



SDSHM117

HAMMERITE RADIATOR PAINT GLOSS AEROSOL SAFETY DATA SHEET

Revision 04/2010

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME : Hammerite Radiator Paint Gloss Aerosol

Supplied by : ICI Paints AkzoNobel, Wexham Road, Slough, Berkshire, SL2 5DS, U.K.

E-mail address : duluxtrade_advice@ici.com

Emergency Telephone : Slough +44 (0) 1753 550000

INTENDED USE

ICI Paints AkzoNobel's decorative products are intended for use in the decoration of buildings surfaces. Refer to product label for details of areas of use and methods of application.

2. HAZARDS IDENTIFICATION

This product has been assessed under the CHIP Regulations and is classified as follows:

For WHITE:

Indication(s) of Danger

Extremely Flammable, Irritant

Symbol Letter(s)

F+, Xi

Category(ies) of Danger

Extremely Flammable, Irritant

For CHROME:

Indication(s) of Danger

Extremely Flammable, Irritant

Symbol Letter(s)

F+, Xi

Category(ies) of Danger

Extremely Flammable, Irritant, Sensitising (Contact with skin)

Warning Label Phrases

For WHITE and CHROME:

R12	Extremely flammable.
R36	Irritating to eyes.
R67	Vapours may cause drowsiness and dizziness.
R66	Repeated exposure may cause skin dryness or cracking.
P96	Pressurised container: protect from sunlight and do not expose to temperature exceeding 50 degrees C. Do not pierce or burn, even after use.
P97	Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

Plus for CHROME only:

R43	May cause sensitisation by skin contact.
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Plus for WHITE only:

Contains ETHYL METHYL KETOXIME. May produce an allergic reaction.

Information on Occupational Exposure Limits is given in Section 8.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances presenting a physico-chemical, health or environmental hazard within the meaning of the CHIP Regulations or which are assigned occupational exposure limits.

EC No.	CAS No.	HAZARDOUS INGREDIENTS	%	CLASSIFICATION
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For WHITE:

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200-662-2	67-64-1	ACETONE	25-50	F, Xi	R11-36-66-67	
200-827-9	74-98-6	PROPANE	10-25	F+	R12	
265-150-3	64742-48-9	NAPHTHA (PETROLEUM), HYDROTREATED HEAVY	10-25	Xn	R10-65-66	
203-448-7	106-97-8	BUTANE(CONT.<0.1%BUTADIENE)	2.5-10	F+	R12	
200-857-2	75-28-5	ISOBUTANE	2.5-10	F+	R12	
202-496-6	96-29-7	ETHYL METHYL KETOXIME	< 1.0	Xn	R21-40-41-43	Carc. Cat. 3

For CHROME:

200-662-2	67-64-1	ACETONE	25-50	F, Xi	R11-36-66-67	
	9011-14-7	POLY (METHYL METHACRYLATE)	10-25	Xi	R43	
204-658-1	123-86-4	N-BUTYL ACETATE	10-25		R10-66-67	
203-448-7	106-97-8	BUTANE(CONT.<0.1%BUTADIENE)	10-25	F+	R12	
200-827-9	74-98-6	PROPANE	10-25	F+	R12	
200-857-2	75-28-5	ISOBUTANE	10-25	F+	R12	
203-603-9	108-65-6	2-METHOXY-1-METHYLETHYLACETATE	2.5-10	Xi	R10-36	
205-500-4	141-78-6	ETHYL ACETATE	1.0-2.5	F, Xi	R11-36-66-67	
231-072-3	7429-90-5	ALUMINIUM POWDER (STABILISED)	1.0-2.5	F	R10-15	

Note: The text for R phrase codes shown above (if any) is given in section 16.

Note: 'EC Number' if quoted is the EINECS or ELINCS number.

4. FIRST-AID MEASURES

In all cases of doubt, or where symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped administer artificial respiration. Give nothing by mouth. If unconscious place in the recovery position. Seek medical advice.

EYE CONTACT: Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 minutes, holding lids apart. Seek medical advice.

SKIN CONTACT: Remove contaminated clothing, wash skin thoroughly with soap and water, or use a proprietary skin cleanser. Do not use solvents or thinners. Seek medical advice if symptoms persist.

