



### Heat Resistant Paint



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

##### 1.1. Product identifier

Product name SmartCare Heat Resistant Paint  
Internal Id SA1449

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

Identified uses Heat Resistant Spray Paint

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

Supplier IQ Design  
Unit 20, Millennium Business Park,  
Cappagh Road,  
Dublin 11, Ireland.  
Tel: +353 1 8649004

##### 1.4. Emergency telephone number

National Emergency Telephone Number  
IQ Design Ltd +353 1 8649004 (Mon-Fri 09:00 - 17:00)

#### SECTION 2: HAZARDS IDENTIFICATION

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

Classification (EC 1272/2008)

Physical and Chemical Hazards Flam. Aerosol 1 - H222  
Human health EUH066;Acute Tox. 4 - H312;Acute Tox. 4 - H332;Eye Irrit. 2 - H319  
Environment Aquatic Chronic 3 - H412

Classification (1999/45/EEC)

Xn;R20/21. Xi;R36. F+;R12. R52/53, R66.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Human health

In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea.

Environment

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Physical and Chemical Hazards

Pressurised container: Must not be exposed to temperatures above 50°C. The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures.

##### 2.2. Label elements

Contains XYLENE

Label In Accordance With (EC) No. 1272/2008



Signal Word Danger

Hazard Statements

H222 Extremely flammable aerosol.  
H312 Harmful in contact with skin.  
H319 Causes serious eye irritation.

Precautionary Statements	H332	Harmful if inhaled.
	H412	Harmful to aquatic life with long lasting effects.
	P102	Keep out of reach of children.
	P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
	P211	Do not spray on an open flame or other ignition source.
	P251	Pressurized container: Do not pierce or burn, even after use.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P261	Avoid breathing vapour/spray.
	P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplementary Precautionary Statements	P314	Get medical advice/attention if you feel unwell.
	P410+412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
	P501	Dispose of contents/container in accordance with national regulations.
	P273	Avoid release to the environment.
	P264	Wash contaminated skin thoroughly after handling.
	P302+352	IF ON SKIN: Wash with plenty of soap and water.
	P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Supplemental label information	EUH066	Repeated exposure may cause skin dryness or cracking.

### 2.3. Other hazards

H229 Pressurised container: May burst if heated.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

XYLENE		10-30%
CAS-No.: 1330-20-7	EC No.: 215-535-7	Registration Number: 01-2119488216-32-0000
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315	Classification (67/548/EEC) R10 Xn;R20/21 Xi;R38	
ACETONE		10-30%
CAS-No.: 67-64-1	EC No.: 200-662-2	Registration Number: 01-2119471330-49
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC) F;R11 Xi;R36 R66 R67	

BUTANONE		10-30%
CAS-No.: 78-93-3	EC No.: 201-159-0	Registration Number: 01-2119457290-43
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC) F;R11 Xi;R36 R66 R67	
PROPANE		5-10%
CAS-No.: 74-98-6	EC No.: 200-827-9	Registration Number: 01-2119486944-21
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12	
BUTANE/ISOBUTANE		5-10%
CAS-No.: 106-97-8	EC No.: 203-448-7	Registration Number: 01-2119474691-32
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12.	
1,2,4-TRIMETHYLBENZENE		1-5%
CAS-No.: 95-63-6	EC No.: 202-436-9	Registration Number: 01-2119472135-42
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 Aquatic Chronic 2 - H411	Classification (67/548/EEC) R10 Xn;R20 Xi;R36/37/38 N;R51/53	
SOLVENT NAPHTHA, LIGHT AROMATIC		1-5%
CAS-No.: 64742-95-6	EC No.: 265-199-0	Registration Number: 01-2119486773-24
Classification (EC 1272/2008) Flam. Aerosol 2 - H223 EUH066 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. Xi;R37. N;R51/53. R10,R66,R67.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**SECTION 4: FIRST AID MEASURES**

#### General information

Move the exposed person to fresh air at once.

#### Inhalation

Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

#### Ingestion

Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention if any discomfort continues.

#### Skin contact

Wash skin with soap and water. Get medical attention if any discomfort continues.

#### Eye contact

Immediately rinse with water. Continue to rinse for at least 15 minutes. Make sure to remove any contact lenses from the eyes before rinsing. Get medical attention promptly if symptoms occur after washing.

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

#### General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

#### Inhalation

In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.

#### Ingestion

There may be soreness and redness of the mouth and throat. May cause stomach pain or vomiting. Fumes from the stomach contents may be inhaled resulting in the same symptoms as inhalation.

#### Skin contact

There may be irritation and redness at site of contact.

#### Eye contact

May cause severe irritation to eyes.

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

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1. Extinguishing media**

#### Extinguishing media

Extinguish with foam, carbon dioxide or dry powder.

#### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

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

#### Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

#### Unusual Fire & Explosion Hazards

Extremely flammable. Forms explosive mixtures with air. May explode in a fire. Vapours are heavier than air and may spread near ground to sources of ignition.

#### Specific hazards

Pressurised container: Must not be exposed to temperatures above 50°C.

### **5.3. Advice for firefighters**

#### Special Fire Fighting Procedures

Use water spray to reduce vapours. Aerosol cans may explode in a fire. Cool aerosol containers exposed to heat with water spray and remove container, if no risk is involved.

#### Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

### **6.2. Environmental precautions**

Avoid discharge into drains.

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

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Provide ventilation and confine spill. Do not allow runoff to sewer.

### **6.4. Reference to other sections**

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

Keep away from heat, sparks and open flame. Read and follow manufacturer's recommendations. Avoid inhalation of vapours and spray mists. Do not spray on a naked flame or any incandescent material. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

### **7.2. Conditions for safe storage, including any incompatibilities**

Extremely flammable. Store at moderate temperatures in dry, well ventilated area. Keep away from heat, sparks and open flame. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Storage Class

Extremely Flammable Aerosol

### **7.3. Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1. Control parameters**

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ACETONE	WEL	500 ppm	1210 mg/m <sup>3</sup>	1500 ppm	3620 mg/m <sup>3</sup>	
BUTANE/ISOBUTANE	WEL	600 ppm		750 ppm		
BUTANONE	WEL	200 ppm(Sk)	600 mg/m <sup>3</sup> (Sk)	300 ppm(Sk)	899 mg/m <sup>3</sup> (Sk)	
PROPANE	WEL	1000 ppm	1800 mg/m <sup>3</sup>			
SOLVENT NAPHTHA, LIGHT AROMATIC	WEL	25 ppm	50 mg/m <sup>3</sup> (Sk)			
XYLENE	WEL	50 ppm(Sk)	220 mg/m <sup>3</sup> (Sk)	100 ppm(Sk)	441 mg/m <sup>3</sup> (Sk)	

WEL = Workplace Exposure Limit.

**ACETONE (CAS: 67-64-1)**

DNEL				
Consumer	Oral	Long Term	62	mg/kg/day
Consumer	Dermal	Long Term	62	mg/kg/day
Industry	Dermal	Long Term	186	mg/kg/day
Consumer	Inhalation.	Long Term	200	mg/m3
Industry	Inhalation.	Short Term	2420	mg/m3
Industry	Inhalation.	Long Term	1210	
PNEC				
Freshwater	10.6	mg/l		
Marinewater	1.06	mg/l		
Intermittent release	21	mg/l		
Soil	29.5	mg/l		
Sediment (Marinewater)	3.04	mg/kg		
Sediment (Freshwater)	30.4	mg/kg		

**BUTANONE (CAS: 78-93-3)**

DNEL				
Consumer	Oral	Long Term	Systemic Effects	31 mg/kg/day
Consumer	Dermal	Long Term	Systemic Effects	412 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	106 mg/m3
Industry	Inhalation.	Long Term	Systemic Effects	600 mg/m3
PNEC				
Freshwater	Long Term	55.8	mg/l	
Marinewater	Long Term	55.8	mg/l	
Intermittent release	Intermittent release	55.8	mg/l	
STP	Long Term	709	mg/l	
Sediment	Long Term	284.7	mg/kg	
Soil	Long Term	22.5	mg/kg	

**.2. Exposure controls**

Protective equipment



Process conditions

Ensure suitable ventilation of area.

Engineering measures

Provide adequate ventilation.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. In case of inadequate ventilation use suitable respirator.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hygiene measures

DO NOT SMOKE IN WORK AREA! When using do not eat, drink or smoke. Wash promptly if skin becomes wet or contaminated.

Personal protection

Wear protective work clothing.

Skin protection

Wear suitable gloves if prolonged or repeated skin contact is likely

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**
**.1. Information on basic physical and chemical properties**

Appearance	Aerosol container containing a mixture of active ingredients, solvents and propellants
Colour	Black.

Odour	Aromatic hydrocarbons.
Solubility	Immiscible with water
Relative density	1.4-1.6 20
Viscosity	Density of paint base
	900-1000 mPas 25
Flash point (°C)	Density of paint base
	<-40°C
Auto Ignition Temperature (°C)	410-580
Flammability Limit - Lower(%)	1.8%
Flammability Limit - Upper(%)	9.5%
Comments	Information given concerns the major ingredient. 23 Flammable gas. A flash point method is not available for aerosols but the major hazardous component, the Propellant has a flash point of <-40 C with flammability limits of 9.5% vol. upper and 1.8% vol. lower. Auto ignition temperature is 410/580 C.

## 9.2. Other information

Volatile Organic Compound (VOC)	<499 g/litre
	Base Paint VOC

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

Highly volatile.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions if stored under normal conditions.

Hazardous Polymerisation

Will not polymerise.

