAPHTHA (PETROLEUM) LIGHT ALKYLATE)

14.3. Transport hazard class(es)

ADR/RID/ADN/IMDG/ICAO: 3
TDG: 3
US DOT: 3

14.4. Packing group

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

14.5. Environmental hazards

MARINE POLLUTANT

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. 128
IMDG: EmS F-E, S-E
ADR: Classification code F1 , Tunnel restriction code (D/E)

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 2012/18/EU on the control of major-accident hazards involving dangerous substances (Petroleum products, qualifying quantities: 2 500 t, 25 000 t). Directive 94/33/EC on the protection of young people at work

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

Immediate
 Fire
 Delayed

313 Chemicals:

None

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: 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
 NOAEL: No Observed Adverse Effect Level
 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)
 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:

Classification	Classification procedure
Flam. Liq. 2, H225	On basis of test data
Asp. Tox. 1, H304	Bridging principle "Dilution"
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336	Bridging principle "Dilution"
Aquatic Chronic 2, H411	Calculation method

Relevant H-statements: EUH066: Repeated exposure may cause skin dryness or cracking.
 H225: Highly flammable liquid and vapour.
 H226: Flammable liquid and vapour.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.
 H336: May cause drowsiness or dizziness.
 H361f: Suspected of damaging fertility.
 H400: Very toxic to aquatic life.
 H410: Very toxic to aquatic life with long lasting effects.
 H411: Toxic to aquatic life with long lasting effects.
 H412: Harmful to aquatic life with long lasting effects.
 H413: May cause long lasting harmful effects to aquatic life.

Hazard pictogram names: Flame, health hazard, exclamation mark, environment

Changes to the SDS in this revision: Sections 1. Product name, 2.2, 3, 4.1, 4.2, 5.1, 8.1, 11,12, 15.1.2, 16.

Revision date: 29 March 2016

Further information: None

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.