INGESTION: If accidentally swallowed, DO NOT INDUCE VOMITING. Keep at rest and obtain medical attention.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Recommended - alcohol resistant foam, CO₂, powders.

Not to be used - waterjet.

Recommendations : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Fire fighters should wear self-contained breathing apparatus.

Closed containers exposed to fire should be cooled with water. Do not allow run-off from fire-fighting to enter drains or water-courses.

6. ACCIDENTAL RELEASE MEASURES

Exclude non-essential personnel.

Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in section 8. Contain and collect spillage with non-combustible absorbent materials, eg sand, earth, vermiculite or diatomaceous earth, and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses. Clean preferably with a detergent; avoid use of solvents. If the product enters drains or sewers, immediately contact the local water company; in the case of contamination of streams, rivers or lakes, the relevant environment agency.

7. HANDLING AND STORAGE

Persons with a history of skin sensitisation problems which are related to substances listed in section 3 of this safety data sheet should only be employed in processes in which this product is used under appropriate medical supervision.

HANDLING CONDITIONS: Vapours are heavier than air and may spread along floors. They may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected by the appropriate standard. Keep the container tightly closed. Exclude sources of heat, sparks and open flame. Non-sparking tools should be used. Avoid skin and eye contact. Avoid the inhalation of vapour and mist. Smoking, eating and drinking should be prohibited in storage and use areas. For personal protective equipment see Section 8. Always keep in containers made of the same material as the supply container, or in containers that are compatible with the product. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimise the risks of spontaneous combustion and other fire hazards.

Preparations may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing, and floors should be of the conducting type.

STORAGE CONDITIONS: Observe the label precautions. Store in a cool, dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorised access. Containers which are opened should be properly resealed and kept upright to prevent leakage. Do not use or store any paint container by hanging on a hook.

The Manual Handling Operations Regulations 1993 may apply to the handling of certain Paint Products. Products packed in containers of 5 litres and above will be marked with a guide weight; refer to these weights when carrying out an assessment.

The principles contained in the HSE guidance note Storage of Packaged Dangerous Substances, should be observed when storing this product. Store separately from oxidising agents, strongly alkaline and strongly acidic materials, amines, alcohols and water.

SPECIFIC USE(s): Where applicable refer to the product label and literature for the application and use instructions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

HAZARDOUS INGREDIENT	LTEL (8hr TWA) ppm	LTEL (8hr TWA) mg/m3	STEL (15 mins) ppm	STEL (15 mins) mg/m3	Notes
For WHITE:					
ACETONE	500	1200	1500	3620	WEL
PROPANE	500	900			
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY		1000			OEL
BUTANE(CONT.<0.1%BUTADIENE)	600	1430	750	1780	WEL
ETHYL METHYL KETOXIME	3	10			SUP
For CHROME:					
ACETONE	500	1200	1500	3620	WEL
N-BUTYL ACETATE	150	724	200	966	WEL
BUTANE(CONT.<0.1%BUTADIENE)	600	1430	750	1780	WEL
PROPANE	500	900			
2-METHOXY-1-METHYLETHYLACETATE	50	274	100	548	OEL,Sk
ETHYL ACETATE	200		400		WEL

OEL - Occupational Exposure Limits

WEL - Workplace Exposure Limit

SUP - Manufacturer's recommended Limit

LTEL - Long-term Exposure Limit.

TWA - Time weighted Average

STEL - Short term Exposure Limit (15mins)

sk - Risk of absorption through unbroken skin

sen - Respiratory sensitiser

rd - Figure quoted is for Respirable dust

id - Figure quoted is for Inhalable dust

Further guidance on WELs and OELs, and on occupational exposure to harmful materials (including mixed exposures) is given in HSE Guidance Note EH40.

EXPOSURE CONTROLS

Before commencing work, ensure that a COSHH Assessment has been carried out. All personal protective equipment, including respiratory protective equipment, used to control exposure to hazardous substances must be selected to meet the requirements of local regulations.

RESPIRATORY PROTECTION: Avoid the inhalation of vapour, particulates and spray mist. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general ventilation. If this is not sufficient to maintain concentrations of particulates and solvent vapour below the occupational exposure limit, respiratory protection must be worn.

The selection of respiratory equipment should be in accordance with BS 4275. Recommendations for the selection, use and maintenance of Respiratory Equipment, and the current certificates of approval are issued annually by the Health and Safety Executive.