### 10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight. Avoid contact with strong oxidisers.

### 10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances.

### 10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

General information

Contains organic solvents

Inhalation

Harmful by inhalation. High exposures may cause an abnormal heart rhythm and prove suddenly fatal. Very high atmospheric concentrations may cause anaesthetic effects and asphyxiation.

Ingestion

Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

**Skin contact**

Harmful in contact with skin. Prolonged and frequent contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.

**Eye contact**

Irritating to eyes. Spray and vapour in the eyes may cause irritation and smarting.

**Health Warnings**

In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Arrhythmia, (deviation from normal heart beat).

**Route of entry**

Inhalation. Skin absorption.

**Target Organs**

Central nervous system Respiratory system, lungs

**Medical Symptoms**

Narcotic effect. Vapours may cause drowsiness and dizziness.

Toxicological information on ingredients.**ACETONE (CAS: 67-64-1)**

Toxic Dose 1 - LD 50

3 mg/kg (oral-mouse)

Toxic Dose 2 - LD 50

5800 mg/kg (oral rat)

Toxic Conc. - LC 50

>20 mg/l/4h (inh-rat)

Acute toxicity:

Acute Toxicity (Dermal LD50)

2000 mg/kg Rabbit

**SOLVENT NAPHTHA, LIGHT AROMATIC (CAS: 64742-95-6)****SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity**

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment. Dangerous for the environment if discharged into watercourses. Do not allow to enter drains, sewers or watercourses.

**12.1. Toxicity**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**12.2. Persistence and degradability**

Biodegradable in part only.

**12.3. Bioaccumulative potential**

Bioaccumulative potential

No data available on bioaccumulation.

**12.4. Mobility in soil**

Mobility:

The product has poor water-solubility.

**12.5. Results of PBT and vPvB assessment**

Not determined

**12.6. Other adverse effects**

Not available.



**SECTION 13: DISPOSAL CONSIDERATIONS**

## General information

Do not puncture or incinerate even when empty. Ensure containers are empty before discarding (explosion risk). Dispose of waste and residues in accordance with local authority requirements.

**13.1. Waste treatment methods**

Make sure containers are empty before discarding (explosion risk). Do not puncture or incinerate even when empty. Dispose of waste and residues in accordance with local authority requirements.

## Waste Class

Full or Partially Empty Aerosol: 16 05 04, Empty Aerosol: 15 01 10 (Containing hazardous residues). Empty Aerosol: 15 01 04 (No hazardous residues).

**SECTION 14: TRANSPORT INFORMATION**

## General

This product is packed in accordance with the Limited quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow the transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing they are labelled in accordance with the requirements of those regulations to show that they are transported as Limited Quantities. Aerosols not so packed must show the following.

**14.1. UN number**

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

**14.2. UN proper shipping name**

Proper Shipping Name	AEROSOLS
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**14.3. Transport hazard class(es)**

ADR/RID/ADN Class	2, 5F
ADR/RID/ADN Class	Class 2: Gases
ADR Label No.	2.1
IMDG Class	2.1
ICAO Class/Division	2.1
ICAO Subsidiary risk	2.1
Transport Labels	

**14.4. Packing group**

ADR/RID/ADN Packing group	#
IMDG Packing group	#
ICAO Packing group	#

**14.5. Environmental hazards**

Environmentally Hazardous Substance/Marine Pollutant  
No.

**14.6. Special precautions for user**

EMS F-D, S-U  
Tunnel Restriction Code (D)

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

Not applicable.

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

## Uk Regulatory References

Health and Safety at Work Act 1974. Chemicals (Hazard Information & Packaging) Regulations. The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

## Statutory Instruments

Control of Substances Hazardous to Health.

## Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

## EU Legislation

Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

## National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). The Aerosol Dispensers Regulations 2009 (SI 2824) The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 ("CDG 2009"), SI 2009 No 1348 Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007 (CDG 2007). Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. Control of Substances Hazardous to Health Regulations 2002 (as amended) The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689.

**15.2. Chemical Safety Assessment**

No chemical safety assessment has been carried out.

**SECTION 16: OTHER INFORMATION**

Issued By Technical Service Manager  
Revision Date 28-11-2014  
Revision 1  
SDS No. 12009  
Date 28-11-2014

## Risk Phrases In Full

R12	Extremely flammable.
R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R20	Harmful by inhalation.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R36/37/38	Irritating to eyes, respiratory system and skin.
R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R66	Repeated exposure may cause skin dryness or cracking.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

## Hazard Statements In Full

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H222	Extremely flammable aerosol.
H220	Extremely flammable gas.
H223	Flammable aerosol.
H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
H412	Harmful to aquatic life with long lasting effects.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H335	May cause respiratory irritation.
EUH066	Repeated exposure may cause skin dryness or cracking.
H411	Toxic to aquatic life with long lasting effects.

## Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.