SCHAWBEL CORP. MATERIAL SAFETY DATA SHEET C-15 CARTRIDGE

The Schawbel Corp., 100 Crosby Drive, Bedford, MA 01730 781-541-6900

Section I

Manufacturers Name: Swedish Match

Chemical Name and Synonyms: cartridges contain a mixture of Isobutane, Propane, Normal butane, Pentane,

Hexane and Heptane

Trade Name: Gas Cartridges (disposable)

Chemical Family:

Formula: Liquid Hydrocarbons

Section II - Hazardous Ingredients

Paints, Preservatives and Solver	<u>nts %</u>	TLV (Units)	Alloys and Metallic Coatings	<u>%</u>	TLV (Units)
Pigments	0		Base Metal	0	
Catalyst	0		Alloys	0	
Vehicle	0		Metallic Coatings	0	
Solvents	0		Other	0	
Additives	0				
Other	0				

Hazardous Mixtures of Other Liquids, Solids or Gases: %	<u>TLV (Units)</u>
Disposable gas cartridges contain: Isobutane 50	
Propane 15	
Normal butane 34	
Pentane 0.5	
Hexane / Heptane balanc	e

Mixture 800(PPM)

Section III - Physical Data

Boiling Point (°F) at 1 Atmosphere: 10.9 Specific Gravity (H₂O=1) 0.55 (liquid)
Vapor Pressure (PSIA) Absolute at 70°F 45 Percent Volatile by Volume (%) 100%
Vapor Density (Air=1) 1 Atmosphere 70°F 2.06 Evaporation Rate NA (Depends on Surface

Exchange Area)

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Section IV - Fire and Explosion Hazard Data

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Flash Point (Method Used)Flammable LimitsLELUELN/A for GasIn Air1.8%8.4%Extinguishing Media:Carbon Dioxide, Dry Chemical, or Water Spray

Special Fire Fighting Procedures: Protection from exploding cartridges is required if cartridges are subjected to high

temperatures or open flames.

Section V - Health Hazard Data

Threshold Limit Value: 800 PPM for the gas. None for the cartridges

Effects of Overexposure: The gas causes drowsiness and is an asphyxiant when exposed to in large

quantities, however, cartridges are not a health hazard.

Emergency First Aid Procedures: Cartridges do not present a health hazard.

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Section VI - Reactivity Data

Unstable Conditions to Avoid:

STABILITY

High temperature or open flame

Stable

May Occur Conditions to Avoid:

HAZARDOUS POLYMERIZATION

Will Not Occur

Section VII - Spill or Leak Procedures

Steps to be Taken in Case Material is Released or Spilled: N/A - Repack

Waste Disposal Method: Damaged cartridges are to be returned to the distributor or manufacturer. Do not puncture

or incinerate. Empty cartridges may be disposed of at suitable landfill.

Section VIII - Special Protection Information

Respiratory Protection: None required

Local Exhaust: As required Special: None

VENTILATION

Mechanical (General): None Other: None

Protective Gloves: None for cartridges

Eye Protection: None Other Protective Equipment: None

Section IX - Special Precautions

Precautions to be Taken in Handling and Shipping: Do not puncture cartridges and avoid excessive heat (>120°F).

Other Precautions: None

Section X - MSDS Transport Information

US DOT

Ground: Shipping Name: Consumer Commodity

Shipping Label: ORM-D

AIR / SEA

UN Number: 2037 Hazard Class: 2

Shipping Name: Receptacles, small, containing gas (gas cartridges) without a release device, non-refillable.

IATA: Goods Acceptable without the Operator's Approval, Paragraph 2.3.5.9

Hair curlers containing hydrocarbon gas, no more than one per passenger or crew member, provided that the safety cover is securely fitted over the heating element. Gas refills for such curlers are not permitted in checked or carry-on baggage. Hence, one curler with one cartridge attached to make a complete curling iron unit may be carried as mentioned above. It is not

permitted to carry cartridges or refills that are not part of a curling iron.

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