For solvent-based products, consider using water-based products as alternatives, where equivalent products exist. Work only in places of good ventilation. Inside always keep doors and windows fully open during application and drying. When applying solvent-based products by brush or roller to large surface areas inside, or using in small confined spaces, the wearing of air supplied breathing apparatus will always be necessary. When applying for short periods only, a cartridge mask may be worn providing the filter is changed regularly. Do not spray any product unless directed to do so on the container. The principal hazards associated with paint spraying are health hazard from inhalation of vapours and spray mist, and fire risk. When applying water-based paints by spray inside or in confined spaces, wearing a cartridge mask of Assigned Protection Factor 40 x OEL for particulates is recommended. This should be confirmed by your COSHH assessment. Contact your merchant about masks. When applying solvent-based paints by spray, in case of insufficient ventilation, the wearing of air-fed respiratory equipment will always be necessary. Refer to your COSHH assessment. When spraying solvent based products it is possible to build up an explosive or flammable atmosphere: refer to Guidance Note EH9 from the HSE or advice on good practice. All respiratory equipment must be suitable for the purpose and meet an appropriate standard approved by the HSE. Refer to BS4275.

HAND PROTECTION: Wear suitable gloves for protection against materials in section 3.

When skin exposure may occur, advice should be sought from glove suppliers on appropriate types and usage times for this product. The instructions and information provided by the glove supplier on use, storage, maintenance and replacement must be followed.

EYE PROTECTION: Eye protection designed to protect against liquid splashes should be worn.

SKIN PROTECTION: Cotton or cotton/synthetic overalls or coveralls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner.

FLATTING: Protective gloves should be worn to avoid the risk of skin irritation. When surfaces are to be prepared for painting, account should be taken of the age of the property and the possibility that lead pigmented paint might be present. There is a possibility that ingestion or inhalation of scrapings or dust arising from the preparation work could cause health effects. As a working rule you should assume that this will be the case if the age of the property is pre 1960.

Where possible wet flattening or chemical stripping methods should be used with surfaces of this type to avoid the creation of dust. When dry flattening cannot be avoided, and effective local exhaust ventilation is not available, it is recommended that a dust respirator is worn, that is approved for use with lead dusts, and its type selected on the basis of the occupational hygiene (COSHH) assessment, taking into account the occupational hygiene exposure standard for lead in air. Furthermore, steps should be taken to ensure containment of the dusts created, and that all practicable measures are taken to clean up thoroughly all deposits of dusts in and around the affected area.

The Control of Lead at Work approved code of practice 1998 (ISBN 0 71 7615065) should be consulted for advice on protective clothing and personal hygiene precautions.

Care should also be taken to exclude visitors, members of the household and especially children from the affected area, during the actual work and the subsequent clean up operations.

All scrapings, dust, etc. should be disposed of by the professional painting contractor as Special (Hazardous) Waste, with the relevant documentation under The Special Waste Regulations 1996 plus amendment 2001, The Environmental Protection (Duty of Care) Regulations 1991, The Controlled Waste Registration of Carriers and Seizure of Vehicles Regulations 1991 plus amendment 1998 and the Controlled Waste Regulations 1992 plus amendment 1993.

Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Extra precautions will need to be taken when burning off old lead based paints (See above - "Flattening" for relevance to work on older property, ie pre 1960) as fumes containing lead will be produced.

It is recommended that a respirator, approved for use with particulate fumes of lead is selected on the basis of the occupational hygiene (COSHH) assessment, taking into account the occupational hygiene exposure standard for lead in air.

Similar precautions to those given above under the Flattening section should be taken with reference to protective clothing, disposal of scrapings and dusts, and exclusion of other personnel and especially children from the building during actual work and the subsequent clean up operations.

ENVIRONMENTAL EXPOSURE CONTROLS: See section 12 for detailed information.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State :	Aerosol	
Flash Point - WHITE :	< - 18	°C
Flash Point - CHROME :	- 18 - < 21	°C
Initial Boiling Point :	5	°C
Specific Gravity :	0.77-0.87	
Water Miscibility :	No	
pH :	No Information	
Viscosity :	< 30	(ISO 6mm Range)

Explosion limits: Lower - approx. 0.8% Upper - no information

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Extremes of temperature.

To prevent the creation of flammable concentrations of vapour in air, good natural ventilation, and if necessary, local exhaust ventilation, should be provided. The accumulation of dry overspray, contaminated rags, etc may result in spontaneous combustion. Good housekeeping standards plus the regular and safe removal of waste materials will minimise the risk.

MATERIALS TO AVOID: Keep away from oxidising agents, strongly alkaline and strongly acidic materials in order to avoid exothermic reactions.

HAZARDOUS DECOMPOSITION PRODUCTS: When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke and oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

There is no data available on the product itself. The product has been assessed following the conventional method in the CHIP Regulations and is classified for toxicological hazards accordingly. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. See Sections 2 and 15 for details of the resulting hazard classification.

Over-exposures of vapour are irritating to eyes and respiratory system. Excessive concentrations may produce effects on the central nervous system including drowsiness. In extreme cases loss of consciousness may result. Long term exposure to vapour concentrations in excess of quoted OELs may result in adverse health effects. Splashes entering the eye will cause discomfort and possible damage. Prolonged contact with the skin may have a defatting effect which may lead to skin irritation and in some cases dermatitis.

WHITE only: This product contains methyl ethyl ketoxime. The classification given in Section 3 is in concurrence with Annex 1 of EU Directive 67/548/EEC. Ingestion studies in animals have shown that repeated doses have an adverse effect on the blood. A lifetime inhalation study in rats and mice produced damage to the nasal membranes and liver tumours. The relevance of the carcinogenicity findings to humans is uncertain. The new data may lead to a future reclassification of methyl ethyl ketoxime. Further studies are to be conducted.

12. ECOLOGICAL INFORMATION

There is no specific data available on the product itself.

The product should not be allowed to enter drains or watercourses or be deposited where it can affect ground or surface waters.

The Air Pollution Control requirements of regulations made under the Environmental Protection Act may apply to the use of this product.

Products classified as Marine Pollutants are indicated as such under Transport (section 14).

Products classified as Dangerous For the Environment are indicated as such in sections 2 and 15.

Any substances in the product that are classified as Dangerous for the Environment, present at concentrations above those requiring listing are given in section 3.

13. DISPOSAL CONSIDERATIONS

Wastes, including emptied containers, should be disposed of in accordance with national regulations.

CODES ACCORDING TO THE LIST OF WASTES REGULATIONS:

Product as supplied: Assigned as hazardous waste code 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances.

Part-used containers, containing dried residues of the supplied product: Assigned as hazardous waste code 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

Used containers, rigorously scraped out and containing dried residues of the supplied product: Not Applicable.

"Rigorously scraped out" means removing the maximum amount of product from the container by physical or mechanical means (draining or scraping) to leave a residue or contamination that cannot be removed by such means.

These codes have been assigned based on the actual composition of the product both as supplied and as dried residues. If mixed with other wastes, the waste codes quoted may not be applicable.

14. TRANSPORT INFORMATION

Transport within user's premises:

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport to be in accordance with ADR for road, IMDG for sea. The transport classifications provided in this section are not valid for transport by Air. Please call the number in section 1 of this safety data sheet to obtain more information on this products classification for Air transport.

ADR Classification Information

UN Number : 1950
Proper Shipping Name : AEROSOLS
Hazard Class : 2
Sub-Hazard Class :
Packing Group : .
Technical Name (NOS only) :

IMDG Classification Information

UN Number : 1950
Proper Shipping Name : AEROSOLS
Hazard Class : 2
Sub-Hazard Class :
Packing Group :
Technical Name (NOS only) :

Ltd Qty Code :	LQ2	Ltd Qty Maximum :	See SP277
Packing Instructions :	P204	Packing Instructions :	P003
		Marine Pollutant if indicated here:	
		Emergency Schedule No :	F-D,S-U
		Flash Point - WHITE :	< - 18
		Flash Point - CHROME :	- 18 - < 21

15. REGULATORY INFORMATION

This product has been assessed under the CHIP Regulations and is classified as follows:

For WHITE:

NAMED SUBSTANCES

Contains

No substances are required to be named in this section

INDICATION(S) OF DANGER

Extremely Flammable, Irritant

SYMBOLS LETTER(S)

F+, Xi

WARNING LABEL PHRASES:

- J37 SOLVENT-BASED PAINT.
- R36 Irritating to eyes.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

- P99 Contains: ETHYL METHYL KETOXIME. May produce an allergic reaction.

- P96 Pressurised container: protect from sunlight and do not expose to temperature exceeding 50 degrees C. Do not pierce or burn, even after use.
- P97 Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition – No smoking. Keep out of the reach of children.
- A6 Solvent abuse can kill instantly.

- S9 Keep container in a well-ventilated place.
- S51 Use only in well ventilated areas.
- S23 Do not breathe spray.
- J103 Ensure maximum ventilation during application and drying.
- S24/25 Avoid contact with skin and eyes.
- J33 When applying it is advisable to wear eye protection.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- J34 After contact with skin, wash immediately with plenty of soap and water or a proprietary skin cleanser. Do not use solvent, thinners or white spirit.
- S46 If swallowed, seek medical advice immediately and show this container or label.
- J16 Do not empty into drains or watercourses. Some local authorities have special facilities for disposing of waste paint.
- J17 Safety data sheet available for professional user on request.
- J110 This includes waste hazard categories.
- J50 Avoid the inhalation of dust. Wear a suitable face mask if dry sanding.
- J44 Special precautions should be taken during surface preparation of pre-1960s paint surfaces over wood and metal as they may contain harmful lead
- J47 For further advice contact ICI Paints AkzoNobel.

For CHROME:

NAMED SUBSTANCES

Contains

POLY (METHYL METHACRYLATE)

INDICATION(S) OF DANGER

Extremely Flammable, Irritant

SYMBOLS LETTER(S)

F+, Xi

WARNING LABEL PHRASES:

J37	SOLVENT-BASED PAINT.
R36	Irritating to eyes.
R43	May cause sensitisation by skin contact.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.
P96	Pressurised container: protect from sunlight and do not expose to temperature exceeding 50 degrees C. Do not pierce or burn, even after use.
P97	Do not spray on a naked flame or any incandescant material. Keep away from sources of ignition – No smoking. Keep out of the reach of children.
A6	Solvent abuse can kill instantly.
S9	Keep container in a well-ventilated place.
S51	Use only in well ventilated areas.
S23	Do not breathe spray.
J103	Ensure maximum ventilation during application and drying.
S24/25	Avoid contact with skin and eyes.
J33	When applying it is advisable to wear eye protection.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
J34	After contact with skin, wash immediately with plenty of soap and water or a proprietary skin cleanser. Do not use solvent, thinners or white spirit.
S46	If swallowed, seek medical advice immediately and show this container or label.
J16	Do not empty into drains or watercourses. Some local authorities have special facilities for disposing of waste paint.
J17	Safety data sheet available for professional user on request.
J110	This includes waste hazard categories.
J50	Avoid the inhalation of dust. Wear a suitable face mask if dry sanding.
J44	Special precautions should be taken during surface preparation of pre-1960s paint surfaces over wood and metal as they may contain harmful lead
J47	For further advice contact ICI Paints AkzoNobel.

Where 'J'and/or 'P' phrases are denoted, these are ICI Paints or paint industry reference codes to additional phrases.

16. OTHER INFORMATION

Text for R Phrases shown in section 3 describing each ingredient:

R10	Flammable.
R11	Highly flammable.
R12	Extremely flammable.
R15	Contact with water liberates extremely flammable gases.
R21	Harmful in contact with skin.
R36	Irritating to eyes.
R40	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

The information in this safety data sheet is required in pursuant to the CHIP Regulations.

Other Reference: The Control of Substances Hazardous to Health Regulations (COSHH). You should satisfy yourself that your COSHH Assessment is in accordance with the COSHH Regulations and Approved Code of Practice. ICI does not accept any responsibility for your COSHH Assessment.

The information on this sheet is not a specification: it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions and recommendations are not followed.

We will be pleased to answer any specific enquiries regarding the safe use, storage and handling of our product.
Contact: ICI PAINTS Technical Group, Wexham Road, Slough, Berks. SL2 5DS
Telephone: 0870 242 1100

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REVISION 04/2010: CHANGES TO SECTIONS 1,9,15 COMPARED WITH PREVIOUS VERSION DATED 02/2007 WHICH IS NOW SUPERSEDED.